DRAFT

Subsequent Environmental Impact Report

(SCH #2012042065)

City of Stockton Climate Action Plan and Related Actions

Prepared for:
City of Stockton

Prepared by:
ICF International

February 2014





ICF INTERNATIONAL

CITY OF STOCKTON

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SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

FOR THE

CITY OF STOCKTON CLIMATE ACTION PLAN AND RELATED ACTIONS

PREPARED FOR:

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February 2014

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Contents

Tables

On Page

Figures

On Page

Acronyms and Abbreviations

AB	Assembly Bill
ACE	Altamont Commuter Express
ALUC	Airport Land Use Commission
Ballona Wetlands	Ballona Wetlands Land Trust et al. v. City of Los Angeles
BART	Bay Area Rapid Transit
BAU	business as usual
BPS	best performance standards
BRT	Bus Rapid Transit
CAFE	Corporate Average Fuel Economy
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCAs	Community Choice Aggregations
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CIP	capital improvement plan
CIT	CAP Implementation Team
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COA	Comprehensive Operations Analysis
County	County of San Joaquin
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CVRWQCB	Central Valley Regional Water Quality Control Board
DRP	Development Review Process
du	dwelling units
DWR	Department of Water Resources
EBMUD	East Bay Municipal Utility District
EIR	environmental impact report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESPs	energy service providers

FY	fiscal year
GDSA	Greater Downtown Stockton Area
GHG	greenhouse gas
GPEIR	General Plan EIR
GWP	global warming potential
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
IOU	investor-owned utilities
IPCC	Intergovernmental Panel on Climate Change
LCFS	low carbon fuel standard
LGOP	Local Governments Operations Protocol
MAF	million acre-feet
mpg	miles per gallon
MPOs	metropolitan planning organizations
MT	metric ton
$MTCO_2e$	metric ton carbon dioxide equivalent
MW	megawatt
N_2O	nitrous oxide
NCCP	Natural Community Conservation Plan
NOP	notice of preparation
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PCBs	polychlorinated biphenyls
PFCs	perfluorinated carbons
PM10	particulate matter 10 microns or less in diameter
ppb	parts per billion
ppm	parts per million
ppt	parts per trillion
PRC	Public Resources Code
PSD	Prevention of Significant Deterioration
RAD	Responsible Appliance Disposal
Reporting Rule	Greenhouse Gas Reporting Rule

ROG	reactive organic gasses
RPS	Renewable Portfolio Standard
RTPs	Regional Transportation Plans
San Joaquin RTD	San Joaquin Regional Transit District
SAWP	Settlement Agreement Work Program
SB	Senate Bill
SEIR	supplemental environmental impact report
SF_6	sulfur hexafluoride
SJCOG	San Joaquin Council of Governments
SJRRC	San Joaquin Regional Rail Commission
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWPPP	Stormwater Pollution Prevention Plan
UBC	Uniform Building Code
USB	urban services boundary
VMT	vehicle miles traveled

Introduction

This summary provides information about the subsequent environmental impact report (SEIR) prepared by the City of Stockton (City) for the Draft Climate Action Plan and related actions. It presents a description of the Project; summarizes the impacts and mitigation measures; identifies areas of known controversy, including issues raised to date by agencies and the public; and identifies unresolved issues.

Purpose of the Subsequent Environmental Impact Report

This document is a SEIR that, at a programmatic level, examines the environmental effects of adopting a Climate Action Plan and a Transit Plan/Program. These actions implement a number of General Plan policies concerning greenhouse gas emissions and transportation. This document contains a programmatic analysis of both the short- and long-term impacts of implementation of the Proposed Project using the analysis in the General Plan EIR (GPEIR) (ESA 2007) and the additional information included in this SEIR. The significance thresholds in the GPEIR were used to assess whether the proposed new climate action plan and related actions would result in new significant impacts or substantially more severe impacts than were described in the GPEIR for subjects other than greenhouse gas emissions and climate change, for which new significance thresholds were used. The contents of the General Plan and GPEIR are fully incorporated into this SEIR. The proposed Climate Action Plan is also part of this SEIR and is included as Appendix A to this report.

Project Description

As noted in Section 1.1 and discussed further in Chapter 2, *Project Description*, the Proposed Project analyzed in this SEIR consists of the following.

- Settlement Agreement–Related Actions.
    - Climate Action Plan containing measures to reduce greenhouse gas (GHG) emissions through 2020.
    - Transit Plan/Program to promote and/or retain transit service in Stockton.
    - A funding program for the items related to implementation of a Settlement Agreement between the city, the Sierra Club and the California Attorney General concerning the existing General Plan CEQA compliance.

The GPEIR considered impacts associated with the General Plan through buildout of the General Plan, which were previously estimated to occur in the year 2035. However, due to the recent economic downturn, which has disproportionately affected housing development, it is reasonable to assume buildout of the General Plan can no longer be expected to occur by 2035. Based on recent development trends and revised growth projections from the California Department of Finance,

buildout is now expected to occur between approximately 2050 and 2055 (see discussion in Chapter 2).

Accordingly, this SEIR analyzes the effects of the Proposed Project over the course of two overlapping but different periods of time: impacts through 2035 and impacts through buildout of the General Plan. Impacts through 2035 are analyzed qualitatively as is appropriate for a programmatic-level analysis. Impacts through buildout are only analyzed in general, given the inherently speculative nature of analyzing impacts that will occur at a time so distant in the future. In each chapter, impacts associated with the Proposed Project through 2035 are analyzed first, followed by a brief summary of anticipated impacts through buildout. Mitigation measures are included where appropriate.

Areas of Known Controversy and Issues to Be Resolved

Pursuant to Section 15123 of the CEQA Guidelines, a summary section must identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public. In addition, a summary section identifies issues to be resolved. These items are discussed below.

The City distributed a notice of preparation (NOP) of a draft SEIR for the Proposed Project on April 26, 2012 (Appendix A). The NOP was distributed for a 30-day comment period that ended on May 29, 2012. Comments about the NOP were considered in the preparation of the SEIR. Appendix B contains written comments received about the NOP.

Areas of Known Controversy and Concern

There are several areas of known controversy and concern related to the actions being analyzed in the SEIR:

- The issues of controlling greenhouse gas emissions and climate change are controversial as some question the underlying scientific understanding of the relation of human activities to changes in the climate and some also question whether the city, the state, or the country should or should not take actions related to these emissions and climate change. Some also desire that local jurisdictions, the state, and the country to do much more than is presently being done due to their concern about the long-term effects of climate change.
- As with the existing General Plan, there remains controversy about what kind of new growth will be allowed in Stockton. The Settlement Agreement between the city, the Sierra Club, and the California Attorney General is an attempt to resolve some (but not necessarily all) of the disagreements between different parties on the type and character of future growth in Stockton. Some parties also remain concerned about whether ambitious plans for residential infill growth in the greater downtown area are realistic given the current economic conditions.
- Stockton is also engaged in bankruptcy proceedings and thus there is substantial community concern about costs and savings that might occur as a result of potential new government programs and policies included in the actions being analyzed in this SEIR. The Draft Climate Action Plan includes an estimate of costs and savings for the City government and for the private sector related to the CAP reduction measures.

Issues to Be Resolved

The primary issue to be resolved is whether the City will or won't adopt the GHG reductions measures in the Climate Action Plan in total, in part, or not at all and will or won't adopt the transportation strategies in the Transit Plan/program in total, in part, or not at all.

Summary of Impacts and Mitigation Measures

Proposed Project

Table ES-1 summarizes the impacts analyzed in the GPEIR, the level of significance of those impacts, and the degree to which the Proposed Project would increase or decrease the severity of those impacts. See Chapters 3-14 for detailed discussions of impacts, policies in place, and proposed new policies to reduce impacts included in the SEIR.

Unavoidable Significant Effects

The GPEIR identified the unavoidable significant effects caused by implementation of the General Plan in the GPEIR. The detailed discussion provided in the GPEIR is fully incorporated into this SEIR by this reference. The GPEIR identified significant unavoidable impacts related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services (including recreation), utilities, and traffic/transportation.

As discussed in Chapter 3 through 14, development under the General Plan, as modified by the Proposed Project, would not result in any new significant and unavoidable impacts beyond those disclosed in the GPEIR with one exception:

- Impact CC-2: Development under the General Plan, as modified by the Proposed Project, would result in cumulatively considerably greenhouse gas emissions beyond 2020. This impact was not analyzed in the GPEIR and thus this is a new significant and unavoidable impact. While the Climate Action Plan will help to reduce GHG emissions through 2020 and beyond, overall development would still contribute ongoing and increasing GHG emissions by 2050 that would be inconsistent with long-term reduction goals. The Proposed Project analyzed in this SEIR would include additional residential development in the downtown area, but would offset associated emissions through the implementation of the CAP. However the Proposed Project would not sufficiently address city emissions overall to match 2050 reduction goals.

As discussed in Chapters 3 through 14 and as shown in Table ES-1, the Proposed Project would increase the severity of the following significant and unavoidable impacts beyond the level disclosed in the GPEIR:

- Impact TC-1: Increased vehicular traffic in the downtown area
- Impact TC-4: Increase vehicular traffic in the downtown area affecting railroad crossings.
- Impact PFS-12: Increased residents subject to flooding due to levee failure.

- Impact NCR-7: Increased residential development and solar roofs in the downtown area potentially affecting historic buildings
- Impact NCR-14: Increased residential development and solar roofs in the downtown area potentially affecting historic buildings which could affect visual aesthetics

Other CEQA-Related Conclusions

Growth-Inducing Impacts

The GPEIR discussed the growth-inducing impacts of the General Plan in Chapter 15, *Additional Statutory Considerations*. The detailed discussion provided in the GPEIR is fully incorporated into this SEIR by this reference. The GPEIR found that implementation of the General Plan would induce some of the population and housing growth in the city, in part because it increases intensity of uses and densities in future urban centers, close to transportation nodes. The GPEIR determined that while growth would be allowed under the then-proposed General Plan, the market indicated that growth would occur in the city under the prior General Plan, but without the benefit of new residential areas development under the proposed Village concept, updated polices that reflect current environmental and regulatory trends, and the opportunity for increased economic sustainability. The General Plan provided goals and policies to maintain the character of the city and minimize the environmental impacts of anticipated growth, including discouraging undesirable development in areas with sensitive natural resources, critical habitats and important scenic resources, and encouraging the orderly growth of new development to occur in areas adjacent to existing urban uses and requires developers to provide service extensions.

Therefore, the GPEIR determined that while the General Plan would result in an increase of growth locally, the policies included in the General Plan would reduce the potential for negative impacts associated with directly induced growth. However, because this growth resulting from the General Plan would still significantly affect existing visual resources and result in an overall reduction of existing open space and agricultural lands, the growth inducing impacts of the Proposed Project are also considered significant and unavoidable.

The Proposed Project would not revise the General Plan Planning Area or sphere of influence, and through the year 2035 would not allow additional development compared to the amount disclosed in the GPEIR. While certain project elements would require the construction of solar panel systems, alternative transportation infrastructure, and retrofitting buildings, these project elements would improve existing resources, and would not create new infrastructure that could accommodate additional growth. Therefore, through the General Plan horizon of 2035, project impacts would not be greater under the Proposed Project as compared to the severity of growth-inducing impacts disclosed in the GPEIR.

Through buildout of the updated General Plan, which is expected to occur between 2050 and 2055, additional development would be allowed in the GDSA. This additional development would include as many as 300 to 1,100 additional residential units. As discussed in this SEIR, with development under the General Plan, as modified by the Proposed Project, impacts may be more severe than disclosed in the GPEIR for certain resource areas, including visual aesthetics in the downtown area, traffic in the downtown area affecting localized congestion and railroad crossings, placing more residences in areas subject to flooding due to levee failure, and historic resources in the downtown area. As discussed in Chapter 14, development under the General Plan as modified by the Proposed

Project would have a significant unavoidable impact for greenhouse gas emissions beyond 2020 through 2050 (this impact was not analyzed in the GPEIR). Levels of impact would be lower for development under the General Plan, as modified for the Proposed Project for a number of other resource areas, including likely for air quality, greenhouse gas emissions (through 2020), transit usage, bicycle and pedestrian activity, and energy consumption. Growth-inducement impacts associated with the Proposed Project would remain significant and unavoidable.

Cumulative Impacts

For the following resource areas, cumulative impacts associated with the Proposed Project would be more severe than disclosed in the GPEIR: cultural resources; downtown traffic; and downtown traffic noise.

Alternatives

The following alternatives to the Proposed were analyzed in the SEIR:

- *No Project Alternative*
    - This alternative, which is required to be analyzed under CEQA, assumes that the City would not adopt a local Climate Action Plan or a Transit Plan/Program is implemented. The state measures would remain in effect. New development projects would be required to comply with CEQA concerning GHG emissions and thus would still be required to reduce their emissions by 29% compared to unmitigated levels (see discussion in CAP of measure DRP-1). CAP Measure Trans-4 (Goods Movement improvements) would still be implemented as this is an existing initiative of the City. CAP Measure Water-1 would also still be implemented, since this measure is pursuant to a state regulation (SB X7-7).
    - Compared to the Proposed Project, this alternative would result in higher GHG emissions, higher air quality emissions, better traffic downtown but worse traffic overall and would have less potential visual aesthetic and historic building impacts.
- *Greater Density (CAP Alternative)*
    - Under this alternative, the City would reduce GHG emissions through promotion of greater changes to existing zoning and land use policies to provide for substantially increased levels of high-density and mixed-use development within the city limits, compared to the Proposed Project. This alternative would also promote additional high density along the City's primary public transportation corridors and would restrict further low density development along the City's edge and away from existing transportation corridors. This alternative would also include an urban limit line to prevent further City annexations and edge development. This alternative assumes that the increased reduction in transportation emissions would allow for elimination of at least the two solar promotion measures (Energy-5 and Energy-6).
    - This alternative would have the same land use change in the GDSA as the Proposed Project but would result in greater land use change outside the GDSA it would represent a substantial change in land use patterns compared to the adopted General Plan. This could result in land use incompatibilities between existing low density residential development and new high-density development along transportation corridors. This alternative would likely result in greater traffic, noise, and visual impacts along existing transportation corridors compared to the Proposed Project outside the GDSA and may result in greater

impacts to historic buildings. This alternative would likely have better local air quality than the Proposed Project, but similar regional emissions. This alternative would likely have lower impacts to biological resources and farmland than the Proposed Project (and the adopted General Plan).

- *Greater Efficiency (CAP Alternative)*
    - Under this alternative, the City would reduce GHG emissions through promotion of, and a greater reliance on, efficiency programs for existing development, compared to the Proposed Project. The City would adopt an energy efficiency upgrade ordinance, which would require all buildings more than 10 years old to improve their energy efficiency at the point of sale (the exact amount has not been determined). The City would also increase the ambition of CAP Measures Energy-3 and Energy-4 to seek higher participation rates for efficiency retrofits of existing homes. This alternative assumes that the increased reduction in building energy (electricity and natural gas) emissions would allow for elimination of at least the two solar promotion measures (Energy-5 and Energy-6).
    - This alternative would lower visual aesthetic and cultural resource impacts related to the elimination of City support for solar improvements. Other impacts would be the same as the Proposed Project.
- *Community Choice Aggregation (CAP Alternative)*
    - Under this alternative, the City would establish itself as the electricity provider for the City as a whole and would obtain its electricity from generation sources with a substantially lower GHG emissions profile than that provided by PG&E now and in that to be provided in the future. Depending on the aggressiveness of the CCA, the City could decide to drop some or all of the GHG measures in the CAP other than those necessary for consistency with the Settlement Agreement (Energy-1 and Trans-1), that represent existing projects (Trans-4), or that are necessary to meet other state mandates (Water-1)[1]. In order to meet or exceed that GHG reduction target, the CCA would have to have an electricity generation profile that had the equivalent of between 80% and 85% non-GHG energy sources.
    - While this alternative is in concept feasible, the City is currently in bankruptcy, and is not in a favorable financial position to take on new obligations that may require new debt financing. Until the City has emerged from bankruptcy and its credit rating is restored allowing it to take on substantial new burdens, this is not considered a feasible alternative for the City. In addition, there would need to be a feasibility study conducted to determine the timing, costs, and benefits of pursuing a CCA and what kind of energy portfolio could be achieved by the City. Were this alternative to be pursued, the City could benefit from combining with other local jurisdictions in the County to lower administrative costs and increase market buying power.
    - This alternative would result in similar impacts in the GDSA related to downtown traffic, historic buildings, flooding and aesthetics. This alternative would have lower aesthetic impacts in Stockton because it would not include City promotion of solar roofs. This

[1] In this scenario, the City could also include DRP-1, which requires 29% GHG emissions reductions from new development to be consistent with SJVAPCD recommendations for CEQA, but for the sake of the analysis, this alternative assumes that project-level reductions would not be necessary as the CCA measure would obtain all the remaining reductions needed to achieve the City's reduction goal.

alternative would have worsened traffic and air quality in Stockton overall because it would reduce transportation emissions less than the Proposed Project. This alternative would contribute to a cumulative demand for new renewable energy facilities, which may be located in Stockton, but are more likely to be located outside of Stockton. These new renewable energy facilities, depending on location and character, have the potential to have significant impacts in particular on land use, biological resources, cultural resources, noise, and farmland but may also have temporary or permanent significant impacts on many other resource areas.

- *Transit 5% Mode Share (Transit Plan/Program Alternative)*
    - Under this alternative, the Transit Plan/Program would have a goal of a 5% transit mode split instead of the 3% transit mode split in the Proposed Project. As described in the Transit Plan/Program, achieving a 5% transit mode split would require far greater funding for SJRTD than the Proposed Project (approximately $51 million annually vs. approximately $31 million for the draft Transit Plan/Program) that may be beyond the ability of the San Joaquin RTD. While likely not feasible in the short run, for the sake of analysis in this SEIR, this alternative is considered technically feasible by 2020, presuming sufficient economic recovery in Stockton and San Joaquin County overall.
    - This alternative would result in better traffic conditions and less air quality emissions than the Proposed Project, but is of questionable financial feasibility in the near term.

There are notable tradeoffs between the different alternatives. When considering the full range of potential environmental impacts, the Greater Density Alternative is considered the Environmentally Superior Alternative as it would have substantially lower traffic, air quality, biological resources, and farmland impacts compared to the Proposed Project and substantially lower biological resources and farmland impacts compared to all of the alternatives. These environmental benefits are considered to outweigh the potential adverse impacts of this project related to land use compatibility, cultural resources, and visual aesthetics.

Additional alternatives to the Proposed Project were also considered but dismissed from further analysis in the SEIR because they did not meet most of the objectives of the project, were not feasible, or they did not avoid or substantially reduce one or more significant impacts of the Proposed Project:

- Increased Reliance on Mandatory Measures (CAP Alternative)
- No Change in Downtown Residential Buildout Potential (CAP Alternative)
- Carbon Offsets (CAP Alternative)
- Growth Moratorium(CAP Alternative)
- Downzoning Development Potential on the City Edge (CAP Alternative)
- 15% Below 2005 Emissions Target for 2020 (CAP Alternative)
- 80% Below 1990 Levels by 2050 (CAP Alternative)
- Increased Light Rail Alternative (Transit Plan/Program Alternative)

Alternatives to the Proposed Project are discussed in further detail in Chapter 15, “Alternatives.”

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
Land Use					
LU-1	The General Plan would not divide the physical arrangement of an established community.	Less than Significant	N/A	None	N/A
LU-2	Development proposed under the General Plan would conflict with an adopted applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.	Potentially Significant	Significant and Unavoidable	Greater	Project would change development potential within the GDSA, which would have secondary impacts on downtown traffic, flooding due to levee failure, historic buildings, and visual aesthetics greater than that disclosed in the GPEIR (see discussion below).
LU-3	Development proposed under the General Plan would not conflict with an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP).	Potentially Significant	Less than Significant	None	N/A
Housing					
H-1[i]	The General Plan would displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.	N/A	N/A	N/A	N/A
Transportation and Circulation					
TC-1	The General Plan would result in a substantial increase in vehicular traffic.	Potentially Significant	Significant and Unavoidable	Potentially Greater (downtown) Less (City overall)	Localized increases in congestion at specific locations would result due to increased densities associated with the Proposed Project in the downtown area. Mitigation is not available short of not adding residences in the downtown area as expansion of downtown roadways would limit the residential, commercial, and mixed use potential which would be counterproductive and would not be consistent with the Settlement Agreement.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
					Overall traffic levels expected to be less with Proposed Project due to transportation measures in CAP and Transit Plan/Program.
TC-2	The General Plan would result in a substantial increase in public transit usage.	Potentially Significant	Significant and Unavoidable	Potentially Less	Proposed project would implement measures designed to increase other transportation alternatives such as bicycle and pedestrian modes.
TC-3	The General Plan would result in a substantial increase in bicycle and pedestrian activity.	Potentially Significant	Significant and Unavoidable	Less	Proposed project would implement measures designed to increase other transportation alternatives such as bicycle and pedestrian modes.
TC-4	The General Plan would result in substantial changes in accessibility to Stockton-area railroad terminals and cargo transfer points.	Potentially Significant	Significant and Unavoidable	Potentially Greater	Increases in growth in the GDSA would result in increases in localized traffic congestion that could further decrease railroad accessibility in the downtown area but overall improvements in City-wide traffic. Mitigation is not available short of not adding residences in the downtown area as expansion of downtown roadways would limit the residential, commercial, and mixed use potential which would be counterproductive.
TC-5	The General Plan would result in substantial changes in accessibility to the Port of Stockton.	Potentially Significant	Significant and Unavoidable	None	The Proposed Project would not reduce access to the Port of Stockton.
TC-6	The General Plan would result in substantial changes in accessibility to the Stockton Municipal Airport.	Potentially Significant	Significant and Unavoidable	None	The Proposed Project is not located in close proximity to the Stockton Airport and thus would not affect access, especially in light of transportation measures in the CAP and the Transit Plan/Program.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
Public Facilities and Services					
Impact PFS-1	The General Plan would require or result in the construction of new water treatment facilities or expansion of existing facilities the construction of which could cause significant environmental effects.	Potentially Significant	Significant and Unavoidable	No change for 2035; minor potential increase for buildout	The proposed CAP would promote increased water demand (due to growth in the GDSA) but would also improve water conservation through water measures in the CAP which would likely offset the increase overall through 2035. Uncertain as to net effect at buildout and thus may have minor (less than significant) increase impact above that in the GPEIR.
PFS-2	The General Plan would require new or expanded water supply entitlements.	Potentially Significant	Less than Significant		
PFS-3	The General Plan would have the potential in the long-term to deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.	Potentially Significant	Less than Significant/ Beneficial		
PFS-4	The General Plan would not result in the exceedance of wastewater treatment requirements of the CVRWQCB.	Less than Significant	N/A	No change for 2035; minor potential increase for buildout	The Proposed Project would increase the amount of residents which could incrementally increase wastewater flow, but would lower water use through water measures in the CAP which would help reduce wastewater flows through 2035. Uncertain as to net effect at buildout and thus may result in minor (less than significant) increase impact above that in the GPEIR.
PFS-5	The General Plan would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Potentially Significant	Significant and Unavoidable		
PFS-6	The General Plan would require additional capacity to serve the Project's projected demand in addition to existing commitments.	Potentially Significant	Less than Significant		

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
PFS-7	The General Plan would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Potentially Significant	Significant and Unavoidable	None	The Proposed Project would increase the amount of residents in the downtown but this development is not expected to change the overall amount of impervious space that might increase stormwater flows.
PFS-8	The General Plan would violate water quality standards or waste discharge requirements, or otherwise degrade water quality.	Potentially Significant	Less than Significant	None	The Proposed Project could change the character of development in the GDSA from industrial to residential which is unlikely to increase the amount of contaminated runoff from stormwater with application of all state water quality requirements.
PFS-9	The General Plan would substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding.	Potentially Significant	Less than Significant	None	The Proposed Project would not substantially change drainage patterns as the new residential development in the GDSA is mostly previously altered already and would have been developed for primarily industrial use in the existing General Plan.
PFS-10	The General Plan would create or contribute runoff water which would exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff.	Potentially Significant	Less than Significant	None	The Proposed Project would change the character of development in the GDSA from industrial to residential which is unlikely to increase the amount of contaminated runoff from stormwater with application of all state water quality requirements.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
PFS-11	The General Plan would place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures which would impede or redirect flood flows.	Potentially Significant	Less than Significant	None	The Proposed Project would place more residential development in the GDSA which is mostly outside the 100-year flood zone except for along McLeod lake and an inlet north of Harbor Street. If new development is placed in the 100-year floodplain, in compliance with state and federal regulations, existing General Plan policies would require floodproofing to avoid any substantial risk to new residents.
PFS-12	The General Plan would expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	Potentially Significant	Significant and Unavoidable	Greater	Large numbers of residents in Stockton are potentially subject to risks from levee or dam failure presently. Project would increase the number of residents subject to this impact.
PFS-13	The General Plan would produce substantial amounts of solid waste that could exceed the permitted capacity of a landfill serving the Study Area.	Potentially Significant	Significant and Unavoidable	Potentially less	The Proposed Project would change the character of development in part of the GDSA from industrial to residential which would increase the amount of residentially-generated waste but lower the potential amount of industrial-generated waste. With the CAP measures on waste, overall waste generation is not expected to actually be reduced.
PFS-14	The General Plan complies with all federal, State, and Local Statutes and Regulations related to solid waste.	Less than Significant	N/A	None	The Proposed Project would be developed consistent with all solid waste requirements.
PFS-15	The General Plan would not result in the wasteful, inefficient, or unnecessary consumption of energy by residential, commercial, industrial, or public uses.	Less than Significant	N/A	Less	Implementation of GHG reduction measures that would increase energy conservation; additional housing that could occur under the Proposed Project would be located in an area currently served with adequate supplies of electricity and gas service.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
PFS-16	The General Plan may require the construction or expansion of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.	Potentially Significant	Significant and Unavoidable	None	The Proposed Project would help to lower future energy demands and reduce the need for additional energy infrastructure facilities.
PFS-17	The General Plan would not result in a substantial adverse physical impact to the continued provision of law enforcement services in the Study Area.	Potentially Significant	Less than Significant	No change for 2035 overall but increase in demand in downtown area for 2035. Slightly greater demands for buildout.	The project would include additional residents in the downtown area by buildout, which will require additional law enforcement services and may require additional law enforcement facilities in the downtown area. This is a minor (less than significant) increase overall relative to that disclosed in the GPEIR.
PFS-18	The General Plan would include law enforcement facilities or require the construction or expansion of facilities which could have an adverse physical effect on the environment.	Potentially Significant	Significant and Unavoidable		
PFS-19	The General Plan would not result in a substantial adverse physical impact to the continued provision of fire protection services in the Study Area.	Potentially Significant	Less than Significant	No change for 2035 overall but increase in demand in downtown area for 2035; Slightly greater demands for buildout.	The project would include additional residents in the downtown area by buildout, which will require additional fire protection services and may require additional fire protection facilities serving the downtown area. This is a minor (less than significant) increase overall relative to that disclosed in the GPEIR.
PFS-20	The General Plan would include fire protection facilities or require the construction or expansion of facilities which could have an adverse physical effect on the environment.	Potentially Significant	Significant and Unavoidable		
PFS-21	The General Plan would not result in a substantial adverse physical impact to the continued provision of school services in the Study Area.	Potentially Significant	Less than Significant	No change for 2035 overall but increase in demand in downtown area for 2035; Slightly greater demands for buildout.	The project would include additional residents in the downtown area by buildout, which will require additional school services and may require additional school facilities. This is a minor (less than significant) increase overall relative to that disclosed in the GPEIR.
PFS-22	The General Plan would not result in a substantial adverse physical impact to the continued provision of library services in the Study Area.	Potentially Significant	Less than Significant	No change for 2035 overall but increase in demand in downtown area for	The project would include additional residents in the downtown area by buildout, which will require additional library services and may require additional library facilities. This is a

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
PFS-23	The General Plan would include library facilities or require the construction or expansion of facilities which could have an adverse physical effect on the environment.	Less than Significant	Significant and Unavoidable	2035; Slightly Greater demands for buildout.	minor (less than significant) increase overall relative to that disclosed in the GPEIR.
Recreation and Waterways					
RW-1	The General Plan would result in the substantial physical deterioration of existing neighborhood and regional parks or other recreational facilities through increased use.	Potentially Significant	Less than Significant	Greater in downtown area	The Proposed Project could result in a substantial increase in residents in the downtown areas, with a concomitant increase in demand for downtown parks and recreation facilities. This is a minor (less than significant) increase overall relative to that disclosed in the GPEIR.
RW-2	The General Plan would include recreational facilities or require the construction or expansion of recreational facilities which would have an adverse physical effect on the environment.	Potentially Significant	Significant and Unavoidable	None	N/A
RW-3	The General Plan would increase the potential risk of fire hazards along open space corridors or other recreational facilities through increased use.	Potentially Significant	Less than Significant	None	N/A
RW-4	The General Plan would increase the potential for crime to occur within and adjacent to open space corridors or other recreational facilities through increased use.	Potentially Significant	Less than Significant	None	N/A

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
Health and Safety					
HS-1	The General Plan would result in the exposure of persons to or generation of nose levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	Potentially Significant	Significant and Unavoidable	None	N/A
HS-2	The General Plan will result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	Potentially Significant	Significant and Unavoidable	None	N/A
HS-3	The General Plan will be located within an airport land use plan area or within the vicinity of a private airstrip and could expose people residing or working with the project area to excessive noise levels.	Potentially Significant	Significant and Unavoidable	None	Project would not change development potential within 2 miles of the Stockton Airport. Additional residential projects within the area of influence of the airport would be required to comply with airport land use requirements including those related to noise.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
HS-4	The General Plan would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction; or 4) landslides.	Less than Significant	N/A	None	N/A
HS-5	The General Plan would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or offsite landslide, lateral spreading, subsidence, liquefaction,\or collapse.	Less than Significant	N/A	None	N/A
HS-6	The General Plan could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), but would not create substantial risks to life or property.	Less than Significant	N/A	None	N/A
HS-7	The General Plan would result in a cumulatively considerable net increase of criteria pollutants. Future growth in accordance with the General Plan would exceed the daily SJVAPCD thresholds for NOx and ROG.	Potentially Significant	Significant and Unavoidable	Potentially Less	It is likely that any emissions increases associated with downtown infill would be offset by emissions reductions achieved by policies outlined in the CAP. The Proposed Project's encouragement of public transit over personal vehicle use and the concentration of new development proximate to downtown, commercial corridors, and public transit would reduce vehicle trips and air pollutant emissions.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
HS-8	The General Plan would not conflict with or obstruct implementation of an applicable air quality plan.	Potentially Significant	Significant and Unavoidable	Potentially Less	The Proposed Project includes measures that will reduce operational criteria pollutant emissions in the Climate Action Plan.
HS-9	Buildout of the General Plan would generate emissions above the daily SJVAPCD significance thresholds for NOx and ROG, primarily due to emissions related to increased traffic.	Potentially Significant	Significant and Unavoidable	Potentially Less	The Proposed Project includes measures that will reduce operational criteria pollutant emissions in the Climate Action Plan from on-road traffic and off-road emission sources.
HS-10	The General Plan would expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant	Significant and Unavoidable	None	The Proposed Project includes measures in the Climate Action Plan that will reduce operational pollutant emissions from on-road traffic and off-road emission sources that will offset potential increased emissions from additional residents in the downtown area.
HS-11	The General Plan would not create objectionable odors affecting a substantial number of people.	Less than Significant	N/A	None	N/A
HS-12	The General Plan would result in a cumulatively considerable net increase of greenhouse gas emissions that would contribute to global warming conditions	Potentially Significant	Significant and Unavoidable	*See "Greenhouse Gas Emissions and Climate Change"*	*See "Greenhouse Gas Emissions and Climate Change"*
HS-13	The General Plan could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials to the environment.	Potentially Significant	Less than Significant	None	N/A

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
HS-14	The General Plan would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less than Significant	N/A	None	N/A
HS-15	Development under the General Plan could be located on a site which is included on a list of hazardous materials sites compiled pursuant to government code section PS65962.5 and, as a result, could create a significant hazard to the public or the environment.	Potentially Significant	Less than Significant	None	N/A
HS-16	The General Plan will result in development located within an airport land use plan area or and could result in a safety hazard for people residing or working in the project area.	Potentially Significant	Significant and Unavoidable	None	The Proposed Project would not change growth potential within 2 miles of the Stockton airport.
HS-17	The General Plan could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Potentially Significant	Significant and Unavoidable	None	N/A
HS-18	The General Plan could expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	Potentially Significant	Less than Significant	None	N/A

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
Natural and Cultural Resources					
NCR-1	The General Plan would have a substantial adverse effect, either directly or through habitat modifications, on any officially designated species identified as an endangered, threatened, candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	Potentially Significant	Significant and Unavoidable	None	N/A
NCR-2	The General Plan would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	Potentially Significant	Significant and Unavoidable	None	N/A
NCR-3	The General Plan would have a substantial adverse effect on "federally protected" wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means.	Potentially Significant	Significant and Unavoidable	None	N/A
NCR-4	The General Plan would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Potentially Significant	Significant and Unavoidable	None	N/A

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
NCR-5	The General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less than Significant	N/A	Potentially Significant and Unavoidable	CAP Measures Energy-5 and Energy-6 would promote solar roofs which may require removal of overhanging trees to provide solar access. In some cases, tree removal may conflict with city tree preservation policies or the new tree preservation ordinance to be adopted by the City. The California Solar Rights Act prohibits the City from review of solar permit applications for issues other than public health and safety and thus the City may not be able to condition solar permit applications to avoid significant impacts to trees. No mitigation is available due to the constraints in state law.
NCR-6	The General Plan would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.	Less than Significant	N/A	None	N/A
NCR-7	The General Plan would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	Potentially Significant	Significant and Unavoidable	Potentially greater in downtown area and due to solar panels	The Proposed Project would specifically increase residential development in the downtown area where many historic structures are located. Implementation of General Plan policy provisions would reduce impacts on historic resources, but impacts associated with historic resources could be greater than those disclosed in the GPEIR under the Proposed Project. No mitigation is available to avoid increased residential development in the downtown area.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
					Mitigation Measure CUL-MM-1 would reduce but not avoid potential impacts due to increased residential development in the GDSA Mitigation Measure CUL-MM-2 would reduce but not avoid potential impacts due to solar roofs that may be proposed on historic buildings.
NCR-8	The General Plan would cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains, including those interred outside of formal cemeteries.	Potentially Significant	*Historical Resources:* Significant and Unavoidable *Archaeological Resources and Human Remains*: Less than Significant	None	N/A
NCR-9	The General Plan would result in the substantial conversion of important farmland to non-agricultural uses.	Potentially Significant	Significant and Unavoidable	None	N/A
NCR-10	The General Plan could conflict with existing zoning for agricultural use, or conflict with existing Williamson Act contracts.	Less than Significant	N/A	None	N/A
NCR-11	The General Plan would involve other changes in the existing environment that, due to their location or nature, could result in conversion of Important Farmland, to nonagricultural uses.	Potentially Significant	Less than Significant	None	N/A
NCR-12	The General Plan would result in substantial soil erosion or the loss of topsoil.	Potentially Significant	Less than Significant	None	N/A

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
NCR-13	The General Plan would substantially degrade the existing visual character or quality of the site and its surroundings.	Potentially Significant	Significant and Unavoidable	Potentially greater in the downtown area and due to additional solar roofs	Proposed project would result in increased number of solar roofs which would not change the character of City neighborhoods or districts but could change the visual appearance of individual buildings. In addition, solar roof proposals for historic buildings could result in significant change to the visual appearance of those historic buildings. Increased downtown residential development would change the downtown character from low and high density residential, industrial and commercial uses to one more dominated by higher-density residential and mixed use, which may improve visual character due to reduction in industrial uses. However, project may adversely affect historic buildings and create potential differences in density character on the edges of downtown. Mitigation measure CUL-MM-1 and CUL-MM-2 would help to reduce the level of impact related to historic buildings but not necessarily to a level of less than significant
NCR-14	The General Plan would have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	Potentially Significant	Significant and Unavoidable	Potentially greater in the downtown area and due to solar roofs	Project may adversely affect historic buildings which are local scenic resources in the downtown area. Mitigation measure CUL-MM-1 and CUL-MM-2 would help to reduce the level of impact related to historic buildings but not necessarily to a level of less than significant.

GPEIR Impact #	GPEIR Impact Statement	Impact Level in GPEIR Before Mitigation	Impact Level in GPEIR After Mitigation	Change in Impact Level in the SEIR Due to Proposed Project	Reason for Change in Severity (if applicable)
NCR-15	The General Plan would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Potentially Significant	Significant and Unavoidable	Greater	Proposed project would result in increased number of solar roofs and solar installation in parking lots which would create new sources of daytime glare that could affect aesthetics and public safety in certain conditions. Mitigation Measure AES-MM-1 would avoid glare impacts from solar roofs where they would affect a public safety, but would not avoid or reduce glare impacts relative to visual aesthetics only due to the limitations in the California Solar Rights Act
NCR-16	The General Plan would result in the loss of availability of a known mineral resource that would be of a value to the region and the residents of the state or result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	Less than Significant	N/A	None.	N/A
Climate Change					
CC-1[ii]	Emissions associated with General Plan Buildout through 2020 would be reduced consistent with AB 32.	N/A	N/A	Less	Climate Action Plan would reduce GHG emissions consistent with AB-32.
CC-2[iii]	GHG Emissions associated with General Plan Buildout from 2020 to 2050 will contribute considerably to cumulative GHG emissions despite implementation of the CAP and the Transit Plan/Program.	N/A	N/A	Significant and Unavoidable	GP EIR did not analyze emissions through 2050. Climate Action Plan and state plans are only through 2020. Additional action after 2020 will be required but it is premature to identify those actions at this time.
CC-3[iv]	Development allowed by the General Plan would subject property and persons to otherwise avoidable physical harm in light of inevitable climate change.	N/A	N/A	Less than Significant with Mitigation	Not analyzed in GPEIR. New impact analysis and new mitigation measure.

[i] Impact H-1 was not addressed in an in-depth fashion in the GPEIR. There is therefore no corresponding Impact H-1 in the GPEIR; this is a new impact analyzed in the SEIR.
[ii] Impact CC-1 was not addressed in an in-depth fashion in the GPEIR. There is therefore no corresponding Impact CC-1 in the GPEIR; this is a new impact analyzed in the SEIR.
[iii] Impact CC-2 was not addressed in an in-depth fashion in the GPEIR. There is therefore no corresponding Impact CC-2 in the GPEIR; this is a new impact analyzed in the SEIR.
[iv] Impact CC-3 was not addressed in an in-depth fashion in the GPEIR. There is therefore no corresponding Impact CC-3 in the GPEIR; this is a new impact analyzed in the SEIR.

Introduction

The City of Stockton (City) has prepared this subsequent environmental impact report (SEIR) for a Proposed Project that includes the following components.

- **Settlement Agreement–Related Actions**. These are actions related to a Settlement Agreement concerning the prior environmental impact report (EIR) for the *City of Stockton General Plan 2035* (General Plan) hereafter referred as the "GPEIR" (City of Stockton 2007a). The Settlement Agreement was entered into by the City, the Attorney General of the State of California (Attorney General), and the Sierra Club on October 14, 2008, and included the following:
    - Climate Action Plan (CAP) to reduce greenhouse gas (GHG) emissions by 2020 to approximately 10[1]% below 2005 levels.[2]
    - Transit Plan/Program to promote transit in Stockton.
    - Settlement Agreement Work Program (SAWP) Funding Program to fund Settlement Agreement Actions.

This SEIR is subsequent to the above-mentioned GPEIR, which was prepared by Environmental Science Associates for the City in 2007 and entitled *City of Stockton General Plan Update: Final Environmental Impact Report*. (City of Stockton 2007a) This SEIR is needed because the above-listed plan and policy actions represent implementation of key policies in the General Plan concerning GHG emissions and transportation, the implementation of those plan and policy changes are related to a legal settlement concerning the GPEIR and the adopted General Plan, and because the actions discussed in this SEIR are directly related to the environmental management of planned growth in the city of Stockton.

SEIR Requirements

The requirements for an SEIR under the California Environmental Quality Act (CEQA) are set out in Public Resources Code [PRC] Section 21166 and State CEQA Guidelines Section 15163.

> § 21166. Subsequent or supplemental impact report; conditions
>
> When an environmental impact report has been prepared for a project pursuant to this division, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency, unless one or more of the following events occurs:
>
> (a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report.

[1] As discussed in the CAP, the actual goal is 10.12% to match the state's reduction from 2005 to 1990 levels, but is referred to as 10% throughout this document.

[2] The Settlement Agreement requires that the City consider a CAP with a GHG emissions reduction goal that is consistent with AB 32, but does not specify what the exact goal needs to be.

(b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report.

(c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

§ 15163. Supplement to an EIR

(a) The lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:

(1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and

(2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

(b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.

(c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.

(d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.

(e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown the previous EIR as revised.

State CEQA Guidelines Section 15163, above, provides that a lead agency shall prepare an SEIR if any of the conditions described in Section 15162, below, would require the preparation of an SEIR.

(a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR, was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects

on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

An EIR, including an SEIR, is a public informational document used in planning and decision-making processes. Although the SEIR does not control the ultimate decision on the project, the lead agency must consider the information in the SEIR (in combination with the prior EIR) and respond to each significant impact identified in the SEIR.

SEIR Scope

This document supplements the GPEIR and contains a programmatic analysis of both the short- and long-term impacts of implementing the Proposed Project. The significance thresholds in the GPEIR were used to assess whether the Proposed Project described in this SEIR would result in new significant impacts or substantially more severe impacts than those described in the GPEIR. As noted in Section 1.1 and discussed further in Chapter 2, *Project Description*, the Proposed Project analyzed in this SEIR consists of the following.

- Settlement Agreement–Related Actions.
  - CAP.
  - Transit Plan/Program.
  - SAWP Funding Program.[3]

The GPEIR considered impacts associated with the General Plan through buildout of the General Plan, which were previously estimated to occur in the year 2035. However, due to the recent economic downturn, which has disproportionately affected housing development, it is reasonable to assume buildout of the General Plan can no longer be expected to occur by 2035. Based on recent development trends and revised growth projections from the California Department of Finance, buildout is now expected to occur between approximately 2050 and 2055 (see discussion in Chapter 2).

Accordingly, this SEIR analyzes the effects of the Proposed Project over the course of two overlapping but different periods of time: impacts through 2035[4] and impacts through buildout of the General Plan. Impacts through 2035 are analyzed at an appropriate level for a programmatic-level analysis, while impacts through buildout are analyzed only generally, given the inherently speculative nature of analyzing impacts that will occur at a time so distant in the future. In each chapter, impacts associated with the Proposed Project through 2035 are analyzed first, followed by a brief summary of anticipated impacts through buildout.

[3] As described in Chapter 2, Project Description, the funding program would only enable the measures in the CAP and the Transit Plan/Program and would not result in environmental impacts on its own. As a result, there is no separate environmental analysis of the funding program. The funding program is also still in development as a nexus study has yet to be completed.

[4] The CAP is proposed to address GHG emissions through 2020. As discussed in the CAP, the City will need to consider additional actions to address GHG emissions after 2020. Thus, the CAP measures will continue to be required after 2020. The time period of 2035 was selected for this analysis because that is the horizon analyzed in the GPEIR and this document is a subsequent EIR to the GPEIR.

Terminology Used to Describe Impacts

To assist the reader in understanding this SEIR, terms used are defined as follows.

- *Project* means the whole of an action that has the potential for resulting in a physical change in the environment, directly or ultimately.
- *Environment* means the physical conditions that exist in the area and would be affected by a Proposed Project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved is the area in which significant direct or indirect impacts would occur because of the project. The environment includes both natural and artificial conditions.
- *Impacts* analyzed under CEQA must be related to a physical change. Impacts consist of either of the following.
    - Direct or primary effects that are caused by the Proposed Project and occur at the same time and place.
    - Indirect or secondary effects that are caused by the Proposed Project and are later in time or farther removed in distance but still reasonably foreseeable, including growth-inducing impacts and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- *Significant impact on the environment* means a substantial—or potentially substantial—adverse change in any of the physical conditions in the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.
- *Mitigation* consists of one or more of the following.
    - Avoiding the impact altogether by not taking a certain action or parts of an action.
    - Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
    - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
    - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
    - Compensating for the impact by replacing or providing substitute resources or environments.
- *Cumulative impacts* refers to two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The individual impacts may be changes resulting from a single project or separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

This SEIR uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows.

- A *less-than-significant impact* is adverse but does not exceed the defined thresholds of significance. Less-than-significant impacts do not require mitigation.
- A *potentially significant impact* is an environmental effect that may cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- A *significant impact* exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less-than-significant level.
- A *significant and unavoidable impact* exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.

SEIR Organization

The SEIR is organized in the following chapters.

- The *Executive Summary* presents a brief summary of the Proposed Project; summarizes the impacts and mitigation measures; identifies areas of known controversy, including issues raised by agencies and the public; and identifies unresolved issues. It also summarizes the Proposed Project's growth-inducing impacts, cumulative impacts, significant and unavoidable impacts, and significant irreversible impacts.
- Chapter 1, *Introduction*, explains the purpose of this SEIR, defines terms used in the analysis, and discusses the environmental review process.
- Chapter 2, *Project Description*, describes the Proposed Project, including the proposed CAP and the Settlement Agreement.
- Chapters 3 to 13 detail the impacts of the Proposed Project on those resource areas required to be analyzed by CEQA. In preparing this SEIR, a common chapter order to the General Plan and GPEIR was used for resource area analyses to allow readers to easily find related information in these documents. As such, Chapters 3–13 of this SEIR correspond to Chapters 3–13 of both the General Plan and GPEIR.
- Chapter 14, *Climate Change*, presents the analysis of the Proposed Project's impacts with regard to GHG emissions and global climate change. Because no corresponding section in the General Plan or GPEIR addressed this resource area, this chapter does not adhere to the original chapter numbering system.
- Chapter 15, *Alternatives*, presents consideration of alternatives relative to this SEIR.
- Chapter 16, *Additional Statutory Considerations*, addresses the Proposed Project's impacts with regard to Growth Inducement and Cumulative Impacts and includes an analysis of potential alternatives to the Proposed Project.

- Chapter 17, *List of Preparers*, lists the SEIR authors, technical specialists and members of the production team, and other key individuals who assisted in the preparation and review of this SEIR.
- Chapter 18, *References Cited*, lists printed references consulted and personal communications conducted in preparation of this SEIR.
- Appendices are presented at the end of this SEIR.
    - Appendix A: Notice Of Preparation/Initial Study
    - Appendix B: Scoping Meeting Summary
- The following two documents, available on the City's website, are hereby incorporated by reference in their entirety:
    - Draft Climate Action Plan (February 2014)
    - Draft Transit Plan/Program (included as Appendix D to the Draft Climate Action Plan)

Environmental Review Process

Notice of Preparation and Scoping Comments

The City distributed a notice of preparation (NOP) for this SEIR on April 26, 2012 (Appendix A). The NOP was distributed for a 30-day comment period that ended on May 29, 2012. CEQA does not require formal hearings at any stage of the environmental review process (State CEQA Guidelines Section 15202[a]). However, it does encourage "wide public involvement, formal and informal… in order to receive and evaluate public reactions to environmental issues" (State CEQA Guidelines Section 15201). Accordingly, the City held a public scoping meeting on May 2, 2012, that was attended by 10 members of the public. A public meeting summary report is included in Appendix B of this SEIR that describes oral comments provided by members of the public and the responses provided by ICF International (ICF) and City staff at the public meeting.

Three written comments concerning the NOP were also received during the comment period. They are also included in Appendix B.

- Bob Prickett suggested that the public meeting presentation should have been shortened to allow for more time for questions and answers.
- Betsy Reinsdorfer asked about carbon sequestration and whether cap-and-trade funds would benefit the City of Stockton.
- East Bay Municipal Utility District (EBMUD) commented that portions of EBMUD's Mokelumne Aqueduct are within the city of Stockton and that any future projects proposed within or in the vicinity of the aqueduct must adhere to EBMUD's process and requirements for use of the right-of-way.

Many of the oral and written comments concerned the CAP itself, while a few concerned CEQA. The City considered all comments when developing the draft CAP and in developing this SEIR.

Subsequent Environmental Impact Review Public Review

To comply with CEQA, the City (the lead agency) must prepare an SEIR that reflects the independent judgment of the agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and the mitigation measures proposed to reduce the impacts. A draft SEIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a draft SEIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counterproposals.

As with a draft EIR, reviewers of a draft SEIR should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

The draft SEIR is available for review and comment by the public, responsible agencies, organizations, and other interested parties for a 60-day period. Comments must be received either electronically or physically by 5 p.m. on the last day of the comment period. All comments or questions about the draft SEIR should be addressed to the following address.

City of Stockton
ATTN: David Stagnaro, AICP
Community Development Department
345 N. El Dorado Street
Stockton, CA 95202

The City will schedule an agenda item during a noticed Planning Commission meeting to present the conclusions of the draft SEIR and solicit comments on the document.

Comments on the SEIR received during the review period will be used to prepare a final SEIR. The City will hold a public hearing before certifying the final SEIR, during which the public and agencies can provide additional comments. When the City decides whether to certify the SEIR and approve the Proposed Project, it will consider the previous GPEIR as revised by the SEIR.

- Chapter 17, *List of Preparers*, lists the SEIR authors, technical specialists and members of the production team, and other key individuals who assisted in the preparation and review of this SEIR.
- Chapter 18, *References Cited*, lists printed references consulted and personal communications conducted in preparation of this SEIR.
- Appendices are presented at the end of this SEIR.
    - Appendix A: Notice Of Preparation/Initial Study
    - Appendix B: Scoping Meeting Summary
- The following two documents, available on the City's website, are hereby incorporated by reference in their entirety:
    - Draft Climate Action Plan (May 2013)
    - Draft Transit Plan/Program (included as Appendix D to the Draft Climate Action Plan)

Environmental Review Process

Notice of Preparation and Scoping Comments

The City distributed a notice of preparation (NOP) for this SEIR on April 26, 2012 (Appendix A). The NOP was distributed for a 30-day comment period that ended on May 29, 2012. CEQA does not require formal hearings at any stage of the environmental review process (State CEQA Guidelines Section 15202[a]). However, it does encourage "wide public involvement, formal and informal… in order to receive and evaluate public reactions to environmental issues" (State CEQA Guidelines Section 15201). Accordingly, the City held a public scoping meeting on May 2, 2012, that was attended by 10 members of the public. A public meeting summary report is included in Appendix B of this SEIR that describes oral comments provided by members of the public and the responses provided by ICF International (ICF) and City staff at the public meeting.

Three written comments concerning the NOP were also received during the comment period. They are also included in Appendix B.

- Bob Prickett suggested that the public meeting presentation should have been shortened to allow for more time for questions and answers.
- Betsy Reinsdorfer asked about carbon sequestration and whether cap-and-trade funds would benefit the City of Stockton.
- East Bay Municipal Utility District (EBMUD) commented that portions of EBMUD's Mokelumne Aqueduct are within the city of Stockton and that any future projects proposed within or in the vicinity of the aqueduct must adhere to EBMUD's process and requirements for use of the right-of-way.

Many of the oral and written comments concerned the CAP itself, while a few concerned CEQA. The City considered all comments when developing the draft CAP and in developing this SEIR.

Subsequent Environmental Impact Review Public Review

To comply with CEQA, the City (the lead agency) must prepare an SEIR that reflects the independent judgment of the agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and the mitigation measures proposed to reduce the impacts. A draft SEIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a draft SEIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counterproposals.

As with a draft EIR, reviewers of a draft SEIR should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

The draft SEIR is available for review and comment by the public, responsible agencies, organizations, and other interested parties for a 60-day period. Comments must be received either electronically or physically by 5 p.m. on the last day of the comment period. All comments or questions about the draft SEIR should be addressed to the following address.

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Chapter 2
Project Description

Introduction

The project to be analyzed in this SEIR under CEQA includes the implementation of certain actions associated with the Settlement Agreement entered into by the City, the Attorney General, and the Sierra Club on October 14, 2008. This chapter provides background information about the previously certified General Plan, the Settlement Agreement, and the components of the proposed project, which specifically consist of the following.

- Settlement Agreement–Related Actions.
    - Climate Action Plan (CAP).
    - Transit Plan/Program.
    - Settlement Agreement Work Program (SAWP) Funding Program.

The NOP for this SEIR included the following items that are not analyzed further in this document for the reasons described below.

- Settlement Agreement-Related Actions
    - **General Plan Amendments.** The NOP included potential general plan amendments to promote downtown infill, to promote balance between infill and outfill, and to promote consistency between elements of the General Plan to better facilitate implementation of actions identified in the Climate Action Plan. The City is evaluated general plan amendments but will be proposing them at a later date and will be completing any necessary CEQA analysis for those amendments at that time. To the extent that the CAP measures may result in related impacts, such as increased downtown infill, there is programmatic analysis in this document, although the details of the proposed general plan amendments will have to be analyzed once they are specifically proposed by the City.
- Non–Settlement Agreement Actions.
    - **Revised and New Water Conservation Ordinances.** NOP included a revised Water Efficient Landscape Ordinance, a Landscape Design Ordinance, a revised Tree Ordinance, a revised Stormwater Management, a Discharge Control Ordinance and a new Low Impact Development Ordinance. The City has decided to develop and consider such ordinances separately from the CAP and Transit Plan/Program.
    - **Potential amendments to the General Plan related to AB 162 (2007) concerning floodplain management.** The City has determined at this time that it cannot proceed with new floodplain management analyses and policy consideration, as the California Department of Water Resources (DWR) has not yet provided adequate 200-year flood mapping for the city of Stockton and the City does not have the financial ability to fund such a mapping effort at this time. The City will consider new floodplain management analyses and policy at such a time as DWR completes adequate 200-year floodplain mapping and/or the City is in a better financial position to fund such mapping. As such, potential General

Plan amendments concerning floodplain management are not proposed at this time nor included as part of the project analyzed in this document.

- **Potential amendments to the General Plan related to AB 170 (2003) concerning air quality.** The City has reviewed its existing General Plan and found it compliant with the requirements of AB 170. The City submitted its opinion to the San Joaquin Valley Air Pollution Control District (SJVAPCD) for confirmation in fall of 2012. On May 1, 2013, the SJVAPCD responded to the City that the General Plan has the required air quality components. SJVAPCD recommended that the description of the attainment status be updates and the air quality monitoring and emissions inventory discussion be expanded but these are information items and does not affect the SJVAPCD opinion that the General Plan contains the required components. The City will consider the informational items for inclusion in the next round of General Plan amendments.

Project Location

Regional Location

Stockton is the county seat and is located in the center of San Joaquin County, California. San Joaquin County is located at the northern end of the San Joaquin Valley. The primary zone of the Sacramento–San Joaquin Delta (Delta) is west of Stockton, and much of the westernmost part of the city is located within the secondary zone of the Delta. The city is located in the San Joaquin Valley Air Basin (SJVAB).

Project Area

For the purposes of this document and the analyses herein, the boundaries of the project area are consistent with those of the City Study Area defined in the GPEIR. The project area comprises 84,950 acres and encompasses the land within the city limits, the existing sphere of influence (SOI) area, and the urban services boundary (USB). The project area boundaries extend to Armstrong Road and Live Oak Road on the north; portions of State Route 99, the Stockton Diverting Canal, and Jack Tone Road to the east; Bowman and Roth Roads on the south; and the San Joaquin River to the west.

Project Background

City of Stockton General Plan 2035 and Environmental Impact Report

In December 2006, in accordance with the requirements of CEQA, the City prepared and circulated the draft GPEIR. Comments were received on the GPEIR, and the City prepared responses to these comments and a final GPEIR. On December 11, 2007, the City certified the GPEIR (State Clearinghouse #2004082066) (City of Stockton 2007a) and adopted Findings of Fact and a Statement of Overriding Considerations for the GPEIR. It also approved the General Plan, *Final City of Stockton Bicycle Master Plan,* and Infrastructure Studies Project.

Settlement Agreement–Related Actions

On January 10, 2008, the Sierra Club filed a Petition for Writ of Mandate in San Joaquin County Superior Court (Case No. CV 034405), alleging that the City had violated CEQA in its approval of the General Plan. In this case, the Sierra Club asked the court, among other things, to issue a writ directing the City to vacate its approval of the General Plan and its certification of the GPEIR, and to award petitioners' attorney fees and costs.

The Attorney General also raised concerns about the adequacy of the EIR under CEQA, including but not limited to the EIR's failure to incorporate enforceable measures to mitigate GHG emission impacts that would result from the General Plan.

To allow the General Plan to go forward while still addressing the concerns of the Attorney General and the Sierra Club, the parties (i.e., the City, the Attorney General, and the Sierra Club) agreed to resolve their dispute by agreement, without the need for judicial resolution. On October 14, 2008, the City of Stockton entered into a Memorandum of Agreement (i.e., the document that implements the Settlement Agreement) with the Attorney General and the Sierra Club. The Settlement Agreement is included as an appendix the Draft Climate Action Plan

The project description in this chapter discusses certain tasks necessary to comply with the Settlement Agreement. The City has begun certain tasks required by the Settlement Agreement, as noted below.

- **CAP.** The Settlement Agreement requires preparation of a CAP and submittal to the City Council for adoption; however, the Settlement Agreement does not require actual City Council adoption of a CAP. *The CAP, currently in draft form, is intended to meet this requirement.*
- **Climate Action Plan Advisory Committee (CAPAC).** The Settlement Agreement requires formation of an advisory committee. *The CAPAC has been formed and has been involved in the development of the Green Building Ordinance, the CAP, and review of other Agreement requirements.*
- **CAP Requirements.** The Settlement Agreement requires the CAP to include GHG inventories, identify goals for reducing GHG emissions and vehicle miles travelled (VMT), and identify measures to reduce GHG emissions. *These are included in the CAP, which would result in VMT growth less than population growth as required by the Settlement Agreement. This SEIR analyzes the potential environmental impacts of the reduction measures in the CAP.*
- **Green Building Program.** The Settlement Agreement requires development and consideration of a green building program and associated measures. *The City adopted a Green Building Ordinance (GBO) and the Green-Up Stockton Ordinance in compliance with this part of the Settlement Agreement. The GBO is presently suspended pending consideration of potential revisions. The City has considered a local assessment district (consistent with AB 811) for residential buildings but has put this on hold in light of mortgage restrictions of Fannie Mae and Freddie Mac. The CAP calls for establishing a local assessment district for non-residential buildings, which are not hindered by the restrictions of Fannie Mae and Freddie Mac. This SEIR does not analyze the Green Building Ordinance or the Green-up Stockton Ordinance as they have been previously adopted, but it does analyze potential adoption of a future AB 811-style district as part of SAWP funding.*

- **Transit Program/Transit Gap Study**. The Settlement Agreement requires development of transit studies and a transit program. *A transit gap study was completed, and a transit program was developed; the transit program is included as Appendix D of the CAP for ultimate consideration by the City Council. This SEIR analyzes the potential environmental impacts of the Transit Plan/Program as part of the proposed CAP.*

- **Infill/Downtown Development**. The Settlement Agreement requires the City to develop General Plan policies or programs to support infill/downtown development and to submit them to the City Council for adoption. The Settlement Agreement does not require actual City Council adoption of such policies or programs. *The City staff has developed Draft General Plan amendments to ensure 4,400 housing units by buildout in the Greater Downtown area and to incentivize infill including a goal of 3,000 units by 2020 for the Greater Downtown area. The specific General Plan amendments will be considered separately from the Climate Action Plan and are not being analyzed in this SEIR; however this SEIR does analyze the potential impact of increased downtown infill, since CAP Measure Trans-1 calls for increased downtown infill consistent with the Settlement Agreement's goal for 2020. The Settlement Agreement also requires that the General Plan allow for 14,000 housing units within the City limits (limits as of the 2008 date of the Settlement Agreement); however, the existing General Plan already provides for this amount of development and thus no new plans or policies are necessary to meet this portion of the Settlement Agreement.*[1]

- **Projects outside the City limits.** The Settlement Agreement requires development of project approval criteria for projects outside the City limits. *The City is evaluating General Plan amendments to provide criteria for review and approval of projects outside the City limits in relation to GHG emissions, services, and transit support for City Council consideration. These General Plan amendments will be considered separately from the Climate Action Plan and are not being analyzed in this SEIR; these amendments could affect the timing of development in the City, but are not considered specifically as part of any measures included in the CAP.*

- **Monitoring.** The Settlement Agreement requires monitoring of program elements. *The City would track any measures and strategies that are adopted pursuant to the CAP or other Settlement Agreement elements. Monitoring of program implementation is not expected to result in any environmental impacts and thus this aspect of the Settlement Agreement is not discussed further in this SEIR.*

- **Early Climate Protection Actions.** The Settlement Agreement requires development of certain early climate protection actions. *The City has developed a Climate Impact Study Process and is evaluating GHG emissions for projects in this interim period before CAP adoption. Since this requirement only concerns a review process, it would not result in any environmental impacts and is not discussed further in this SEIR.*

[1] The Settlement Agreement also requires the City to ensure 14,000 units could be built within the City limits, but outside the Greater Downtown Stockton Area (GDSA). As of the writing of this SEIR, 8,256 units had already been entitled in this area since the publication of the General Plan. In addition, the 2010 Stockton Housing Element identifies enough vacant/opportunity sites within the City limits but outside the GDSA to realistically allow for the development of an additional 6,038 units, for a total development capacity in this area of 14,294 units. Therefore, the City has already reached its goal of allowing for the amount of development within the City limits but outside the GDSA, as required by the Settlement Agreement. The proposed project, correspondingly, does not increase development capacity in this area, and potential impacts associated with any potential future growth in this area caused by the proposed project are not analyzed.

Project Purposes and Objectives

Settlement Agreement–Related Actions

Project Objectives

The key objectives for the Climate Action Plan and the Transit Plan/Program include the following:

- Result in GHG reductions that consistent with AB 32.
    - As described in the Draft Climate Action Plan, for Stockton this level has been defined as approximately 11% below 2005 levels by 2020.
    - Fulfill the requirements of General Plan Policy HS-4.20 which requires the City to "adopt new policies, in the form of a new ordinance, resolution, or other type of policy document, that will require new development to reduce its greenhouse gas emissions to the extent feasible in a manner consistent with state legislative policy as set forth in Assembly Bill (AB) 32 (Health & Saf. Code, § 38500 et seq.) and with specific mitigation strategies developed by the California Air Resources Board (CARB) pursuant to AB 32[.]"
- General consistency with the land use policy direction in the adopted General Plan with the exception of the downtown area and accommodation of approximately the same amount of growth as the adopted General Plan.
- Consistency with the Settlement Agreement[2], including the following:
    - Result in a rate of VMT growth less than the rate of population growth; and
    - Promote increased residential development in the GDSA.
- Allow for economic growth in the City to support improvement in the City's financial picture and economic opportunity for the City's residents and businesses.

The key objectives for the Transit Plan/Program include the following:

- improving the public transit network;
- eliminate potential last mile barriers that keep people from using transit;
- adopting transit-supportive policies; and
- identifying long-term funding solutions to support the existing and future transit system and transit-oriented development.

[2] The underlying purpose of the Settlement Agreement is described as follows: "The parties want to ensure that the General Plan and the City's implementing actions address GHG reduction in a meaningful and constructive manner. The parties recognize that development on the urban fringe of the City must be carefully balanced with accompanying infill development to be consistent with the state mandate of reducing GHG emissions, since unbalanced development will cause increased driving and increased motor vehicle GHG emissions. Therefore, the parties want to promote balanced development, including adequate infill development, downtown vitalization, affordable housing, and public transportation. In addition, the parties want to ensure that development on the urban fringe is as revenue-neutral to the City as to infrastructure development and the provision of services as possible." The CAP and the Transit Plan/Program are only two actions intended to help meet the Settlement Agreement. Other actions, including the Green Building Ordinance and General Plan Amendments for downtown infill and for balancing infill and outfill will also be necessary to meet the Settlement Agreement, but this SEIR is focused only on the CAP and the Transit Plan/Program.

Project Description

The various components of the proposed project are described below.

Settlement Agreement–Related Actions

Climate Action Plan

Overview

The City has prepared a draft CAP for reducing its GHG emissions by 2020 to a level approximately 11%[3] below 2005 levels. The draft CAP was prepared in consultation with the CAPAC, the stakeholder group appointed by the City Council to represent various stakeholders and to advise the City on implementation of the Settlement Agreement including preparation of the CAP. The draft CAP may be revised in response to City, CAPAC, and public input as it goes through the review process prior to consideration by the City Council.

The CAP is organized as follows.

- The *Executive Summary* summarizes the key findings of the document.
- *Introduction: Summary of the Settlement Agreement* provides relevant regulatory information (AB 32, etc.) and the science concerning climate change.
- *GHG Emissions Inventory and Forecast Summary* includes the latest emissions inventory and forecasts.
- *GHG Reduction Strategies and Measures and Cost/Benefit Analysis* includes the analysis and conclusions from the quantification of GHG reduction measures and cost/benefit analysis and addresses include the following sectors.
    - Building energy use.
    - Land use and transportation.
    - Waste generation.
    - Water consumption.
    - Wastewater treatment.
    - Urban forestry.
    - High global warming potential GHGs.
    - Off-road vehicles.
- *Implementation Strategies* identifies key implementation tasks to be pursued in full by the City at the time of implementation as well as the financing options for different measures.

The entire draft CAP (available on the City's website) is hereby incorporated by reference as part of this SEIR. The CAP is summarized further below. For a full description of the CAP and the GHG-reduction measures, please refer to the CAP document itself.

[3] As described in the CAP, the actual goal is 10.97%, but is referred to as "approximately 11%" in this SEIR.

Stockton's Community Greenhouse Gas Emissions

GHG emissions from "community activities" include those occurring in association with the land uses within the City's jurisdictional boundary, and generally consist of sources of emissions that the City's community can influence or control. Emissions generated by the City's municipal operations (e.g., City-owned facilities, vehicle fleets) are not individually highlighted in the draft CAP. However, emissions generated by the City's municipal operations occurring within the City's jurisdictional boundaries are encapsulated in the overall community emissions inventories and subject to the CAP. Municipal emissions represent approximately 2 to 3% of the City's 2005 community inventory.

The City inventoried GHG emissions from community activities in 2005 and then extrapolated those emissions to 2020. The GHG emissions inventory utilized methodologies and procedures approved by the state and local air quality management agencies. The primary protocols consulted for the analysis are listed below.

- *Local Governments Operations Protocol for the Quantification and Reporting of GHG Emissions Inventories (Version 1.1)* (California Air Resources Board 2010a).
- *2006 IPCC Guidelines for National Greenhouse Gas Inventories* (Intergovernmental Panel on Climate Change 2006).
- *Climate Action Registry General Reporting Protocol (Version 3.1): Reporting Entity-Wide Greenhouse Gas Emissions* (Climate Action Registry 2009).

The 2005 inventory includes GHG emissions that are either under the jurisdiction of the City or that occur in association with the land uses within the city limits. The 2005 inventory represents the *baseline* inventory, or the existing emissions level for CAP analysis purposes.

The 2020 emissions projection is a prediction of how community emissions may change by 2020, in the absence of state and local actions to reduce GHGs. The 2020 emissions projection is called the *business as usual* (BAU) scenario and is based on the expected growth in city population, employment, and housing.

As is the standard practice, the GHG inventories are presented in metric tons (MT) of carbon dioxide equivalent (CO_2e) in all Stockton CAP figures and tables, unless otherwise noted. Presenting inventories in CO_2e allows one to characterize the complex mixture of GHGs as a single unit, taking into account that each gas has a different global warming potential (GWP).

Total emissions for the city in 2005 were approximately 2.4 million MT CO_2e (Table 2-1 and Figure 2-1). The largest source of emissions was on-road transportation, which represented 48% of total community emissions. (Transportation emissions are often the largest source of emissions in community inventories in California.) Building energy emissions were the second largest source of emissions and accounted for 33% of total community emissions. The building energy sector includes emissions associated with natural gas combustion and electricity consumption in residential, commercial, and industrial buildings and other uses in Stockton. The third largest source was off-road equipment, which contributed 8% of the total 2005 emissions. The remaining sources in order of greatest contributions were high-GWP GHGs (4%), wastewater treatment (4%), solid waste management (3%), water importation (0.4%), and agriculture (0.04%).

Community-wide, BAU emissions are projected to increase by approximately 13% from 2005 to 2020. The increase will occur primarily because of increases in VMT, building energy and water use, and wastewater generation due to population and employment growth. Using values listed in Table

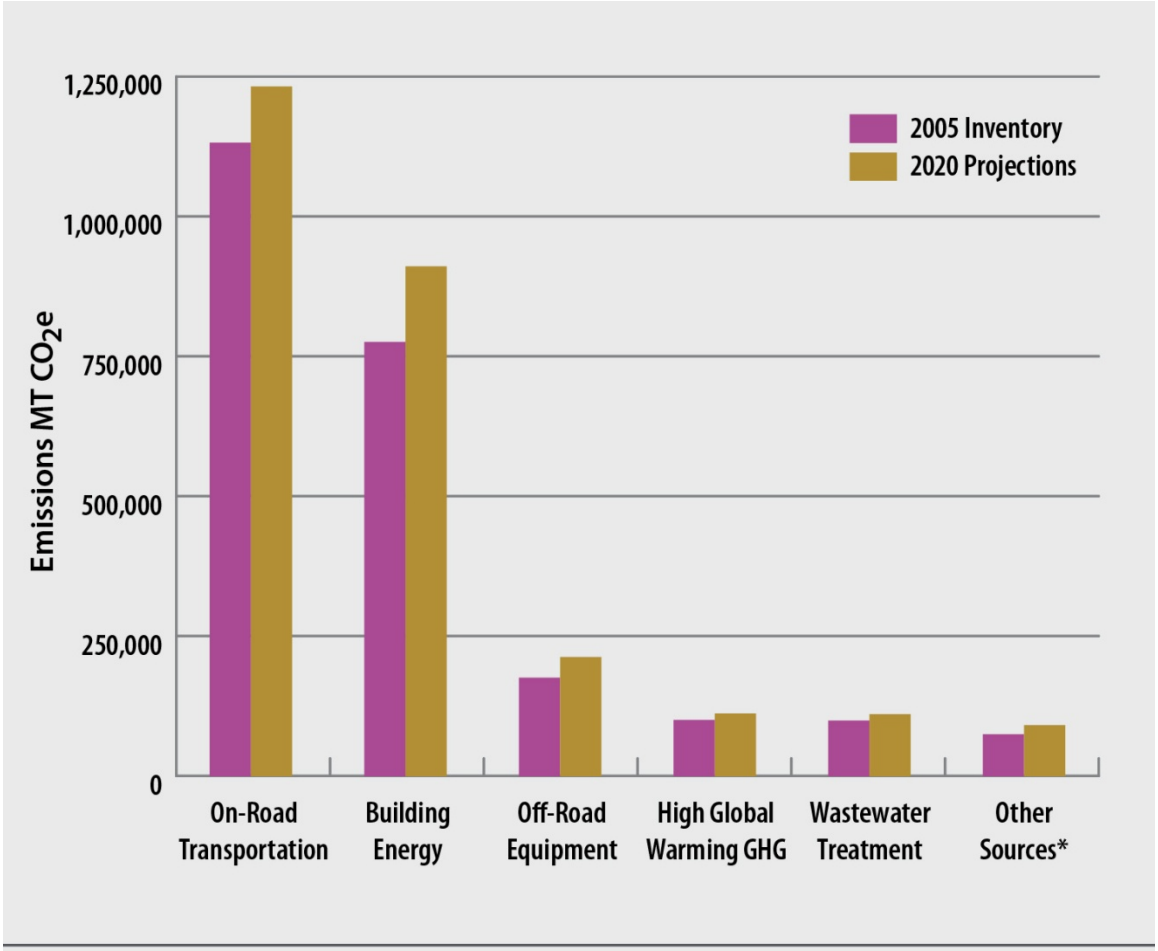
2-1, it is predicted that between 2005 and 2020 on-road transportation emissions and building energy emissions are expected to increase by 9% and 17%, respectively; water importation emissions and wastewater treatment emissions are expected to grow by 42% and 11%, respectively.

Table 2-1. City of Stockton Community Greenhouse Gas Inventories: 2005 Baseline and 2020 Business as Usual Scenario Forecast[a]

	2005 Baseline		2020 BAU Scenario Forecast	
Emissions Section	MT CO_2e	% of Total	MT CO_2e	% of Total
Agriculture	928	0.04%	928	0.03%
Building energy	776,186	32.9%	911,272	34.1%
High-GWP GHG	100,931	4.3%	112,478	4.2%
Off-road equipment	176,431	7.5%	213,300	8.0%
On-road transportation	1,132,265	48.0%	1,232,663	46.1%
Solid waste management	65,720	2.8%	78,347	2.9%
Wastewater treatment	99,777	4.2%	111,191	4.2%
Water importation	8,694	0.4%	12,340	0.5%
Total emissions	2,360,932	100%	2,672,519	100%

Source: Draft Climate Action Plan
BAU = business as usual.
GHG = greenhouse gas.
GWP = global warming potential.
MT CO_2e = metric tons of carbon dioxide equivalent.
[a] For more information, see the Draft Climate Action Plan.

Figure 2-1. City of Stockton Community Greenhouse Gas Inventories: 2005 Baseline and 2020 BAU Forecast (MT CO_2e)



Stockton's Greenhouse Gas Emissions Reduction Target

In December 2008 CARB, which is the lead agency empowered to implement AB 32, adopted the *Climate Change Scoping Plan: A Framework for Change* (AB 32 Scoping Plan), which is a policy document outlining the state's approach to meeting the AB 32 GHG emissions reduction targets. In the AB 32 Scoping Plan, CARB recommended—but did not require—an emissions reduction goal for local governments of 15% below "current"[4] emissions to be achieved by 2020 (California Air Resources Board 2008). Based on this recommendation, the City identified an interim GHG emissions reduction goal for the purposes of initial CAP development of 15% below 2005 levels.

During development of the CAP, the City evaluated the effect of the state's reduction measures and evaluated a wide range of potential local GHG reduction measures to examine the feasibility, cost, and benefits of potentially meeting the interim reduction target. Although technically feasible to meet the interim reduction target, it is the City's judgment that meeting the target would require some measures or actions that are infeasible under current economic conditions in Stockton; these measures or actions would result in short- and near-term financial impacts that could affect economic recovery in Stockton and would affect Stockton's ability to invest in energy efficiency and other GHG reduction strategies in the long run. While some of the initially identified reduction strategies would result in long-term economic benefits, particularly for measures regarding energy efficiency, the City finds that economic conditions limit the extent of measures that the City can propose and commit to at this time. With changes in future economic conditions, the City and the community may choose to implement more ambitious GHG reductions.

At the release of the AB 32 Scoping Plan in 2008, the state's GHG inventory had been completed only from 1990 through 2004, with a forecast to 2020. If one interpolates between the 2004 and 2020 emission estimates at the time of the AB 32 Scoping Plan, one finds that CARB's recommendation of 15% below "current" levels roughly corresponds to 15% below 2008 levels as they were projected at the time. Subsequent to the AB 32 Scoping Plan, CARB completed state inventories for 2005 to 2008. Using this new data, statewide 1990 emissions (433.29 million MT CO_2e) are equivalent to approximately 10% below 2005 levels (482.09 million MT CO_2e).[5] In light of this updated data and the evaluation of feasibility described above, the City now proposes an ***10% below 2005 levels*** as its GHG reduction goal, which would be consistent with the level of reductions needed at the state level to meet the AB 32 goal, compared to statewide 2005 levels.

The measures described in the City's CAP would, if fully implemented, result in 2020 emissions approximately 10% below 2005 levels, as shown in Figure 2-2.

The CAP would require substantial effort on the part of the entire Stockton community, including residents and business, schools, the San Joaquin Regional Transit District (San Joaquin RTD), other public entities, and the Stockton municipal government at a time when residents, businesses, and public agencies are struggling to pay current bills, keep businesses open, and provide basic services. The CAP, if fully implemented, would result in a 20% reduction in GHG emissions per capita from 2005 to 2020. Compared to the statewide effort needed to meet AB 32, for the land use sector (e.g., excluding heavy industrial sources, which are not included in Stockton's local inventory), the state would need to reduce per capita GHG emissions from 10.0 MT per person in 1990 to approximately 7.4 MT per person in 2020. Implementation of the CAP would result in reducing Stockton's

[4] "Current" as it pertains to the AB 32 Scoping Plan is commonly understood as sometime between 2005 and 2008.

[5] See draft CAP for calculations.

emissions from approximately 8.5 MT per person in 2005 to 6.8 MT per person in 2020, which is roughly the same as the state's overall needed average in 2020 (see data in the Draft CAP). While some communities in California, particularly those with relatively better economic conditions or lower levels of projected growth compared to Stockton, might be able to achieve relatively greater reductions in GHG emissions, given the City's severe economic constraints, the CAP would represent no less dedication and effort to helping California reach the GHG reduction goals in AB 32.

Development of the Greenhouse Gas Reduction Strategies

In order to develop the GHG reduction strategies, the City compiled a list of candidate GHG reduction measures for quantification and potential inclusion in the CAP, based on existing City documents and other focused studies. An extensive list of potential GHG reduction measures was developed and submitted to the CAPAC for technical review. Based on feedback provided by the CAPAC, the City selected candidate measures to analyze in greater detail. The amount of GHG emissions that could be avoided in 2020 by each measure was calculated. Costs and savings associated with each measure were also quantified, as feasible, to help identify the financial and economic impact of the measures. Other benefits, such as reduction in air pollution, were also identified for all measures. The City also evaluated the methods of implementing different measures, including whether each measure should be implemented through incentive-based voluntary approaches, flexible performance-based measures, or through new local mandates.

Based on consideration of the GHG reduction effectiveness, financial and economic costs of measures, and benefits, the City identified a list of voluntary and mandatory measures for inclusion in the CAP.

Greenhouse Gas Reduction Measures

The City's CAP includes existing state and proposed local measures that would result in GHG emissions reductions within the community. State mandates do not require additional local action but would result in local GHG reductions and would often require local effort. For example, a number of state regulations will improve the fuel efficiency of vehicles and reduce the carbon content of electricity. Vehicles travelling on City roadways, as well as electricity provided to the City, will therefore be cleaner and less GHG-intensive than if state mandates had not been established. Statewide energy efficiency mandates require that new buildings must include additional energy efficiency improvements. State commercial recycling mandates will require greater effort in recycling for commercial buildings.

To supplement statewide initiatives, the City has identified a series of voluntary, performance-based, and mandatory reduction measures that are either currently being implemented, or would be implemented by the City. The reduction measures can be grouped into eight broad emission sectors and would affect emissions throughout community activities. The measures include programs that improve building energy efficiency, increase transit and alternatives to vehicular travel, increase use of renewable energy, reduce water consumption, reduce waste, and other measures. Table 2-2 summarizes the City's list of proposed reduction measures by emissions sector.

Table 2-2. Summary of Greenhouse Gas Reduction Measures[a]

Measure Number	Measure Description
Multi-Sectoral	
DRP-1	Development Review Process—29% reduction for discretionary projects [M]
Building Energy	
Energy-1	Green Building Ordinance, as amended [M][b]
Energy-2a	Outdoor Lighting Municipal Upgrades [CITY]
Energy-2b	Outdoor Lighting Private Upgrades [V]
Energy-3	Energy Efficiency Programs to Promote Retrofits for Existing Residential Buildings [V]
Energy-4	Energy Efficiency Programs to Promote Retrofits for Existing Non-Residential Buildings [V]
Energy-5	Solar-Powered Parking [V]
Energy-6	Residential and Non-Residential Rooftop Solar [V]
Land Use and Transportation	
Trans-1	Land Use/Transportation System Design Integration [CITY]
Trans-2	Parking Polices [M]
Trans-3	Transit System Support [CITY]
Trans-4	Efficient Goods Movement [CITY]
Trans-5	Reduce Barriers for Non-Motorized Travel [CITY]
Trans-6	Transit System Improvements [CITY]
Trans-7	Safe Routes to School [CITY]
Trans-8a	Additional Safe Routes to School [CITY]
Trans-8b	Transportation Demand Management [V]
Waste Generation	
Waste-1	Increased Waste Diversion [M]
Water Consumption	
Water-1	Comply with Senate Bill (SB) X7-7 [M]
Water-2	Promotion of Water Efficiency for Existing Development [V]
Wastewater Treatment	
Wastewater-1	Energy Efficiency Improvements at the RWCF [CITY]
Urban Forestry	
Urban Forestry-1	Urban Tree Planting Programs [CITY]
High Global Warming Potential GHGs	
HGWP GHG-1	Residential Responsible Appliance Disposal (RAD) Programs [CITY]
Off-Road Vehicles	
Off-Road-1	Electric-Powered Construction Equipment [V]
Off-Road-2	Reduced Idling Times for Construction Equipment [M]
Off-Road-3	Electric Landscaping Equipment [V]

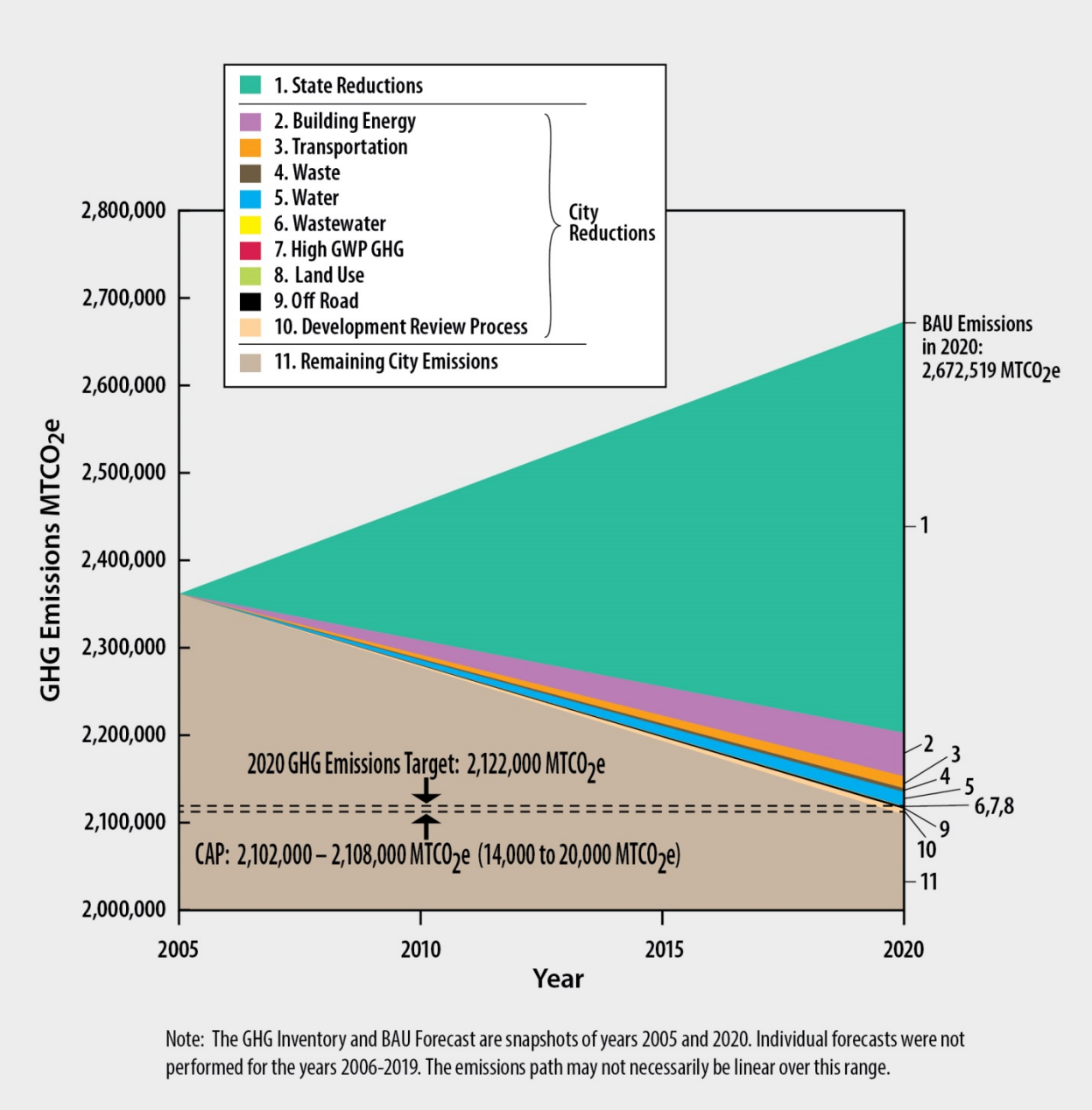
[V] = Voluntary for existing and new private development incentive-based approaches.
[M] = Mandatory program for existing and/or new development.
[CITY] = City initiative.

[a] Carbon offsets are considered as a contingency method for greenhouse gas reductions. See discussion in the draft CAP.

[b] Because the Green Building Ordinance is being revised, the CAP presently does not assume any additional reductions from its implementation beyond those accounted for in the state Title 24 measure.

Approximately 83% of the reductions needed to achieve the City's GHG reduction goal are achieved through state-level programs, and 17% are achieved through City-level programs. The largest GHG reductions are identified in the areas of building energy (both energy efficiency and renewable energy), transportation, and waste (Table 2-3 and Figure 2-2).

Figure 2-2. Summary of GHG Emissions Reductions by Sector



Note: The GHG Inventory and BAU Forecast are snapshots of years 2005 and 2020. Individual forecasts were not performed for the years 2006-2019. The emissions path may not necessarily be linear over this range.

Table 2-3. Summary of Greenhouse Gas Emissions Reductions by Sector in 2020 with Implementation of the Draft Climate Action Plan

GHG Emissions	MT CO_2e	Percentage of Total Reduction (%)
State programs	**473,415**	**83%**
Local programs		
Development review process	4,963	1%
Building energy use measures	49,271	9%
Land use and transportation measures	13,619–19,360	2 to 3%
Waste generation measures	4,245	1%
Water consumption measures	16,228	3%
Wastewater treatment measures	312	0.1%
Urban forestry measures	75	0.0%
High-GWP GHG measures	255	0.0%
Off-road vehicle measures	2,622	0.5%
Subtotal for local programs	**91,590–97,331**	**16% to 17%**
Total Reductions	**565,004–570,746**	**100%**

Source: Draft Climate Action Plan, 2014
Note: Totals may not add up due to rounding.
GHG = greenhouse gas.
GWP = global warming potential.
MT CO_2e = metric tons of carbon dioxide equivalent.

The measures described in the CAP outline a path for reducing community emissions in conjunction with planned state actions. When combined with state efforts, the GHG reduction measures described in the City's CAP would enable the City to reduce its community GHG emissions by approximately 565,000 to 571,000 MT CO_2e, which slightly exceeds the emissions reduction target of 10% below 2005 levels. Actions not currently quantified, as well as local effects of the state's cap-and-trade program,[6] will likely contribute additional reductions to the City's goal.

Carbon offsets[7] were considered as a potential alternative option to reduce GHG emissions in Stockton. Carbon offsets can remain an option for the City as a means to meet its reduction target. However, at this time, offsets are not proposed as a reduction measure due to concern that purchase of offset credits from offset providers outside of Stockton would not result in any economic return to Stockton residents or businesses and due to financial concerns. The City may consider in the future if the purchase of local (Stockton or nearby parts of San Joaquin County) offset credits represent a viable approach for inclusion in future updates to the CAP. Under the Development Review Process for new development, the City would remain open to the potential use of offset credits to meet required reduction amounts at a project-by-project level.

Local GHG reduction measures are discussed further in the CAP.

[6] See discussion of cap-and-trade in the draft CAP.

[7] Carbon offsets are credits (in MT CO_2e) generated through projects that voluntarily reduce their emissions. Offsets are validated by third parties using accepted protocols such as those of the Climate Action Reserve. Offset credits can be purchased directly from offset project proponents or through brokers. The California cap-and-trade system started to operate in late 2012 and was applied to stationary sources in 2013.

Cost/Benefit Analysis

A quantitative and qualitative cost/benefit analysis was performed for the GHG reduction measures included in the draft CAP. Wherever possible, the implementation and operational costs and savings were identified for the reduction measures in order to present the cost effectiveness in terms of dollars per ton of GHG reduced. Costs and savings were identified separately for the private sector and for the City government. An analysis of benefits was also performed for each measure to identify the other benefits that could be derived from GHG reduction measure implementation. The CAP presents a summary of the GHG emissions reduced by each measure and the costs and savings of different measures and their benefits.

The City has designed the CAP to rely, for the most part, on voluntary, incentive-based measures for existing development and flexible performance-based measures for new development, and it only uses mandatory measures for new development when required by prior state or local mandates (such as for water conservation) or when advantageous to the City. By providing flexibility, the intent is that the City government, residences, and businesses would employ the most cost-effective methods to reduce GHG emissions.

The City, other public sector agencies (e.g., school districts), private residents, and businesses would incur costs to implement GHG reduction measures; but in many cases, they would also realize long-term savings resulting from reduced energy and maintenance costs that can help recoup initial investments. In the building energy sector, costs would be borne by building owners to upgrade to energy efficient technologies. In the transportation sector, many of the measures involve capital improvement projects and operational improvements that would be funded through a mix of local, state, and federal funding sources. Implementation costs for the City government would be associated with staff time to develop energy, waste, and transportation programs and ordinances as necessary; promote incentives for voluntary energy efficiency and renewable energy; supervise the Development Review Process, develop and implement building, and fleet upgrades for City municipal operations; and implement new programs.

Some of the most cost-effective measures—and the biggest GHG reductions—can be found in the building energy sector. For example, investments to upgrade to energy efficient lighting and improve the energy efficiency of existing buildings can have payback times of as little as 1–5 years through reduced energy bills. Other measures have longer-term payback periods but can still have a positive net present value (i.e., their costs can be fully recouped in a reasonable amount of time). Other measures would represent net costs in the long-term, based on current energy prices, but may have shorter payback periods if energy prices increase in the future.

A competitiveness analysis was completed by Economic and Planning Systems (EPS) to identify the potential net effects of CAP policies, programs, and financing measures on competitiveness of business in Stockton. The conclusion of that analysis is that the measures included in the CAP have been designed to minimize cost burdens on businesses and residents, and thus the net competitiveness impacts are likely to be very limited or insignificant (Economic and Planning Systems 2012). The competitiveness analysis is included as an appendix to the CAP.

Implementing the CAP would avoid the generation of approximately 565,000 to 571,000 MT CO_2e, which is equivalent to the following actions (U.S. Environmental Protection Agency 2011).

- Removing more than 120,000 passenger vehicles from the road each year.
- Reducing gasoline consumption by more than 64 million gallons.

- Consuming more than 1.3 million fewer barrels of oil.

Implementing the CAP would reduce the generation of criteria air pollutants in Stockton, including ozone, carbon monoxide, and fine particulates, which would improve public health for the community. Stockton residences and businesses that implement energy efficiency upgrades as a result of the CAP would see future savings due to lower future energy bills. Transportation improvements included in the CAP would increase mobility and alternative modes of transportation for Stockton residents and visitors. Water improvements included in the CAP promote wise use of limited water resources and enhance water quality. Waste reductions included in the CAP would reduce the need for landfill space. Other benefits of the CAP include reduction of electricity, natural gas, and gasoline usage, which reduces consumer sensitivity to potential increases in future energy prices. Reduction of gasoline consumption also has an additional benefit of reducing dependence on foreign oil supplies. The benefits for each measure are thoroughly discussed in the CAP.

Implementing the CAP

Meeting the City's emissions reduction target would require participation of both City government and the community at large. The CAP sets a path for achieving the City's target through a collective initiative that would streamline efforts and ensure new policies are integrated into everyday life.

To facilitate implementation of the CAP, the City has outlined key priorities for three implementation phases starting in 2012 and ending in 2020.

- **Phase 1 (2014–2015).** During this phase, the City would develop key ordinances, programs, and policies required to promote the voluntary, incentive-based measures to establish the planning framework for the performance-based development review process, and to support and implement the local mandatory GHG reduction measures. This would include development of a Specific Plan for the Downtown area to help promote residential development. [8] Measure funding would be established. A key initiative, a public-private partnership to help promote downtown/infill development would be advanced (see further discussion below). A cost/benefit analysis of measures not analyzed in the CAP (i.e., urban forestry, high GWP GHG, and off-road measures) would be completed. In 2015, the City would update the community GHG inventory to monitor emissions trends.
- **Phase 2 (2016–2017).** The City would conduct a mid-course evaluation of CAP implementation to examine progress made toward meeting the City's reduction target, to examine the effectiveness of the measures in the CAP, and to examine the City's current economic condition to identify if additional or different measures should be adopted and to identify whether the City's reduction target can or should be revised. During Phase 2, the City would continue to implement measures that were begun in Phase 1. The City would also select and encourage implementation of Phase 2 measures.
- **Phase 3 (2018–2020).** The City would continue to implement and support measures begun in Phases 1 and 2 and encourage implementation of all remaining CAP measures (Phase 3 measures). An analysis of the effectiveness of Phase 1 and 2 measures would be conducted, as would an update to the community GHG inventory. The City would begin developing a plan for post-2020 actions.

[8] Funding for the Downtown Specific Plan has been included in the proposed CDD budget for FY 2013/2014.

The City would appoint an Implementation Coordinator as part of the fiscal year 2014/15 budget process to oversee the successful implementation of all selected GHG reduction strategies. The primary function of the Implementation Coordinator would be to create a streamlined approach to manage implementation of the CAP. The Implementation Coordinator would also coordinate periodic community outreach to leverage community involvement, interest, and perspectives.

Successful implementation of the CAP requires the development of a robust planning framework. Specifically, the City would establish a timeline and prioritization scheme for measure implementation. Measure prioritization would be based on a number of factors, including cost effectiveness, GHG reduction efficacy, and general benefits to the community. Financing all measures would require creative, continuing, and committed funding. Implementation of the CAP is resource dependent and will rely on the ability of the City to obtain grants and other local funds.

The citizens and businesses in Stockton are integral to the success of the CAP. Their involvement is essential, considering that several measures depend on the voluntary commitment, creativity, and participation of the community. The City would help to educate stakeholders, such as businesses, business groups, residents, developers, and property owners about the CAP and encourage participation in efforts to reduce GHG emissions. Detailed community outreach and education plans would be developed during Phase 1.

Once the GHG reduction measures have been implemented, regular monitoring is important to ensure reduction measures are functioning as they were originally intended. Early identification of effective strategies and potential issues would enable the City to make informed decisions on future priorities, funding, and scheduling. Moreover, monitoring provides concrete data to document the City's progress in reducing GHG emissions.

It is anticipated that monitoring, in the form of updated GHG inventories, would be conducted in 2015, 2017, and 2019 and would be tied to the phases describe above. The results of the monitoring would be used to examine GHG reduction progress and would allow for adaptive management of the CAP. The City would develop a detailed protocol for monitoring the effectiveness of emissions reduction measures. The City would also establish guidelines for reporting and documentation and would make annual reports to the City Council.

While AB 32 focuses on a 2020 target for California, the State has also adopted Executive Order (EO) S-03-05, which articulates a GHG reduction goal for the State to reduce GHG emissions to a level that is 80% below the level in 1990. It is reasonably foreseeable that as California approaches its first milestone in 2020, focus will shift to the 2050 target. Consistent with statewide planning trends, the City would commence planning for the post-2020 period in Phase 3 (2018). By the time Phase 3 begins, the City would have implemented the first two phases of the CAP and would have a better understanding of the effectiveness and efficiency of different reduction strategies and approaches.

Development Potential Change with CAP Measure Trans-1 (Downtown Infill)

Increased downtown infill per Cap Measure Trans-1 would build on the significant prior work the City and regional government have accomplished, which—in addition to the adopted General Plan and Housing Element—includes the following.

- *Stockton Greater Downtown Housing Strategy* (City of Stockton 2007b)
- *Downtown Development Handbook*, June 2011 (City of Stockton 2011)

- San Joaquin Council of Governments (SJCOG) studies of the ACE station area related to the *Regional Smart-Growth Transit-Oriented Development Plan* (SJCOG 2012)
- *ULI Advisory Services Panel Report on Stockton, California Downtown Revitalization* (Urban Land Institute 2012).

The General Plan already addresses increasing housing in the Central City and Downtown Districts in several ways, although not to the extent required by the Settlement Agreement.

- General Plan policies regarding housing.
- General Plan policy objectives for increasing housing in the Downtown District.
- Higher densities allowed in the Commercial designation for the Downtown District.
- Policies encouraging development of more housing in both the Downtown District and the Central City District.

The General Plan Housing Element assesses the extent to which the adopted General Plan policies and vacant lands could allow achievement of General Plan goals for housing in the downtown area. The analysis in the Housing Element shows that development of vacant and underutilized lands at adopted land use densities could achieve between 1,900 and 2,700[9] housing units in the Greater Downtown area, including the Downtown District, which falls short of the Settlement Agreement 2020 goal of 3,000 units and the ultimate goal of 4,400 units. The Housing Element also reviewed barriers to the development of housing and concluded that permit requirements for residential land uses in the downtown area could be reduced. Basically, any housing other than single-family housing at low densities requires approval of a discretionary land use permit as well as environmental review under CEQA.

The Greater Downtown Housing Strategy identified types of housing that could be developed as infill in the Greater Downtown. Additionally, the strategy presented valuable recommendations regarding reducing uncertainty in permitting and increasing flexibility in housing and land use types. Recent analysis by SJCOG identified several more opportunity areas, primarily focused on transit-oriented development opportunity sites. These sites would not appreciably add to the total projected additional housing development and would not necessarily result in meetings the 3,000 unit goal for 2020 or the 4,400-unit goal for buildout. Staff review of GIS mapping and aerials did not identify any other significant opportunity areas with appropriate adopted land uses designations not noted in the Housing Element.

Much of the land area in the Greater Downtown area outside of the urban core is designated for Low-Density Residential land uses. The existing General Plan land use designation allows a maximum density of residential development of 8.7 dwelling units (du) per net acre and covers the historic neighborhoods of Magnolia, Doctor's Row, Victory Park, Midtown, and Gleason Park as well as large developed areas north of the Central City. Although much of the area is developed with existing older single-family residential structures, new, higher density development on vacant lots, in unused portions of existing lots, and through replacement or remodeling of existing structures could greatly increase housing opportunities in the district.

[9] The actual buildout estimates are 1,928 to 2,723 housing units. Given that buildout numbers are made based on land use plan designations, they are considered approximate only and thus this document rounds these estimates to the nearest hundred units.

Because so much work has been done by the City and others to identify strategies and policies to revitalize downtown Stockton and encourage and support smart growth in the central parts of the city, there is no need to "reinvent the wheel" in response to the Settlement Agreement as far as the types of developments that would be appropriate to further smart-growth goals and the locations where such projects could occur. However, efforts prior to the economic downturn focused on catalyzing efforts that could be pursued by public and nonprofit agencies. With the changes in the economic climate and the market, and the loss of redevelopment as an available tool, a different approach is required.

There is reason to believe that when market demand for housing in Stockton revives, the types of housing for which there will be market demand may be different from those in the recent past. Prior to the economic downturn, the ULI found that demand was growing for higher-density, centrally located housing. Market demand for this type of housing may be driven by these factors.

- Higher gas prices.
- Smaller household size.
- Greater desire to live downtown among younger people.
- Aging population.
- Lower wages leading to less money available for households to spend on housing and automobile ownership.

As noted above, the existing General Plan would allow for approximately 1,900 and 2,700 housing units in the Greater Downtown area, including the Downtown District, which falls short of the Settlement Agreement ultimate goal of 3,000 units for 2020 and 4,400 units at buildout. The proposed CAP includes the 3,000 unit goal for 2020, which could result in an increase of 300 to 1,100 units above the current General Plan.[10] The City will be separately considering General Plan amendments to enable the 3,000 unit goal for 2020 and to meet the 4,400 unit buildout goal.

The existing General Plan included an estimated citywide buildout level of an estimated 191,215 housing units[11], an increase of 99,490 units above the General Plan estimated 91,725 units as of 2005 (City of Stockton 2007a). With an additional 300 to 1,100 units the new citywide buildout level would be approximately 191,500 to 192,300 units. This would represent a 0.2% to 0.6% increase in the overall buildout level compared to the existing General Plan.

The existing General Plan (and the GPEIR) estimated that buildout would be achieved in 2035. This estimate was made prior to the recent recession and the virtual collapse in the Stockton housing market, which has seen very low levels of growth from 2008 to 2012. Historically, there has been little to no net growth in the greater downtown area in the last decade. From 2002 to 2011, there were 256 new units built (approximately 26 units per year). Taking into account demolitions, there were only 62 net new units over this period (approximately 6 net units per year). In the City overall, the annual number of new units built dropped from over 3,000 in 2004 to around 200 or fewer from 2008 to 2011. In 2012, citywide building permits for new residential units dropped below 100 for the first time in several decades. Given the effects of the recession, during early development of the

[10] Achieving the 3,000 units in the GDSA will likely require changing the designations of some of the existing low-density residential areas, commercial areas, and industrial areas to higher-density residential or mixed use designations. This could result in less industrial or commercial areas than allowed by the current General Plan.

[11] Source: EIR Findings adopted at the time of General Plan Approval in 2007.

CAP, the City staff reviewed the actual level of growth occurring in the city and derived a revised forecast of potential growth for 2020 that was substantially lower than that anticipated by the General Plan and that only approximately 9,300 units would be built from 2005 to 2020.[12]

With the dramatic downturn in the rate of housing growth in Stockton, it is now expected that buildout of the General Plan will happen much more slowly. Using the latest estimates of growth rates for San Joaquin County as a whole from the California Department of Finance (DOF) (2012)[13], it is now estimated that General Plan residential buildout as of 2035 would only be an estimated 149,000 units. Using the DOF estimates for County growth rates, the existing General Plan would only reach buildout perhaps in 2051. With the additional 300 to 1,100 units of downtown residential growth per the goal for CAP measure Trans-1, buildout would be reached perhaps six months to one year later in 2052. It is also possible that the additional units would be absorbed over time without any extension of the buildout horizon.

While adopting a goal of 3,000 units for 2020 would ultimately increase the level of buildout in the City, this increase in growth would only manifest itself citywide far in the future. Due to the change in economic conditions, at the 2035 horizon, overall city level of growth is expected to be substantially less than that evaluated in the prior GPEIR, even with the designation of additional areas for residential use in the Greater Downtown Area.

The prior General Plan did not provide analysis of the level of buildout in the downtown area for 2020 or for 2035. Based on the prior assumed buildout horizon of 2035 for the city as a whole, it could be assumed that the downtown area would also reach buildout by 2035, including the existing potential of 1,900 to 2,700 units. Interpolating between 2005 and 2035, this rate of growth would correspond to perhaps 950 to 1,350 units by 2020. As noted above, the Settlement Agreement includes a goal of 3,000 units by 2020, which would represent up to 2,050 additional units more than may have been possible by 2020 using the growth rates assumed at the time of the development of the existing General Plan. Although the City is considering adopting a policy to support 3,000 units in the GDSA by 2010, it is highly uncertain whether funding, economic conditions, and market preferences will actually support building of 3,000 units in the downtown area by 2020. Thus, for the purposes of the analysis in this SEIR, a range of growth scenarios are used for analysis of the impacts of the General Plan Amendments on downtown growth.

1. A scenario in which the Settlement Agreement goal of 3,000 units is reached in 2020, resulting in up to 1,650 units to 2,050 units more than would have been likely with the existing General Plan for 2020.
2. A scenario in which the rate of downtown residential growth proceeds at the same trajectory of growth for the City as a whole, in which case perhaps 1,500–2,000 units would be built by 2020, representing an increase of perhaps 550–1,050 units more than with the existing General Plan for 2020.
3. A scenario in which downtown residential growth results in only 1,000 units by 2020, which would represent roughly no change from that expected with the existing General Plan by 2020.

[12] By contrast, by interpolating the growth rates between 2005 and 2035 assumed at the time of development of existing General Plan, it was expected that perhaps 50,000 units would be built from 2005 to 2020.

[13] 2010–2050 annual growth rate for San Joaquin County of 1.58% (California Department of Finance 2012).

For buildout, as noted above, the adoption of a policy of 3,000 units for the GDSA for 2020 would result in an increase of 300 to 1,100 units above the existing General Plan (which would provide for 1,900 to 2,700 units at buildout in the GDSA).

As an implementation action of the CAP under this measure, the City will initiate a Specific Plan for the GDSA with a key goal of enabling the residential unit goals within the Settlement Agreement described above. The city will also consider facilitating several demonstrations projects parallel to the Specific Plan development and environmental process. Two examples of potential demonstration projects include[14]:

- *Cabral Station Neighborhood Transit Oriented Development (TOD) Concept.* This concept includes the following potential features;
    - Housing - Housing Mix: Market Rate Low-Rise, Mid-Rise, Townhomes, Live/work
    - Minimum Density: 20 dwelling units per acre/ Preferred Density: 25-30 d/u per acre
    - Minimum Floor Area Ratio (FAR): 2.0 / Preferred FAR: 3.0 to 4.0
    - General Location: Within ¼ mile radius west of the Cabral Station
    - Retail/Office/Flexible Use Space and Structured Parking:
        - Up to 38,000 square feet of retail/office/flexible use space on the ground floor.
        - Parking structure: approximately 340 spaces (floors 2 through 4). A proposed solar array could provide the majority of the electricity needed to operate the parking garage and ground floor retail (estimate 1,800 kwh).
    - Potential Commercial Uses Include:
        - Neighborhood Grocery Store - 14,000 sq. ft +/-
        - Child Care - 8,000 sq. ft. +/-
        - Restaurant /Café 6,000 sq. ft. +/-
        - Office - 10,000 sq. ft. +/-
    - Needed General Plan and Zoning Changes to Facilitate TOD: The City of Stockton in partnership with the San Joaquin Regional Rail Commission (SJRRC) could initiate changes to the Industrial General Plan designation, and IL—Industrial Limited zoning to allow land use flexibility within the TOD land use concept. The City and SJRRC will explore Development Code changes allowing high density residential uses by-right, without need for a Use Permit.
- *Renaissance Mixed Use Demonstration Project Concept:* The Renaissance Project concept is of an energy efficient, sustainable, mixed-use infill development that will span two city blocks, consisting of two, five story buildings. This concept development will provide 130 market rate apartment homes (floors 2-5) above 6,000 square feet of ground floor retail space. The project's residential product mix is anticipated to be studio, one bedroom, and two bedroom apartments. The street (ROW) will be abandoned between the two blocks containing the project. Each of the

[14] This SEIR does not analyze these potential demonstration projects in detail in this document. These descriptions are provided only as potential development that may be advanced in the GDSA in the future. CEQA compliance for any such projects will be conducted independently at the point of project applications or possibly may be completed as part of the CEQA compliance for the Downtown Specific Plan.

two buildings will front onto Miner Avenue and will be built to the street property line. Site Information:

- General Location: Miner Avenue corridor between Sutter Street and Grant Street
- Gross Project Area: 4.6 acres
- Dwelling Units Per Gross Acre: 28

Transit Plan/Program

The Transit Plan/Program (included as Appendix D to the Draft CAP) recognizes that transit will play a part in meeting the GHG reduction targets set in the CAP and has been developed in consultation with the San Joaquin RTD. The Transit Plan/Program is incorporated into this SEIR by reference. A summary is provided below.

Nelson\Nygaard Consulting Associates (Nelson\Nygaard) assisted the City in determining what actions are needed to accomplish the following.

- Improve the public transit network.
- Eliminate potential last mile barriers that keep people from using transit.
- Adopt transit-supportive policies.
- Identify long-term funding solutions to support the existing and future transit system and transit-oriented development.

The final outcome of this effort is a comprehensive plan, with a program of specific actions and quantifiable measures, which the City can use to address issues in the CAP and assist the San Joaquin RTD in identifying future policies and/or programs and related revenue sources to increase transit system utilization.

Summary of Transit Gap Analysis

A transit gap analysis was completed in early 2010 by City staff and the consulting firm TMD. The primary findings/recommendations were as follows.

- San Joaquin RTD's physical network coverage of the Stockton Metro Area is sufficient.
- San Joaquin RTD's span of service (days and hours of operation) is sufficient.
- San Joaquin RTD should consider quality of service improvements to attract new riders; these improvements could include the following.
  - Increase frequency on key corridors.
  - Improve service reliability.
  - Improve the system's ease of use and streamline routes where appropriate.
  - Expand the Metro Express Bus Rapid Transit Program.
  - Implement new service standards.

The gap analysis also included some recommendations for promoting transit-supportive policies and funding.

San Joaquin Regional Transit District 2009 Comprehensive Operations Analysis

The *San Joaquin RTD 2009 Comprehensive Operations Analysis* (COA) (TMD 2009) focused on improving the network efficiency and service delivery for San Joaquin RTD services operating primarily within the Stockton Metro Area. The document included the following.

- An assessment of transit needs
- A review of existing services and the service framework.
- A preferred service and fleet plan.
- System finance information.

The COA recommendations were divided into two implementation phases.

- Phase 1 was implemented in early 2011 and included the introduction of San Joaquin RTD's second Bus Rapid Transit (BRT) service (Airport Corridor).
- Phase 2 improvements are targeted for 2013–2014 but could be placed on hold depending on San Joaquin RTD's level of success in obtaining additional capital and operating funds.

Peer Review

Nelson\Nygaard completed a peer review that compared some of San Joaquin RTD's performance metrics with similar systems in Modesto, Fresno, and Bakersfield. This assessment determined that the following.

- San Joaquin RTD's low level of baseline service in the Stockton Metro Area (amount of service per capita and/or per square mile) puts transit at something of a disadvantage in addressing GHG emissions.
- San Joaquin RTD's system is below the peer group in terms of service effectiveness (passengers served per hour of revenue service) and is above the peer group in terms of cost effectiveness (operating costs per revenue hour of service).

The Reality of Transit's Modal Share

Transit certainly has a role to play in creating a more livable community in Stockton and to some degree it can help in the effort to reduce GHG emissions. However, given the current low level of usage (ridership) and the low level of total service (baseline service levels), transit's current projected mode split of 3% is unlikely to rise above 5% by 2020, even under the most optimistic funding scenarios.

San Joaquin RTD currently spends about $23 million per year to operate the Stockton portion of its network. Under a status quo scenario, that amount will likely rise to over $31 million per year by 2020. For that amount of money the system will only be keeping pace with total travel growth and will not be making any inroads in VMT or GHG reductions. To gain ground in those categories the amount of annual spending on transit operations will need to reach a level between $35 million and $51 million by 2020. In this economic environment, San Joaquin RTD will have a difficult time just finding the money for the status quo scenario; it is hard to envision how the agency will find the operating or capital funds needed to increase the mode split above 3%.

Proposed Transit Plan/Program Improvements

In light of the above findings, the Transit Plan/Program recommends the following improvements.

Recommended Transit Improvements

- **Serving the Villages**. Several of the Villages proposed in the General Plan are located in areas that cannot be easily be served in a cost-effective manner with standard transit service, let alone a BRT program. For that reason, Nelson\Nygaard recommends that any Village not located on or immediately adjacent to one of San Joaquin RTD's currently proposed Rapid Bus routes not be served by new BRT services. Instead, these outlying Villages should be served by traditional local bus routes that connect to Rapid Bus routes.
- **Arch-Sperry Corridor Project**. The City is already moving ahead with this project, which will provide a seamless roadway connection between the San Joaquin County Hospital Area and the airport. Closing this "roadway gap" will give San Joaquin RTD new opportunities to design effective and efficient bus routes in this part of the city. This corridor should be utilized to improve bus routes in this portion of Stockton.
- **West/Airport BRT**. San Joaquin RTD already has two BRT routes in operation and will be starting a third route (Hammer Lane) within the next few years. Beyond that, a new study should be conducted to evaluate the potential for additional routes. One of the most promising is likely to be West/Airport. This line would start and end in the vicinity of Eight Mile Road and Downtown Stockton. The estimated capital cost of this proposed route is $2 million and the annual operating cost will be approximately $2.3 million.
- **Additional Bus Improvements**. San Joaquin RTD may wish to consider combining Routes 51 and 52, which would result in higher frequency along shared alignment. San Joaquin RTD should also consider an increase in frequency on Route 55. These improvements would require one additional bus ($500,000) and an additional $500,000 in annual operating costs.

Car Sharing and Information Services

One of the obstacles that can keep people from using public transit service is "the first and last mile barrier." A transit agency can provide a comprehensive, frequent and robust transit service but if people can't easily access the system from their homes (i.e., the "first mile") or easily reach their destinations (i.e., the "last mile") then it becomes highly unlikely they will use it. As an example, a transit agency may provide customers excellent bus stop facilities; however, if access to those stops is inhibited by lack of sidewalks or lack of safe crossings of busy streets, it is unlikely that people will be drawn toward using transit.

First and last mile barriers can cover a range of issues. Nelson\Nygaard explored these barriers in Stockton and determined that the best opportunity for erasing some of the barriers could come from a simple, low-cost peer-to-peer car sharing program like GetAround (www.getaround.com). In a peer-to-peer car share program, individuals make their personal automobiles available for rental to other individuals through an online registration and reservation service. The objective of this program is to provide a low-cost and convenient way for people to get access to an automobile. When linked with good transit service, a car sharing program can help people overcome their individual first or last mile barriers and make transit a more attractive modal option for the primary length of their trip.

Nelson\Nygaard also included a recommendation to increase the amount of transit/transportation information that is available to potential transit passengers. Recent studies have shown that people are more willing to leave their cars at home and become multimodal (i.e., walk, ride a bicycle, or use public transit) if they feel they have right at their fingertips the information they need to make informed choices. The Transit Plan/Program recommends that the City work with San Joaquin RTD and SJCOG to develop online applications that people can access with smart phones to receive real-time information about trip planning, multimodal choices, comparative fares, and travel times. A program like this could be tied in to SJCOG's existing Commute Connection program.

Transit Supportive Policies

Nelson\Nygaard reviewed a variety of existing reports including the existing General Plan. Based on this review, Nelson\Nygaard developed a list of recommended policies that the City should consider to help create a more transit-supportive environment in the following areas: transit; parking; land use, municipal codes and growth management; public space; building scale; travel connections; housing; economic development; and developer coordination with SJCOG and the Congestion Management Program. The recommended policies are described further in the Transit Plan/Program.

The policies identified are broad in nature and will require more detailed review and development before being potentially proposed as amendments to the General Plan. At this time, the City is only seeking general interest from the City Council regarding the policy recommendations in order to determine whether to develop them further. As such, these policies are not being proposed at this time and thus are not analyzed in this SEIR as part of the proposed project.

Funding and Action Plan

The Transit Plan/Program provides an overview of existing and potential funding sources that the City and/or San Joaquin RTD can pursue to pay for the improvements listed. The sources included federal, state, and local options.

As the City and San Joaquin RTD move forward with their respective implementation activities, they should remember that there are already several adopted goals and objectives in the General Plan which specifically support coordination efforts between the two entities. These goals include those listed below.

- Transportation is both a local and a regional issue. Effective improvements to the transportation system depend on the multijurisdictional cooperative efforts of multiple agencies beyond the City, such as the State of California, SJCOG, County of San Joaquin (County), San Joaquin RTD, and adjacent cities.
- The City shall work with the County, SJCOG, the California Department of Transportation (Caltrans), San Joaquin RTD, and other jurisdictions and agencies to secure additional funding to meet transportation funding shortfalls for priority projects and other modes of transportation (e.g., cycling and public transit).
- The City is looking to the General Plan to facilitate an effective and efficient alternative to the City's current reliance on the automobile. The policies under this goal cover topics ranging from the integration of transit into the transportation network to the clustering of land use necessary to make these options a reality. A significant new feature in the transit framework of Stockton's future is the establishment of a BRT concept. The proposed BRT system will provide convenient

access and integration of both new development areas (villages) and existing neighborhoods within the City (districts).

- The City shall work cooperatively with San Joaquin RTD, Altamont Commuter Express (ACE), SJCOG, Bay Area Rapid Transit (BART), Caltrans, Amtrak, and other public transit providers to provide rail and bus service at a level that offers an alternative to the automobile for both the short- and long-distance commuter and provides basic transportation to work, shopping, and other destinations—especially for passengers with disabilities, the elderly, youth, and economically disadvantaged passengers.

Settlement Agreement Work Program Funding Program

As described in the NOP for this SEIR, the City is considering funding sources to offset the costs related to compliance with the Settlement Agreement, including the following items.

- Implementing the existing Green Building Ordinance, including inspections.
- Implementing proposed energy efficiency, transportation, waste reduction, water conservation, and other measures in the CAP, including requirements for new development review and for monitoring and reporting of CAP implementation over time.
- Implementing the proposed transit improvements in the Transit Plan/Program.

Chapter 4 of the CAP includes an identification of a variety of federal, state, and local public and private funding sources for implementation of the CAP. Local sources of public funding include the capital improvement plan (CIP) for certain City infrastructure improvements (e.g., street lights); utility rates as a source of funding of water, waste, and wastewater measures; and an AB 811 financing district for energy efficiency and renewable energy. Chapter 4 of the CAP also describes potential future funding options. However, given the current economic climate in the city, these future options are not being proposed as this time.

Implementation of a funding program will only enable implementation of other proposed actions included in the CAP and the transit improvements in the Transit Plan/Program. As such, the funding program itself will not result in additional environmental impacts beyond those disclosed in this SEIR for the various actions described above, and the analysis in the SEIR need not further analyze implications of different funding approaches or options.

Required Approvals

The City will use this SEIR in the decision of whether to certify the SEIR and whether to adopt the Proposed Project (the Climate Action Plan, the Transit Plan/Program). There are no other required agency approvals as these are policy matters for the City. Some of the implementing actions of the CAP or the Transit Plan/Program may involve other agencies, such as the San Joaquin RTD concerning expanded transit service, but such actions will require project-level CEQA evaluation at which time such agencies would be involved as a lead or approving agency.

Chapter 3
Land Use

Setting

The existing land uses within the Planning Area are described in Chapter 3, *Land Use*, of the GPEIR and in Chapter 3, *Land Use/Urban Growth Strategy*, of the General Plan Background Report. Additionally, relevant goals and policies are summarized in Chapter 3 of the GPEIR. The detailed setting and policies provided in the GPEIR and General Plan Background Report are fully incorporated by these references.

Impacts and Mitigation

Criteria of Significance

Implementation of the Proposed Project would have a significant effect on land use if it would result in any of the following.

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating a significant environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impact Discussion

The following impact discussion details specific impacts associated with the Proposed Project through 2035, followed by a more general discussion of impacts once buildout of the General Plan occurs. Because it would be speculative to attempt to define impacts at buildout—which, given recent growth and development rates, is not estimated to occur until sometime between 2050 and 2055—these impacts are discussed qualitatively.

The following components of the Proposed Project were evaluated to determine if impacts would result.

- **CAP**. The CAP contains specific actions to reduce greenhouse gas (GHG) emissions and address climate change. Only one of the measures (Trans-1) in the draft CAP has the potential to change land uses. Measure Trans-1 calls for 3,000 units in the Greater Downtown Stockton Area by 2020, which would represent a buildout increase of 300 to 1,100 units compared to the existing General Plan.
- **Transit Plan/Program**. The Transit Plan includes measures to increase access to transit. These measures implement existing General Plan policies encouraging the use and expansion of transit facilities. No specific programs not already contemplated in the General Plan are proposed in the

Transit Plan. No changes in land use would directly result from adoption and implementation of the Transit Plan.

Impacts through 2035

Impact LU-1: The General Plan, as modified by Proposed Project would not divide the physical arrangement of an established community.

The GPEIR did not identify any significant land use impacts associated with division of a community. The General Plan was developed with the primary goal of ensuring that future growth would occur in an orderly manner, which would help prevent urban sprawl and ensure citywide compatibility.

The Proposed Project is not expected to cause additional growth beyond that anticipated in the GPEIR by 2035, and it would not introduce any nonresidential uses that could divide an established community. Increased safe routes to schools and additional bike paths will actually connect established communities better. Development associated with the Proposed Project would be located in the city's existing urban area. Accordingly, any impacts associated with division of community would not be more significant under the Proposed Project than those impacts disclosed in the GPEIR.

Impact LU-2: Development proposed under the General Plan as modified by the Proposed Project, would conflict with an adopted applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

The GPEIR determined that the General Plan would not conflict with any applicable land use plan, policy, or regulation, with two exceptions: airport land use plans and federal and state air quality standards. The Proposed Project is reviewed relative to those two exceptions below following a discussion of the compatibility of increased downtown infill with the General Plan.

The CAP would also result in construction of additional waste collection and transfer facilities as well as new bicycle and pedestrian facilities which could also affect historic resources. Given the nature of these facilities they can be designed to be consistent with land use plans and policies related to avoiding or mitigating environmental effects.

Greater Downtown Stockton Area

CAP measure Trans-1 calls for an increase in downtown infill residential development in the GDSA to promote 3,000 units by 2020 (compared to 2008), which would require an estimated 300 to 1,100 more units than allowed under the current General Plan. This will ultimately require General Plan Amendments and rezoning to support this goal.[1] While development likely necessary under measure Trans-1 would likely conflict with the allowable residential densities in industrial, commercial and low-density residential areas in the GDSA, these land use designations in the existing General Plan were designed for the purposes of supporting residential, commercial, and industrial growth and were not expressly designed for the purposes of avoiding or mitigating significant environmental impacts. Thus, the inconsistency of higher-density with the current land use designations in and of itself does not give rise to a significant environmental impact. However, as

[1] The city is developing specific general Plan amendments that will be evaluated separately from this SEIR. This SEIR discloses the environmental impacts of the CAP measure; subsequent analysis will be done of the specific details of any General Plan amendments.

discussed elsewhere in this SEIR, the increase of residential development in the GDSA may result in a substantial increase of impacts disclosed in the GPEIR relative to localized downtown traffic, residences subject to flooding due to levee failure, impact to historic buildings, and changes in visual aesthetics. Because of these secondary physical impacts of the inconsistency with the existing General Plan, the Proposed Project is considered to substantially increase this impact compared to that disclosed in the GPEIR. As discussed in other parts of this SEIR, mitigation is available to reduce potential impacts of additional residential growth in the GDSA on historic buildings and visual aesthetics, but no mitigation is available for this increase in localized traffic impacts or placement of residences in levee-failure zones short of not increasing residential development at all in the GDSA. Thus, even with mitigation, this impact would be significant and unavoidable.

Airport Land Use Plan

The GPEIR identified a significant and unavoidable impact with respect to proposed development within the vicinity of the Stockton Metropolitan Airport; this impact would conflict with the airport land use plan developed by the San Joaquin County Airport Land Use Commission (ALUC). The Proposed Project would not contribute to an increase in development near the airport, because CAP measure Trans-1 would only increase housing potential in the in the Greater Downtown Stockton Area (GDSA), which is located more than 2 miles north of the Airport. The airport land use plan includes an area of influence that extends far more than 2 miles from the Airport and includes an area on the southwest of the GDSA. The overlap between the GDSA and the Airport area of influence is roughly west of El Dorado Street, north of Charter Way, east of S. Fresno Ave, and south of Weber Street). The overlap of the GDSA and the airport's area of influence is outside the restrictive areas in which the Airport land use plan recommends avoiding or limiting residential development. For the overlap area, the airport land use plan requires that residential developments file avigation easements, occupied structures be soundproofed to reduce interior noise to 45 DB, reflecting materials not be permitted on structures that would distract pilots, and that the ALUC review the development proposals (SJCOG 1993).

The Proposed Project is not anticipated to cause additional overall growth above the amount anticipated by 2035 in the GPEIR, and the policies of the adopted General Plan covering development within the areas of influence of the Stockton Metropolitan Airport would apply to development associated with the project and would reduce the impact, and thus impacts through 2035 are not expected to be more severe than those disclosed in the GPEIR.

Federal and State Air Quality Standards

As discussed in Chapter 11 of this document, the GPEIR stated that total air quality emissions associated with buildout under the General Plan would result in a net increase of a criteria pollutant for which the region is considered non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for reactive organic gases or ozone precursors). The GPEIR defined this impact as significant and unavoidable.

Construction of certain elements of the Proposed Project, including building efficiency upgrades, transit system improvements, and solar panel systems, could cause temporary increases in criteria pollutants during construction activities. However, any impact associated with this temporary increase would be offset by the variety of project elements that lead to long-term reductions in such pollutants, including the promotion of electric-powered construction equipment, reduced idling times for construction equipment, and electric landscaping equipment. In addition, as stated above,

the Proposed Project would not cause more residential or commercial growth by 2035 than that anticipated in the GPEIR.

Impact Conclusion

The Proposed Project would otherwise comply with all applicable land use plans, policies, and regulations. Accordingly through 2035, impacts associated with the Proposed Project would not be more significant than those disclosed in the GPEIR.

Impact LU-3: Development proposed under the General Plan, as modified by the Proposed Project would not conflict with an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP).

The GPEIR did not identify any significant land use impacts that would conflict with conservation plans, as the General Plan was designed to promote consistency with the planning documents of other key neighboring land use agencies including the San Joaquin Council of Government's *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* (often referred to as the San Joaquin MSCP) and the *Land Use and Resources Management Plan for the Primary Zone of the Delta*.

The Proposed Project is not expected to cause additional growth beyond that anticipated in the GPEIR by 2035, and it would not direct growth outside of any areas currently defined as urban. While the Proposed Project does include the potential for the construction of solar power systems, waste facilities, and transportation infrastructure improvements, these improvements are not anticipated to occur outside already developed areas, with no potential for conflicting with any conservation plan.

Under the Proposed Project, the City will continue to comply with the natural resource objectives administered by the San Joaquin Council of Governments and the Delta Protection Commission. There are no project elements that would conflict with conservation plans. Accordingly, with respect to Impact LU-3, the Proposed Project would not result in a new or substantially more severe significant impacts than those disclosed in the GPEIR.

Impacts through Buildout

The Proposed Project would direct more growth to the GDSA. As such, development associated with the Proposed Project would be a continuation of the existing urban area of the city and would not result in the physical division of the existing community. While there are project elements that would require additional construction activities (e.g., solar power systems, waste collection facilities, and additional transportation infrastructure), project elements would not introduce physical developments that could divide a community. In fact, the addition of public transportation infrastructure such as bicycle lanes could further connect the communities in which they are constructed.

Because buildout of the General Plan is not expected to occur until approximately 2050 to 2055, it would be speculative to analyze the potential for the General Plan to comply with all relevant land use plans, policies, and regulations. The Proposed Project could lead to additional growth within the jurisdiction of the airport land use plan for Stockton Metropolitan Airport, as the Proposed Project would allow additional growth in the GDSA, a small portion of which overlaps with the airport's area of influence but existing requirements for the overlap area would avoid any significant conflicts with the area of influence requirements.

The GPEIR identified impacts associated with development within the jurisdiction of the airport land use plan as significant and unavoidable. Since the GDSA does not overlap with the most restrictive areas in the airport land use plan, the application of the airport land use plan requirements for the outer portion of the area of influence to new residential development would reduce potential impacts, and impacts associated with the Proposed Project involving conflicts with an airport land use plan would not be greater than those analyzed in the GPEIR.

As described in Chapter 11, *Health and Safety,* temporary emissions of criteria pollutants associated with project elements that involve construction of solar panel systems, building upgrades, and transit system improvements would be offset by the variety of measures that would be implemented to reduce pollutant emissions in the long term. However, the Proposed Project would allow for additional development to occur in the GDSA. This additional development would include as many as 300 to 1,100 additional residential units by buildout. However, with the increase of high-density residential and mixed use designated areas in the GDSA, compared to the existing General Plan, there could also be a net decrease of industrial and low-density residential use at buildout. The measures included in the Climate Action Plan would help to reduce criteria pollutants in addition to reducing GHG emissions. The specific air quality tradeoff between additional residential units vs. the potential loss of industrial use would depend ultimately on what kinds of industrial use would have actually been built under the existing General Plan vs. the emissions of the new downtown residents. Project elements that reduce pollutants in the long-term could offset additional impacts associated with this new development capacity to some extent. Because buildout is not anticipated to occur until approximately 2050 to 2055, it would be speculative to quantify the specific amounts of criteria pollutants that buildout of the General Plan would cause. While the Proposed Project could increase or reduce the severity of this impact, it would not alter the level of significance of the impact disclosed in the GPEIR; the impact would remain significant and unavoidable.

There are no project elements that would conflict with conservation plans. Any additional development associated with buildout of the General Plan and increased downtown development per CAP measure Trans-1 would occur in urban areas, and it would not affect resources protected by applicable conservation plans. If additional facilities are proposed in non-urban areas, they would be required to comply with the requirements of the San Joaquin MSCP.

Chapter 4
Housing

Housing information for the Planning Area is described in Chapter 4, *Housing*, of the GPEIR and in Chapter 4, *Housing*, of the General Plan Background Report. The GPEIR's housing chapter does not specifically assess environmental impacts. Instead, it states that housing impacts are discussed in other sections of the GPEIR or are not subject to CEQA. For example, construction-related impacts associated with the development of new suburban residential areas and the conversion of existing open space areas or visual resources are addressed in Chapter 13, *Natural and Cultural Resources*; land use compatibility impacts are addressed in Chapter 3, *Land Use*; and impacts related to the provision of governmental services to proposed development (including residential land uses) are addressed in Chapter 9, *Public Facilities and Services*. Impacts of future growth on public services such as law enforcement, solid waste collection, and library services are described in Chapter 9, *Public Facilities and Services*. Growth inducement is analyzed in Chapter 15, *Additional Statutory Considerations*.

While the GPEIR's housing chapter does not address environmental impacts, the Proposed Project specifically includes a policy to increase residential units in the GDSA. Accordingly, in the interest of full disclosure, this SEIR includes analysis of certain environmental impacts, detailed below.

Setting

Since the publication of the GPEIR, the Housing Element of the General Plan was updated in 2010 to account for more recent projections for growth and potential housing needs in the Stockton area. The following goals and policies from the 2010 Housing Element are applicable to the Proposed Project.

Goal HE-4. Enhance opportunities for infill development, including mixed-use, affordable housing, and transit-oriented development within the Downtown and Greater Downtown Areas, along the city's corridors, and within the existing City limits.

Policy HE-4.1 Infill Development. In compliance with the Settlement Agreement with the Sierra Club and California Attorney General, the City shall promote infill development within the Downtown and Greater Downtown Areas through incentives such as less restrictive height limits, less restrictive setback and parking requirements, subsidies, infrastructure improvements, and streamlined permitting process.

Policy HE-4.2 Balanced Growth. The City shall ensure that development at the city's outskirts, particularly residential, village, or mixed use development, does not grow in a manner that is out of balance with infill development.

Goal HE-10. Promote energy conservation and waste reduction in Stockton's existing and new housing.

Policy HE-10.1 Energy Conservation and Waste Reduction. The City shall promote energy conservation and waste reduction in residential site planning, design, and construction.

Policy HE-10.2 Energy Conservation and Efficiency. The City shall utilize its review and regulatory power to enhance and expand residential energy conservation and efficiency.

Policy HE-10.3 Green Building Concepts. The City shall require green building concepts and processes in new residential construction and rehabilitation of the existing housing consistent with State building standards and local subdivision and zoning standards.

Policy HE-10.4 Energy Conservation and Efficiency Programs. The City shall work with local energy providers to promote energy conservation programs and incentives to existing residential developments, especially low-income households.

Impacts and Mitigation

Criteria of Significance

Implementation of the Proposed Project would have a significant impact on population and housing resources if it would result in any of the following.

- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

As stated above, the housing chapter of the GPEIR did not analyze impacts utilizing any of these criteria. The first criterion, involving substantial growth, was addressed in other sections of the document; in this SEIR, this topic is also addressed in other sections of the document. The remaining two criteria were discussed briefly in the GPEIR's Chapter 1*, Introduction and Reader's Guide to the EIR*, under the heading "Topics Not Analyzed in Detail in this Environmental Impact Report." These topics are discussed briefly below.

Impact Discussion

The following impact discussion details specific impacts associated with the Proposed Project through 2035, followed by a more general discussion of impacts once buildout of the General Plan occurs. Because it would be speculative to attempt to define impacts at buildout—which, given recent growth and development rates, is estimated to occur in approximately 2055—these impacts are discussed qualitatively.

The following components of the Proposed Project were evaluated to determine if impacts would result.

- **CAP**. The CAP contains specific actions to GHG emissions and address climate change. The only CAP measure that would directly affect housing would be measure Trans-1, which would increase residential units in the GDSA by 300 to 1,100 units compared to the adopted General Plan.
- **Transit Plan/Program**. The Transit Plan/Program includes measures to increase access to transit. These measures implement existing General Plan policies encouraging the use and expansion of transit facilities. No specific programs not already contemplated in the General

Plan are proposed in the Transit Plan/Program. No changes in housing availability or cost would result from adoption and implementation of the Transit Plan.

Housing Resources

Impacts through 2035

Impact H-1: Development under the General Plan, as modified by the Proposed Project, would displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.

The GPEIR states that development proposed under the General Plan will help accommodate future growth and address local population and housing needs. In addition, it states that implementation of the General Plan is not expected to result in the displacement of substantial amounts of existing population or housing, as the majority of new development is planned for areas of undeveloped land.

The Proposed Project would direct housing toward the GDSA, potentially increasing housing in that area. No reduction in housing in Stockton would occur as a result of the project. Sites proposed to be designated for higher densities, particularly in the downtown area, are primarily vacant or industrial sites. In the downtown core, for example, 105.78 acres are designated for higher densities; only 3.96 of these acres are currently used for housing. To the extent that implementation of the proposed CAP measure Trans-1 would result in displacement of small numbers of existing housing units, replacement with higher-density housing in the same location would occur, and existing policies and regulations regarding relocation of existing residences would ensure that any displaced residents would be provided with replacement housing located in the same area.

The CAP would also result in construction of additional waste collection and transfer facilities as well as new bicycle and pedestrian facilities none of which is expected to displace housing.

It is therefore reasonable to assume that the Proposed Project would not cause significant displacement of housing or people as compared to the displacement analyzed in the General Plan, and that any replacement housing would fall within the proposed increases in housing units in the GDSA.

Impacts through Buildout

The impacts related to displacement discussed above would not be increased through buildout of the General Plan as proposed for amendment. All potential displacement that could result from the proposed CAP measure Trans-1 would occur from replacing small numbers of existing residences with higher density housing—and therefore more housing units—in the GDSA.

Chapter 5
Economic Development

In preparing this SEIR, a common chapter numbering system to the adopted General Plan and GPEIR was used to allow readers to easily find related information in one of the other documents that comprise the. As part of the General Plan Goals and Policies Report, Chapter 5 is the Economic Development Element.

The Economic Development Element focuses on several areas related to the current and future economic conditions of the city, including employment trends, commercial development, business attraction/retention, and workforce training.

As described in the State CEQA Guidelines (Section 15382), this SEIR does not evaluate economic impacts. Section 15382 of the State CEQA Guidelines states the following:

> "Significant effect on the environment" means a substantial, or potential substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

All physical changes to the environment that may result from economic or social change created by the Proposed Project are discussed within the appropriate resource sections of this SEIR. For example, environmental impacts due to the construction of housing associated with economic and population growth are discussed in Chapter 4, *Housing*; impacts associated with the need for additional public infrastructure due to growth are discussed in Chapter 9, *Public Facilities and Services*; and impacts on natural resources due to growth are discussed in Chapter 13, *Natural and Cultural Resources*. Economic Development as a distinct resource area is therefore not specifically discussed further in this document.

Chapter 6
Community Design

In preparing this SEIR, a common chapter numbering system to the General Plan and GPEIR was used to allow readers to easily find related information in one of the other documents. In the General Plan, Chapter 6.0 is the Community Design Element.

This element focuses on the establishment of qualitative urban design goals and policies, which are intended to reinforce community-wide concepts depicting a framework of places, districts, corridors, and landmarks. The assessment of environmental impacts associated with this topic consists of a variety of impacts that have been more appropriately analyzed in other chapters of this SEIR. For example, land use compatibility issues are addressed in Chapter 3, *Land Use,* and scenic resource issues associated with new development are addressed in Chapter 13, *Natural and Cultural Resources*.

Consequently, Community Design is not specifically discussed further as a distinct resource area in this document.

Chapter 7
Districts and Villages

In preparing this SEIR, a common chapter numbering system was used to the General Plan and GPEIR to allow readers to easily find related information in one of the other documents. In the proposed General Plan Goals and Policies Report, Chapter 7.0 is the Districts and Villages Element.

Similar to the Community and Design Element, this element provides additional detail on the two primary organizational components of the community: districts and villages. *Districts* are characterized as neighborhoods and corridors within the developed community and *Villages* address the development of new areas at the periphery of the existing community. Like the Community Design Element, this assessment of environmental impacts also consists of a variety of impacts that have been more appropriately analyzed in other chapters of the SEIR. For example, impacts resulting from new development are addressed in Chapter 13, *Natural and Cultural Resources*, and land use compatibility impacts resulting from new development are addressed in Chapter 3, *Land Use*.

Accordingly, Districts and Villages as a distinct resource area is not specifically discussed further in this document.

Chapter 8
Transportation and Circulation

Setting

Traffic data for the Planning Area is described in Chapter 8, *Transportation and Circulation*, in the GPEIR and Chapter 8, T*ransportation and Circulation,* in the General Plan Background Report. The detailed setting provided in the GPEIR is fully incorporated by this reference.

Impacts and Mitigation

Criteria of Significance

Implementation of the Proposed Project would be considered to have a significant effect on transportation and circulation, including intersections, roadway segments, transit, parking, emergency access, bicycle and pedestrian circulation and regional policies, if it would result in any of the following situations.

- Cause an increase in traffic, which is considered substantial in relation to the existing traffic load and capacity of the street system.
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature or incompatible uses.
- Result in inadequate emergency access.
- Result in inadequate parking capacity.
- Conflict with adopted policies, plans, or programs supporting alternative transportation.

Impact Discussion

The following impact discussion details specific impacts associated with the Proposed Project through the year 2035, followed by a more general discussion of impacts once buildout of the General Plan occurs. Because it would be speculative to attempt to define impacts at buildout—which, given recent growth and development rates, is estimated to occur approximately 2055—these impacts are discussed qualitatively.

Impacts are assessed for the following elements of the project.

- **CAP**. The CAP contains specific actions to reduce GHG emissions and address climate change. Specific impacts related to traffic are presented below.

- **Transit Plan/Program**. The Transit Plan/Program includes measures to increase access to transit. These measures implement existing General Plan policies encouraging the use and expansion of transit facilities. Specific impacts related to traffic are presented below.

Transportation and Circulation Resources

Impacts through 2035

Impact TC-1: Development under the General Plan, as modified by the Proposed Project would result in a substantial increase in vehicular traffic.

The GPEIR stated that buildout of the General Plan in 2035 would include substantial amounts of new development in the city, and that implementation of the General Plan would more than double the total number of vehicle trips and miles of vehicular travel as compared to existing conditions. The GPEIR also stated that in order to achieve the City's desired level of service, improvements to a number of existing roadway facilities and several new facilities would need to be constructed. Some roadway facilities existed where it was determined to not be possible to achieve the City's desired level of service (LOS D) given the presence of local physical and environmental constraints. Policy TC-2.D identified exceptions to the general LOS standard. Even with implementation of various mitigating General Plan policies, the GPEIR found impacts associated with increased traffic and congestion to be significant and unavoidable.

The Proposed Project is not anticipated to increase overall levels of growth by 2035 above that disclosed in the GPEIR. In addition, the proposed CAP project includes several GHG reduction measures that would mitigate impacts associated with increased traffic and congestion caused by growth.

- *Trans-1* would support a jobs/housing balance and greater land use diversity throughout the city. This could reduce the number of trips and the length of some trips made by local residents, as the distance to their jobs and commercial outlets would be shorter.
- *Trans-2* would increase the price of parking the downtown area, thereby encouraging public transit use and decreasing the number of trips made by residents. In addition, this reduction measure would create incentives for people to parking away from their place of business and make rideshare locations more attractive, which could also decrease the number of trips.
- *Trans-3* would encourage the development of transit amenities, including improved park-and-ride facilities and bus shelters, which could encourage public transportation use and decrease the number of trips made in the city.
- *Trans-4* involves the construction of grade-separated crossings across railroad lines in the city, which would improve goods movement and decrease congestion.
- *Trans-5* would eliminate barriers for nonmotorized travel through the development of bicycle and pedestrian facilities and the encouragement of street construction that considers the needs of all forms of transportation, including public transit, bicyclists, and pedestrians. By encouraging alternative forms of transportation, this measure could reduce the number of trips, thereby decreasing congestion and traffic.
- *Trans-6* and the associated Transit Plan/Program would encourage public transportation use through an additional BRT route, additional service on existing routes, and car-sharing and

transit information promotion although the Plan is expected to keep transit's current mode share rather than increase it.

- *Trans-7* would encourage the provision of safe routes for children to access their schools, potentially decreasing the number of trips made by parents driving their children to and from school and decreasing traffic and congestion.
- *Trans-8* would also encourage safe routes to schools, as well as encourage employer programs that would seek to incentivize employees choosing alternative forms of transportation to get to their place of work. Both efforts could decrease trips and lessen traffic and congestion.

Therefore, overall levels of service on local roadways overall would not be worse under the Proposed Project than under the levels analyzed in the GPEIR. However, given the emphasis on downtown development, traffic levels on downtown roadways will likely be worse than under the adopted General Plan. No mitigation is available for this impact as expanding roadways would only limit the amount of downtown residential and mixed use development that could be accommodated and would thus be self-defeating. As such, this is a significant and unavoidable impact in the downtown area compared to that disclosed in the GPEIR.

Impact TC-2: Development under the General Plan, as modified by the Proposed Project would result in a substantial increase in public transit usage.

The GPEIR determined that buildout of the General Plan includes additional development that would result in an increase in overall travel demand. The GPEIR found that a substantial increase in transit services throughout the city would be provided with implementation of the General Plan to address this increase in demand, but that policy directions of other agencies could change over time and funding for future transit expansion projects would come from a variety of sources not currently known. Thus, the implementation of the transit improvements associated with the General Plan could not be guaranteed solely through the City's action. As a result, even with the implementation of various mitigating General Plan policies, impacts associated with a substantial increase in public transit usage were determined to be significant and unavoidable.

The Proposed Project is not anticipated to cause a level of growth by 2035 above that considered in the GPEIR. Analysis performed in development of the Transit Plan indicated that a substantial increase in transit use would not occur, given realistic resources available to improve and expand transit service in Stockton. Therefore, there would not be a greater demand for transit services due to the Proposed Project compared to baseline levels. In addition, the Proposed Project includes a variety of GHG Reduction Measures that would improve transit services, thereby addressing increased demand on transit services at a level greater than the original General Plan. These reduction measures include those listed below.

- *Trans-2* would increase the price of parking in the downtown area, thereby encouraging public transit use.
- *Trans-3* would encourage the development of transit amenities, including improved park-and-ride facilities and bus shelters.
- *Trans-5* would encourage street construction that considers the needs of all forms of transportation, including public transit.
- *Trans-6* and the associated Transit Plan/Program would encourage public transportation use through an additional BRT route, additional service on existing routes, and car-sharing and

transit information promotion although the Plan is expected to keep transit's current mode share rather than increase it.

- *Trans-8* would encourage employer programs that would seek to incentivize employees choosing alternative forms of transportation to get to their place of work. In addition, the Proposed Project would increase the potential for development in the City, also increasing the demand for public transit.

Policy directions of other agencies could still change over time and funding for future transit expansion projects would still come from a variety of sources that are not currently known.

While the Proposed Project could decrease the severity of this impact as compared to the level disclosed in the GPEIR due to measures designed to increase other transportation alternatives such as bicycle and pedestrian, it would remain significant and unavoidable.

Impact TC-3: Development under the General Plan, as modified by the Proposed Project would result in a substantial increase in bicycle and pedestrian activity.

The GPEIR stated that buildout of the General Plan by 2035 would result in additional development that would cause an increase in overall travel demand, including additional bicycle and pedestrian activity. The GPEIR found that policy directions of other agencies could change over time and funding for future bicycle and pedestrian projects would come from a variety of sources not currently known. Thus, the implementation of the bicycle and pedestrian improvements associated with the General Plan could not be guaranteed solely through the City's action. As a result, impacts associated with a substantial increase in bicycle and pedestrian activity were determined to be significant and unavoidable.

The Proposed Project would promote additional bicycle and pedestrian facilities as part of the CAP transportation measures which would help to accommodate the additional City residents in the GDSA.

- *Trans-5* would eliminate barriers for nonmotorized travel through the development of bicycle and pedestrian facilities and the encouragement of street construction that considers the needs of all forms of transportation, including bicyclists, and pedestrians.
- *Trans-7* and *Trans-8* would encourage the provision of safe routes for children to access their schools, including better bicycle access to schools.

Policy directions of other agencies could still change over time and funding for future pedestrian and bicycle-related projects would still come from a variety of sources that are not currently known.

While the Proposed Project includes measures, discussed above, that would accommodate increased pedestrian and bicycle activity to a level greater than that analyzed in the GPEIR, the impact would remain significant and unavoidable.

Impact TC-4: Development under the General Plan, as modified by the Proposed Project would result in substantial changes in accessibility to Stockton-area railroad terminals and cargo transfer points.

The GPEIR stated that buildout of the General Plan by 2035 would result in substantial increases in vehicular traffic throughout the City as well as modifications to the transportation infrastructure system. The GPEIR found that a number of points of interaction between the roadway system and

the railroads in the City could be affected by implementation of the General Plan. This could cause increased delays for vehicles and trains transporting cargo, which would create further delays for motorists waiting on those vehicles to pass. The General Plan included a variety of policies to address these impacts (see Policies TC 1.1-1.4, 1.9, 2.5. 2.7 and 6.1-6.3). However, the GPEIR found that these improvements were dependent on other agencies with policy directions that could change over time. Additionally, funding for these efforts would come from a variety of sources that could not be fully enumerated. Impacts associated with decreased railroad and cargo accessibility were determined to be significant and unavoidable.

While the Proposed Project would not cause an overall level of growth by 2035 above that analyzed by the GPEIR, increases in growth in the GDSA could result in increases in congestion that could further decrease railroad accessibility in the downtown area potentially below levels already detailed in the GPEIR. The proposed CAP includes planned grade separations (Trans-4) which would help reduce impacts associated with vehicles and trains transporting cargo but this impact would remain significant and unavoidable.

Impact TC-5: Development under the General Plan, as modified by the Proposed Project would result in substantial changes in accessibility to the Port of Stockton.

The GPEIR stated that buildout of the General Plan by 2035 would result in substantial increases in vehicular traffic throughout the City as well as modifications to the transportation infrastructure system that could hinder access to the Port of Stockton. The General Plan included a variety of policies to address these impacts. However, the GPEIR found that these improvements were dependent on other agencies with policy directions that could change over time. Additionally, funding for these efforts would come from a variety of sources that are not currently known. As a result, impacts associated with a substantial increase in public transit usage were determined to be significant and unavoidable.

The Proposed Project would not make any changes in access to the Port of Stockton due to the CAP or Transit Plan/Program. Thus it would not change the level of impact disclosed in the GP EIR and this impact would remain significant and unavoidable.

Impact TC-6: Development under the General Plan, as modified by the Proposed Project would result in substantial changes in accessibility to the Stockton Municipal Airport.

The GPEIR stated that buildout of the General Plan by 2035 would result in substantial increases in vehicular traffic throughout the city as well as modifications to the transportation infrastructure system that could hinder access to the Stockton Municipal Airport. The General Plan included a variety of policies to address these impacts (see policies TC 1.1–1.3, 1.9, 2.5, 2.7, 2.19, 8.1, and 8.2). However, the GPEIR found that these improvements were dependent on other agencies with policy directions that could change over time; in addition, funding for these efforts would come from a variety of sources that are not currently known. As a result, impacts associated with a substantial increase in public transit usage were determined to be significant and unavoidable.

The Proposed Project would not result in new development within 2 miles of the Stockton Airport and thus accessibility to the Stockton Municipal Airport would not be substantially reduced below levels already detailed in the GPEIR. The CAP also includes a number of GHG Reduction Measures that would reduce overall traffic and congestion (*Trans 1–8*), mitigating impacts associated with reduced access to the Stockton Municipal Airport. However, this impact would remain significant and unavoidable.

Impacts through Buildout

The Proposed Project would allow for more development at buildout than disclosed in the GPEIR. Specifically, this additional development would include as many as 300 to 1,100 additional residential units which would be somewhat offset by a net decrease of industrial and low-density residential use. Such development could result in an increase in vehicular traffic in the downtown area but not in close proximity to the Airport itself.

Citywide and regionally beneficial traffic impacts would result due to project implementation due to transportation measures and improvements discussed earlier in this chapter. Because of this, unlikely that the Proposed Project would cause an overall increase in the severity of this impact relative to that disclosed in the GPEIR.

Chapter 9
Public Facilities and Services

Setting

Utility, infrastructure, and energy information for the Planning Area is described in Chapter 9, *Public Facilities*, in the GPEIR and Chapter 9, *Public Facilities* in the General Plan Background Report. The detailed setting provided in the GPEIR is fully incorporated by this reference.

Impacts and Mitigation

Criteria of Significance

Implementation of the Proposed Project would have a significant effect on utilities and infrastructure if it would result in any of the following situations described below.

Water Supply and Delivery

- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Need new or expanded water supply entitlements.
- Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

Wastewater

- Exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board (CVRWQCB).
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require additional capacity to serve the project's projected demand in addition to existing commitments.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater.

Stormwater

- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality.

- Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite.
- Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite.
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

Solid Waste

- Produce substantive solid waste that would exceed the permitted capacity of a landfill serving the Study Area.
- Conflict with federal, state, and local statutes and regulations related to solid waste.

Gas and Electric Services

- Result in wasteful, inefficient, or unnecessary consumption of energy by residential, commercial, industrial, or public uses.
- Result in the construction of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.

Public Services

- Increase the need or use of existing fire protection or law enforcement facilities, schools, or other public facilities such that substantial physical deterioration of the facility would occur or be accelerated in order to maintain acceptable service ratios, response times.
- Include fire protection or law enforcement facilities, schools, or other public facilities or require the construction or expansion of fire protection or law enforcement facilities that might have an adverse physical effect on the environment.

The GPEIR did not discuss in detail whether soils in the Planning Area would be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater because the General Plan assumed that development proposed under the General Plan would be connected to a wastewater collection and treatment system and not require septic systems. The Proposed Project would not change this. Therefore, no impact is anticipated, and this potential impact is not discussed further in this document.

Impact Discussion

The following impact discussions detail specific impacts associated with the Proposed Project through the year 2035, followed by a more general discussion of impacts once buildout of the General Plan occurs. Because, as discussed in Chapter 2 of this document, it would be speculative to attempt to define impacts at buildout—which, given recent growth and development rates, is estimated to occur between 2050 and 2055—these impacts are discussed generally.

Impacts are assessed for the following elements of the project.

- **CAP**. The CAP contains specific actions to reduce GHG emissions and address climate change. The CAP includes measures to make public facilities and services more efficient, in particular, more energy efficient. CAP measures would include waste collection and recycling facilities and new transportation facilities, but these facilities are not expected to result in increased demand for public facilities and services and thus discussion of these facilities is limited to impacts associated with flooding and water quality in this Chapter. Increase in residential growth in the downtown area would increase demand for public facilities and services and is discussed throughout the impact discussion below.
- **Transit Plan/Program**. The Transit Plan/Program includes measures to increase access to transit and transit services. These measures implement existing General Plan policies encouraging the use and expansion of transit facilities. No changes related to public facilities and services would result from adoption and implementation of the Transit Plan/Program.

Water Supply and Delivery

Impacts through 2035

Impact PFS-1: Development under the General Plan, as modified by the Proposed Project would require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The GPEIR stated that the City identified construction of the DWSP to provide increased water supply to meet the City's short-term needs and accommodate buildout of the current 1990 General Plan and buildout of the 2035 General Plan. Impacts associated with the construction and operation of the first phase of the DWSP affected agricultural resources, aesthetic resources, and air quality. Therefore, the GPEIR determined this impact to be significant and unavoidable.

The proposed CAP includes a GHG reduction measure that would increase the need for water for irrigation purposes (*Urban Forestry-1*, under which the City would strive to plant between 500 and 900 trees per year from 2016 to 2020). This increased need would be offset by the variety of GHG Reduction Measures that would reduce the City's need for water.

- *Water-1* would increase water conservation to achieve a goal of a 20% reduction in urban per capita use by December 31, 2020.
- *Water-2* would promote water efficiency measures for existing development.

The Proposed Project would not cause increased growth in housing beyond that analyzed in the GPEIR through 2035, and therefore would not increase the demand for domestic water beyond that

analyzed in the GPEIR. Therefore, the impact would not be more severe under the Proposed Project than that analyzed in the GPEIR. The impact would remain significant and unavoidable.

Impact PFS-2: Development under the General Plan, as modified by the Proposed Project, would require new or expanded water supply entitlements.

The GPEIR found that the initial phase of the DWSP in conjunction with other water supply sources would provide sufficient supplemental water to accommodate the population projections associated with buildout of the 2035 General Plan, with no new water supply entitlements required. With implementation of some of the measures in the General Plan related to timing of development and water conservation, the GPEIR determined this to be a less-than-significant impact.

As described above under Impact PFS-1, the Proposed Project would not result in an increased demand for water beyond that disclosed in the GPEIR through 2035. Therefore, this impact would remain less than significant.

Impact PFS-3: Development under the General Plan, as modified by the Proposed Project, would have the potential in the long-term to deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

The GPEIR stated that with implementation of the DWSP, the City will pump less groundwater and allow groundwater levels to recover by in-lieu (natural) recharge, thereby reducing the dependence on groundwater supplies. These actions would benefit the groundwater basin. With implementation of related General Plan policies, the GPEIR found this impact to be less than significant in the short-term and beneficial in the long-term.

As described above under Impact PFS-1, the Proposed Project would not result in increased demand for water beyond that disclosed in the GPEIR through 2035. Therefore this impact would remain less than significant in the short-term and beneficial in the long-term.

Impacts through Buildout

In addition to increasing water demand through implementation of GHG reduction measure *Urban Forestry-1*, the Proposed Project would also allow for the development of as many as 300 to 1,100 additional residential units in the net downtown compared to the existing General Plan. This additional residential development would create additional demand for water. GHG reduction measure *Water-1* and *Water-2* in the CAP would offset this additional water demand as they would result in reduction of overall City urban water use per capita by 20% compared to 2005 levels. However, because buildout of the Proposed Project is unlikely to occur until approximately 2050 to 2055, it would be speculative to quantify the precise extent of this offset at such a long time in the future and whether or not implementation of the DWSP would sufficiently serve the City through that time. A variety of factors affecting such a quantification, including new technologies and climate variations, are currently uncertain. It is reasonable to assume impacts associated with increased demand for water, including construction or expansion of water treatment facilities, the need for new or expanded water supply entitlements, and a depleted groundwater supply, and associated impacts of providing additional supply may be slightly more under the Proposed Project with more residential water demand than disclosed in the GPEIR; but would not be substantially more severe.

Wastewater Generation

Impacts through 2035

Impact PFS-4: Development under the General Plan, as modified by the Proposed Project, would not result in the exceedance of wastewater treatment requirements of the CVRWQCB.

The GPEIR found that buildout of the General Plan would potentially affect the quantity of pollutant loadings to receiving waters. However, the GPEIR stated that the city is served by a comprehensive sanitary sewer system and no untreated wastewater would be discharged to surface water or groundwater resources. Therefore, the GPEIR determined that no exceedances of CVRWQCB wastewater treatment requirements were anticipated, and that with implementation of related General Plan policies, the impact would be less-than-significant.

Under the Proposed Project, the City would continue to be served by a comprehensive sanitary sewer system, and no untreated wastewater would be discharged to surface water or groundwater resources. The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR, and would therefore not cause an increase in wastewater production associated with growth in that period. Finally, there are two GHG Reduction Measures associated with project implementation that would likely reduce wastewater flows in the City.

- *Water-1* would require an overall increase in water conservation, which would likely include a decrease in water utilized for toilets, thereby decreasing wastewater flows.
- *Water-2* would promote measures that would increase water efficiency for existing development. This increase in efficiency would likely include decreases in the amount of water utilized for toilets, thereby also decreasing wastewater flows.

Therefore, this impact would not be greater under the Proposed Project than previously analyzed in the GPEIR, and could potentially lead to a net decrease in wastewater flows as compared to the level analyzed in the GPEIR through 2035. The impact would remain less than significant.

Impact PFS-5: Development under the General Plan, as modified by the Proposed Project, would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

The GPEIR found that a significant number of additional wastewater facilities would be required to accommodate the projected wastewater flows and loads anticipated with buildout of the General Plan. In addition, higher levels of treatment that would be needed to meet anticipated discharge requirements. The GPEIR stated that the ability to mitigate potential impacts associated with these facilities would be contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required public utility facilities or infrastructure were considered significant and unavoidable.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR, and would therefore not cause an increase in wastewater production associated with growth in that period. In addition, GHG Reduction Measures associated with project implementation would likely reduce wastewater flows in the city. However, construction of new wastewater

treatment facilities or expansion of existing facilities would still be required under the Proposed Project. Therefore, while this impact would not be greater under the Proposed Project than previously analyzed in the GPEIR through 2035, and could potentially lead to a net decrease in wastewater flows as compared to the level analyzed in the GPEIR through 2035, the impact would remain significant and unavoidable.

Impact PFS-6: Development under the General Plan, as modified by the Proposed Project, could require additional capacity to serve the projected demand in addition to existing commitments.

The GPEIR stated that the Regional Water Control Facility (RWCF) would need expansion due in part to implementation of the General Plan. The GPEIR determined that, through the City continuing to ensure that new development projects plan and finance future required wastewater infrastructure consistent with adopted citywide master plans, as well as through implementation of related General Plan policies and mitigation defined in the GPEIR, this impact would be less than significant.

Under the Proposed Project, the City would continue to ensure that new development projects plan and finance future required wastewater infrastructure consistent with adopted citywide master plans. The Proposed Project would also not increase growth above that analyzed in the GPEIR, and would therefore not cause an increase in wastewater production associated with growth. In addition, GHG reduction measures associated with project implementation would likely reduce wastewater flows in the City. Therefore, impacts under the Proposed Project would not be greater than those analyzed in the GPEIR through 2035, and the impact would remain less than significant.

Impacts through Buildout

The Proposed Project would allow additional residential development beyond that analyzed in the GPEIR, and would cause a corresponding increase in wastewater flows in the City. Flows would continue to be served by a comprehensive sanitary sewer system, and no untreated wastewater would be discharged to surface water or groundwater resources under the Proposed Project. The City would continue to ensure that new development projects plan and finance future required wastewater infrastructure and implement related General Plan policies and mitigation defined in the GPEIR. As stated above, *Water-1* and *Water-2* would help offset increased wastewater flows in the city. However, because buildout of the Proposed Project would not occur until approximately 2050 to 2055, it would be speculative to determine precisely the amount of new flows the Proposed Project would generate and the extent to which these measures would offset these new flows.

Construction or expansion of wastewater facilities to accommodate increases in flows associated with growth could potentially be required as part of the Proposed Project, and impacts from this activity could be slightly more, but not substantially more severe than that analyzed in the GPEIR. The increased impact would be incremental in nature, and would therefore not alter the level of significance associated with the impact in the GPEIR of significant and unavoidable.

Stormwater

Impacts through 2035

Impact PFS-7: Development under the General Plan, as modified by the Proposed Project, would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The GPEIR stated that development associated with buildout of the General Plan could cause significant increases in peak flow and runoff volume. Due to the lack of capacity in nearby major waterways, the GPEIR found that most new development areas would require flood control facilities to mitigate for potential flow increases. Because the ability to mitigate the potential impacts of construction of such facilities would be contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures, the GPEIR determined that the potential impacts resulting from the construction and/or expansion of new stormwater facilities would be significant and unavoidable.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR, and would therefore not lead to an increase in residential and commercial development that could consequently increase stormwater flows and require new or expanded infrastructure. While the Proposed Project would result in greater amounts of residential development in the GDSA, the existing general plan included industrial, residential, and commercial development in the areas proposed for redesignation and thus the amount of impervious space is not expected to substantially change with the amendments.

Certain reduction measures in the CAP associated with construction of transportation infrastructure, including *Trans-5*, *Trans-6*, and *Trans-7* could include the construction of impermeable pavement for bike lanes, sidewalks, or transit stops and *Waste-1* and *HGWP GHG-1* which would include construction of waste collection and recycling facilities. The large majority of these improvements would likely occur on land that is already covered with an impermeable surface, and would therefore not lead to a consequent increase in stormwater flows. In addition, the Proposed Project includes a GHG reduction measure, *Urban Forestry-1*, which would significantly increase the number of trees within city limits and cause a consequent decrease in stormwater flows. All new facilities would need to comply with city stormwater requirements and thus it can be reasonably assumed that overall there would not be a significant increase in flows associated with the Proposed Project.

The Proposed Project would therefore not cause impacts more severe than those analyzed in the GPEIR. However, implementation of the General Plan would still require construction and/or expansion of new stormwater facilities due to growth associated with the General Plan. The impact would remain significant and unavoidable.

Impact PFS-8: Development under the General Plan, as modified by the Proposed Project, could violate water quality standards or waste discharge requirements, or otherwise degrade water quality.

The GPEIR stated that buildout of the General Plan would potentially impact the quality of runoff and other pollutant loadings to receiving waters, but that the City would continue to comply with federal water quality, waste discharge, and total maximum daily load standards defined under the

Clean Water Act (CWA) to address water quality impacts. Therefore, the GPEIR found that with related General Plan Policies, impacts associated with the violation of water quality standards would be less than significant.

While the Proposed Project would result in greater amounts of residential development in the GDSA, the existing general plan included industrial, residential, and commercial development in the areas proposed for redesignation and thus the amount of impervious space is not expected to substantially change with the amendments. While the amount of generated runoff may not substantially change, the shift from industrially-designated lands to residential development in the GDSA may result in some decreases in pollutant loading to stormwater runoff. Thus, potential stormwater runoff impacts on water quality are not expected to increase due to the downtown residential growth increase.

As stated above, certain GHG Reduction Measures associated with construction of transportation or waste management improvements could lead to minor increases in stormwater runoff, and potentially runoff compromised by pollutants such as motor oil. Compliance with existing city and state stormwater requirements reduce the amount of stormwater runoff, including runoff that could be compromised by pollutants. Overall, it can be reasonably assumed that there would not be a significant increase in flows associated with the Proposed Project.

Therefore, the Proposed Project would not cause an impact of greater significance than that detailed in the GPEIR. The impact would remain less than significant.

Impact PFS-9: Development under the General Plan, as modified by the Proposed Project, could substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which could result in substantial erosion or siltation on-or offsite or substantially increase the rate or amount of surface runoff in a manner which could result in on- or offsite flooding.

The GPEIR stated that buildout of the General Plan would increase the amount of impervious surfaces, thereby increasing the amounts and speed of runoff. According to the GPEIR, increased runoff volumes and speeds could increase erosion or siltation and result in localized nuisance flooding in areas without adequate drainage facilities, and due to the lack of capacity in nearby major waterways, most new development areas would require flood control facilities to mitigate for potential flow increases. Because the City would ensure that new development projects plan and finance all future required stormwater infrastructure consistent with adopted citywide master plans and that a variety of best management practices designed to minimize soil erosion impacts were implemented under all future development projects, the GPEIR determined this would be a less-than-significant impact.

While the Proposed Project would result in a change of development from primarily industrial land to high-density residential in a part of the GDSA, no substantial changes are expected due to changes in drainage patterns as development would occur in the same locations as with the adopted General Plan, but with a different character. New transportation and waste handling facilities would need to address drainage through project-level review and application of City policies like other development.

As stated above, it can be reasonably assumed that overall there would not be a significant increase in speed or volume of stormwater flows associated with implementation of the Proposed Project.

Therefore, the Proposed Project would not cause an impact of greater significance than that detailed in the GPEIR. The impact would remain less than significant.

Impact PFS-10: Development under the General Plan, as modified by the Proposed Project, could create or contribute runoff water which could exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff.

The GPEIR determined that buildout of the General Plan would cause an increase in peak flow and runoff volume, necessitating flood retention facilities. The GPEIR stated that because the City would ensure that new development projects plan and finance all future required stormwater infrastructure consistent with adopted citywide master plans, and because a variety of best management practices designed to minimize soil erosion impacts would implemented under all future development projects, this would be a less-than-significant impact.

As stated above, it can be reasonably assumed that overall there would not be a significant increase in stormwater flows associated with implementation of the Proposed Project. Therefore, the Proposed Project would not cause impacts more significant than the level detailed in the GPEIR, and this impact would remain less than significant.

Impact PFS-11: Development under the General Plan, as modified by the Proposed Project, could place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures which could impede or redirect flood flows.

The GPEIR stated that a portion of the city is within a FEMA-defined 100-year floodplain. While the GPEIR determined that buildout of the General Plan could expose more people and habitable structures to potential flooding if development were to occur within or adjacent to floodplain areas, it stated that the City would implement a variety of policies designed to address flood plain issues and ensure that adequate stormwater and drainage infrastructure is provided. Therefore, the impact was considered less than significant.

The Proposed Project would increase housing only in the GDSA. According to Figure 11-7 in the General Plan Background Report, the GDSA does not include areas subject to the 100-year flood except directly along McLeod Lake and an inlet north of Harbor Street west of I-5. Residential development is not likely to be proposed directly adjacent to these waterbodies in areas subject to 100-year flooding, but if such development is proposed it would be required per General Plan policies to address flooding safety for new development and thus would not put additional residents at risk to flooding. New transportation facilities such as bicycle and pedestrian paths are not likely to impede or redirect flood flows, but project-level review will be required. New waste management facilities would similarly be required to address flood impacts.

Therefore, the Proposed Project would not cause impacts more significant than the level detailed in the GPEIR, and this impact would remain less than significant.

Impact PFS-12: Development under the General Plan, as modified by the Proposed Project, could expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

The GPEIR stated that flood inundation resulting from levee or dam failure due to a variety of factors is a potential hazard for the City, and that several areas within the Study Area would require a variety of levee improvements and continued maintenance to provide protection from external flooding. The GPEIR stated that the City would implement a variety of policies designed to address flood plain issues by requiring the preservation of floodplain areas, permitting processes for new development that address floodplain issues, and maintaining emergency response programs. However, although this approach provided for human health and safety, the GPEIR determined it could still result in property damage during a flood event, thereby making it a significant and unavoidable impact.

The Proposed Project would include additional housing in the GDSA, all of which is subject to inundation from levee failure, and could therefore put additional residents at risk to flooding. Desite the implementation of General Plan Implementation Measure #14 (fees for infrastructure improvements) this impact is likely to remain significant for the foreseeable future until adequate funding revenue source can be secured to fully maintain and upgrade all levees protecting the City. The impact would be greater under the Proposed Project than the level analyzed in the GPEIR because of increased residents in the GDSA and the impact would remain significant and unavoidable, as property damage from flood inundation resulting from levee failure remains a risk.

Impacts through Buildout

The Proposed Project would allow for additional residential development as compared to the amount analyzed in the GPEIR, which could cause a consequent increase in impermeable surfaces in the GDSA and therefore an increase in peak stormwater flows and stormwater runoff volume. However, much of the GDSA already consists of impermeable surfaces and thus increased residential development may not result in substantially more runoff. While implementation of GHG reduction measure *Urban Forestry-1* and existing local and state stormwater requirements would offset this impact to an extent, it would be speculative to quantify the precise amount stormwater flows would be reduced, as buildout of the Proposed Project would not occur until between 2050 and 2055. It is reasonable to assume that overall, buildout of the General Plan would still require construction and/or expansion of new stormwater facilities due to growth associated with the General Plan, and that this impact would be slightly more under the Proposed Project but would not be substantially more severe than disclosed in the GPEIR. The increase in impact would be incremental, and the level of significance detailed in the GPEIR (significant and unavoidable) would not change as a result of project implementation.

Under the Proposed Project, the City would continue to comply with all relevant water quality standards, and impacts associated with water quality degradation would not be more severe under the Proposed Project than disclosed in the GPEIR. In addition, the City would continue to ensure that new development projects plan and finance all future required stormwater infrastructure; that a variety of best management practices designed to minimize soil erosion impacts would be implemented; and that policies designed to address flood plain issues would remain in place. Impacts associated with alteration of an existing drainage pattern, additional sources of polluted runoff, and obstruction of flood flows would not be more severe under the Proposed Project than disclosed in the GPEIR.

As discussed above, the Proposed Project would allow additional housing in the GDSA which is mostly not subject to the 100-year flood risk (and the city has policies for addressing flooding for areas that are) but the GDSA is subject to levee failure and therefore the Proposed Project could expose more people and habitable structures to potential flooding than disclosed in the GPEIR. Given that this is a public safety impact, this is an area in which the impact is identified as substantially more severe than that disclosed in the GPEIR and the impact level would remain significant and unavoidable impact.

Solid and Hazardous Waste

Impacts through 2035

Impact PFS-13: Development under the General Plan, as modified by the Proposed Project, would produce substantial amounts of solid waste that would exceed the permitted capacity of a landfill serving the Study Area.

The GPEIR determined that to accommodate solid waste needs resulting from additional growth associated with buildout of the General Plan, additional landfill capacity or waste disposal locations could be required for the City. Because several private companies provide waste management services to the City, the GPEIR assumed that these companies would independently continue to maximize the use of existing disposal options and plan for future waste disposal opportunities once existing disposal options reach their capacity. Consequently, because of the uncertain availability of where and what these future waste disposal options may be by 2035, the GPEIR determined this impact to be significant and unavoidable.

The draft CAP includes a variety of GHG reduction measures that would result in temporary increases in solid waste associated with project construction.

- *Energy-2a* and *Energy 2b* would encourage outdoor lighting upgrades. The replaced lighting fixtures and bulbs would need to be properly disposed of.
- *Energy-3* and *Energy-4* would encourage retrofitting of buildings, which could require disposal of outdated materials and equipment.
- *Energy-5* and *Energy-6* would encourage the installation of solar facilities, the construction of which could generate some waste.
- *Trans-3*, *Trans-5*, *Trans-6*, and *Trans-7* could require construction of transportation infrastructure improvements, which could generate temporary increases in waste.

The waste associated with these project elements would not be significant in relation to the overall waste generated by the city. In addition, the Proposed Project includes GHG reduction measure *Waste-1*, which would make it the City's goal to achieve a 75% diversion rate by 2020. This increase in diversion of solid waste would offset any increase associated with temporary waste increases due to Proposed Project construction. The Proposed Project is not expected to result in additional growth by 2035 above the amount considered in the GPEIR, and would therefore not cause an increase in solid waste production above than the amount disclosed in the GPEIR for that period. Nevertheless, while project impacts would not be greater than defined in the GPEIR, because of the uncertain availability of where and what future waste disposal options may be by 2035, this impact would remain significant and unavoidable.

Impact PFS- 14: Development under the General Plan, as modified by the Proposed Project, would comply with all federal, state, and local statutes and regulations related to solid waste.

The GPEIR stated that the City would comply with a variety of statutory requirements related to solid waste, including an increased diversion rate and AB 939. Because of the City's assurance of continued compliance, this impact was considered less than significant.

Under the Proposed Project, the City would continue to comply with all existing solid waste regulations. In addition, under *Waste-1*, the city would both comply with and exceed the requirements of AB 341 by setting its diversion rate goal at 75% by 2020. The Proposed Project is not expected to result in a level of growth by 2035 above that considered in the GPEIR, and would therefore not cause an increase in the production solid waste above the amount disclosed in the GPEIR for that period. Therefore, the impact would remain less than significant.

Impacts through Buildout

The Proposed Project would allow for additional residential growth in the GDSA, resulting in a corresponding increase in solid waste production. Because buildout of the Proposed Project would not occur until approximately 2050 to 2055, it would be speculative to quantify the precise amount of this increase, as well as the extent to which implementation of *Waste-1* compliance with AB 341 would offset this increase. Therefore, while it is reasonable to assume that impacts associated with exceedance of landfill capacity would not be more severe under the Proposed Project, the precise decrease in severity cannot be quantified at this time. The decrease would be incremental in nature, and would not alter the GPEIR's designation of this impact as significant and unavoidable.

Under the Proposed Project, the City would continue to comply with all existing solid waste regulations. In addition, under *Waste-1*, the city would both comply with and exceed the requirements of AB 341. Therefore, impacts associated with compliance with solid waste regulation would not be greater under the Proposed Project than disclosed in the GPEIR.

Gas and Electric Services

Impacts through 2035

Impact PFS-15: Development under the General Plan, as modified by the Proposed Project, would not result in the wasteful, inefficient, or unnecessary consumption of energy by residential, commercial, industrial, or public uses.

The GPEIR stated that buildout of the General Plan would increase the demand for additional energy, as development of new residential, commercial, and industrial uses would contribute to the need for additional energy supplies and utility infrastructure. However, according to the GPEIR, future development would occur in an area currently served with both adequate supplies of electricity and gas service. With implementation of General Plan policies encouraging energy conservation, the GPEIR determined this impact would be less than significant.

The Proposed Project is not expected to result in additional growth by 2035 above that considered in the GPEIR, and therefore not increase energy demand above the level analyzed in the GPEIR for that period. In addition, the Proposed Project includes a number of GHG reduction measures that would increase energy conservation.

- *Energy-1* would implement the City's Green Building Ordinance, which would promote more energy efficient buildings and decrease energy consumption in newly constructed structures.
- *Energy-2a* and *Energy-2b* would upgrade both municipal and private outdoor lighting to be more energy efficient, thereby decreasing energy consumption.
- *Energy-3* and *Energy-4* would promote retrofitting of existing residential and nonresidential buildings to become more energy efficient, also decreasing energy consumption.
- *Energy-5* and *Energy-6* would promote the use of solar energy, further decreasing energy consumption.
- *Wastewater-1* would increase energy efficiency at the RWCF.

Because the additional housing that could occur under the Proposed Project would be located in the downtown area, it would occur in an area currently served with both adequate supplies of electricity and gas service. Impacts under the Proposed Project would likely be less significant than the level analyzed in the GPEIR; this impact would remain less than significant.

Impact PFS-16: Development under the General Plan, as modified by the Proposed Project, may require the construction or expansion of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.

The GPEIR stated that buildout of the General Plan may result in development in areas of new growth, which would require the construction of utility infrastructure resulting in a variety of environmental impacts (e.g., noise, odors, traffic, light/glare). In addition, the GPEIR stated that there could be instances where the construction of these utility or service facilities may result in impacts that cannot be mitigated. Due to these uncertainties, the GPEIR determined that potential impacts resulting from the construction and/or expansion of any required City utility infrastructure would be significant and unavoidable.

As detailed above, the CAP includes a number of additional measures that would increase energy conservation. In addition, as described above, the Proposed Project is not expected to result in additional growth by 2035 above the amount considered in the GPEIR. Therefore, the Proposed Project would not change the impact presented in the GPEIR, and the impact remains significant and unavoidable.

Impacts through Buildout

The Proposed Project would allow for additional residential growth in the GDSA, resulting in a corresponding increase in demand for gas and electric services, General Plan policies encouraging energy conservation and GHG Reduction Measures in the CAP that would increase energy conservation. No major changes in the General Plan are proposed that would result in wasteful, inefficient, or unnecessary consumption of gas and electric energy.

The Proposed Project could cause the need for additional gas and electric energy infrastructure due to increases in residential development in the GDSA. While General Plan policies encouraging energy conservation and GHG Reduction Measures encouraging energy conservation would offset this impact, it would be speculative to quantify the precise amount of this offset due to the buildout of the General Plan not occurring until between 2050 and 2055. Impacts associated with construction of this infrastructure would be greater under the Proposed Project but not substantially more

severe than disclosed in the GPEIR; this increase in impact would be incremental, and the impact would remain significant and unavoidable, as disclosed in the GPEIR.

Law Enforcement

Impacts through 2035

Impact PFS-17: Development under the General Plan, as modified by the Proposed Project, would not result in a substantial adverse physical impact to the continued provision of law enforcement services in the Study Area.

The GPEIR determined that buildout of the General Plan would increase the overall demand on law enforcement to the City, and that new police facilities, vehicles, equipment, and personnel would be required in order to provide adequate response times to serve future growth. However, the GPEIR stated that additional personnel and materials costs would be offset through increased revenue and fees generated by future development. In addition, future projects would be reviewed by the City on an individual basis and would be required to comply with requirements (e.g., impact fees) in effect at the time building permits are issued. Therefore, the impact was considered less than significant.

Because the Proposed Project is not expected to result in additional development by 2035 beyond the amount analyzed in the GPEIR, it would not contribute to an increased demand for law enforcement in that period overall, although it will likely increase demand for law enforcement services in the downtown area. Any new development associated with the Proposed Project would be subject to the same requirements as those outlined in the GPEIR. Therefore, the impact would not be more significant than the level determined in the GPEIR, and would remain less than significant.

Impact PFS-18: Development under the General Plan, as modified by the Proposed Project, would include law enforcement facilities or require the construction or expansion of facilities which would have an adverse physical effect on the environment.

The GPEIR determined that the construction of any future required law enforcement facility infrastructure could result in a variety of environmental impacts (e.g., noise, odors, traffic, light/glare), some of which could potentially be unmitigable. Due to this uncertainty, the GPEIR determined that potential impacts resulting from the construction and/or expansion of any required law enforcement facilities would be significant and unavoidable.

Due to additional residential development in the downtown area, the Proposed Project would contribute to an increased demand for law enforcement, and this impact would be greater than the level determined in the GPEIR. Construction and/or expansion of law enforcement facilities may still be required that could result in unmitigable environmental impacts. Due to the uncertainty regarding potential impacts related to the construction of law enforcement facilities and the possibility that some impacts could be unmitigable, this impact remains significant and unavoidable.

Impacts through Buildout

The Proposed Project could cause the need for additional law enforcement due to increases in residential development in the GDSA, and a consequent increase in residents in the area. It would be speculative to quantify the precise increased need due to the buildout of the General Plan not occurring until approximately 2050 to 2055. Additional personnel and materials costs would be offset through increased revenue and fees generated by future development under the Proposed

Project, and future projects would be reviewed by the City on an individual basis and would be required to comply with requirements (e.g., impact fees) in effect at the time building permits are issued. Impacts associated with construction of any additional law enforcement infrastructure required due to the Proposed Project would be more than disclosed in the GPEIR but not substantially more severe; the impact would remain significant and unavoidable, as disclosed in the GPEIR.

Fire Protection

Impacts through 2035

Impact PFS-19: Development under the General Plan, as modified by the Proposed Project, would not result in a substantial adverse physical impact to the continued provision of fire protection services in the Study Area.

The GPEIR determined that buildout of the General Plan would increase the overall demand on fire protection services to the City, and that new fire facilities, vehicles, equipment, and personnel would be required in order to provide adequate response times to serve future growth. However, the GPEIR stated that additional personnel and materials costs would be offset through increased revenue and fees generated by future development. In addition, future projects would be reviewed by the City on an individual basis and would be required to comply with requirements (e.g., impact fees) in effect at the time building permits are issued. Therefore, the impact was considered less than significant.

Because the Proposed Project is not expected to result in additional development by 2035 beyond the amount analyzed in the GPEIR, it would not contribute to an increased overall demand for fire protection services in that period but may contribute to addition demand for services in the downtown area. Any new development associated with the Proposed Project would be subject to the same requirements as those outlined in the GPEIR. Therefore, the impact would not be more significant than the level determined in the GPEIR, and would remain less than significant.

Impact PFS-20: Development under the General Plan, as modified by the Proposed Project, would include fire protection facilities or require the construction or expansion of facilities which would have an adverse physical effect on the environment.

The GPEIR determined that the construction of any future required fire protection facility infrastructure could result in a variety of environmental impacts (e.g., noise, odors, traffic, light/glare), some of which could potentially be unmitigable. Due to this uncertainty, the GPEIR determined that potential impacts resulting from the construction and/or expansion of any required fire protection facilities would be significant and unavoidable.

The Proposed Project would contribute to an increased demand for fire protection services in the downtown area, but this impact would not be more significant under the Proposed Project than the level determined in the GPEIR. Development allowed for in the General Plan would still occur under the Proposed Project, and therefore construction and/or expansion of fire protection facilities may still be required that could result in unmitigable environmental impacts. Due to the uncertainty regarding potential impacts related to the construction of fire protection facilities and the possibility that some impacts could be unmitigable, this impact remains significant and unavoidable.

Impacts through Buildout

The Proposed Project would cause the need for additional fire protection services due to increases in residential development in the GDSA, and a consequent increase in residents in the area. It would be speculative to quantify the precise increased need due to the buildout of the General Plan not occurring until approximately 2050 to 2055. Additional personnel and materials costs would be offset through increased revenue and fees generated by future development under the Proposed Project, and future projects would be reviewed by the City on an individual basis and would be required to comply with requirements (e.g., impact fees) in effect at the time building permits are issued. Impacts associated with construction of any additional fire protection infrastructure required due to the Proposed Project would be more than disclosed in the GPEIR but not substantially more severe; the impact would remain significant and unavoidable, as disclosed in the GPEIR.

Schools

Impacts through 2035

Impact PFS-21: Development under the General Plan, as modified by the Proposed Project, would not result in a substantial adverse physical impact to the continued provision of school services in the Study Area.

The GPEIR stated that the increased population associated with buildout of the General Plan would result in increased student generation, and that new facilities and personnel will be required in order to provide adequate service for future growth. The GPEIR stated that to the extent allowed by state law, the City would continue to ensure that future development projects mitigate impacts on school facilities. While state law severely limits the City's ability to require proponents of new development to mitigate the impacts of new student populations on existing school facilities, with payment of state-mandated school impact fees impacts on school facilities are deemed to mitigate to less than significant levels. Therefore, the GPEIR determined this impact would be less than significant.

Because the Proposed Project is not expected to result in additional development by 2035 beyond the amount analyzed in the GPEIR, it would not contribute to an overall increased demand for school facilities in that period although the demand for school services (particularly for elementary school needs) would likely increase in the downtown area. The overall impact would not be greater under the Proposed Project than the level determined in the GPEIR but the location of the impact may alter somewhat. Any new development associated with the Proposed Project would be subject to the same requirements as those outlined in the GPEIR, including being subject to state-mandated school impact fees on school facilities, which would mitigate impacts to less than significant levels. Therefore, this impact would remain less than significant.

Impacts through Buildout

The Proposed Project would allow additional for additional residential development in the GDSA beyond that analyzed in the GPEIR, and could contribute to an increased demand for school facilities in the downtown area and the city overall. However, the impact would not be greater under the Proposed Project than the level determined in the GPEIR, as any new development associated with the Proposed Project would be subject to the same requirements as those outlined in the GPEIR,

including being subject to state-mandated school impact fees on school facilities, which would mitigate impacts to less than significant levels.

Communications Systems

No environmental issues were identified relating to the provision of local and regional communications systems in the GPEIR. The GPEIR stated that, because aesthetic and land use conflict issues related to the future placement of both above and below ground utility corridors (including cell towers, transmission lines, etc.) in the Planning Area were addressed in the *Scenic Resources* chapter of the GPEIR. The GPEIR found that except for the kinds of impacts addressed in those chapters, the provision of communications infrastructure typically does not cause other kinds of environmental impacts, as the wiring needed for various communications systems is typically laid in streets at the time they are constructed (adding no additional impacts beyond those associated with road construction), and new homes and other structures are typically wired as they are built. These conclusions remain the same for this project. There would be no new impacts.

Libraries

Impacts through 2035

Impact PFS-22: Development under the General Plan, as modified by the Proposed Project, would not result in a substantial adverse physical impact to the continued provision of library services in the Study Area.

The GPEIR determined that buildout of the General Plan would increase the overall demand on library services to the city. However, the GPEIR stated that additional personnel and materials costs would be offset through increased revenue and fees generated by future development. In addition, future projects would be reviewed by the City on an individual basis and would be required to comply with requirements (e.g., impact fees) in effect at the time building permits are issued. Therefore, the impact was considered less than significant.

Because the Proposed Project is not expected to result in additional development by 2035 beyond the amount analyzed in the GPEIR, it would not contribute to an increased demand for library services in that period but would increase demand for such services in the downtown area. Any new development associated with the Proposed Project would be subject to the same requirements as those outlined in the GPEIR. Therefore, the impact would not be more significant than the level determined in the GPEIR, and would remain less than significant.

Impact PFS-23: Development under the General Plan, as modified by the Proposed Project, would include library facilities or require the construction or expansion of facilities which would have an adverse physical effect on the environment.

The GPEIR determined that the construction of any future required library facility infrastructure could result in a variety of environmental impacts (e.g., noise, odors, traffic, light/glare), some of which could potentially be unmitigable. Due to this uncertainty, the GPEIR determined that potential impacts resulting from the construction and/or expansion of any required library facilities would be significant and unavoidable.

The Proposed Project would contribute to an increased demand for library services in the downtown area, but this impact would not be substantially more severe under the Proposed Project

than determined in the GPEIR. Development allowed for in the General Plan would still occur under the Proposed Project, and therefore construction and/or expansion of library facilities may still be required that could result in unmitigable environmental impacts. Due to the uncertainty regarding potential impacts related to the construction of library facilities and the possibility that some impacts could be unmitigable, this impact remains significant and unavoidable.

Impacts through Buildout

The Proposed Project could cause the need for additional library services due to increases in residential development in the GDSA, and a consequent increase in residents in the area. It would be speculative to quantify the precise increased need due to the buildout of the General Plan not occurring until approximately 2050 to 2055. Additional personnel and materials costs would be offset through increased revenue and fees generated by future development under the Proposed Project, and future projects would be reviewed by the City on an individual basis and would be required to comply with requirements (e.g., impact fees) in effect at the time building permits are issued. Impacts associated with construction of any additional library infrastructure required due to the Proposed Project would be more than disclosed in the GPEIR but not substantially more severe. This increase in severity would be incremental, and the impact would remain significant and unavoidable, as disclosed in the GPEIR.

Chapter 10
Recreation and Waterways

Setting

Recreation and Waterways information for the Planning Area is described in Chapter 10, *Recreation and Waterways*, in the GPEIR, and Chapter 10, *Recreation and Waterways* in the General Plan Background Report. The detailed setting provided in the GPEIR is fully incorporated by this reference.

Impacts and Mitigation

Criteria of Significance

Implementation of the Proposed Project would significantly impact recreation and waterways if it would result in any of the following.

- Increase the use of existing neighborhood, community, and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.
- Increase the risk of fire hazards in the vicinity of the Proposed Project.
- Pose an unacceptable level of safety risk.

Impact Discussion

The following impact discussion details specific impacts associated with the Proposed Project through the year 2035, followed by a more general discussion of impacts once buildout of the General Plan occurs. Because, as discussed in Chapter 2 of this document, it would be speculative to attempt to define impacts at buildout—which, given recent growth and development rates, is estimated to occur approximately 2055—these impacts are discussed qualitatively.

Impacts are assessed for the following components of the project.

- **CAP**. The CAP contains specific actions to reduce GHG emissions and address climate change. The only CAP measure that might affect recreation and waterways would be CAP measure Trans-1, which is analyzed below.
- **Transit Plan**. The Transit Plan includes measures to increase access to transit. These measures implement existing General Plan policies encouraging the use and expansion of transit facilities. No specific programs not already contemplated in the General Plan are proposed in the Transit Plan. No changes in demand for or increase in construction of recreation would result from adoption and implementation of the Transit Plan.

Recreation and Waterway Resources

Impacts through 2035

Impact RW-1: Development under the General Plan, as modified by the Proposed Project, would result in the substantial physical deterioration of existing neighborhood and regional parks or other recreational facilities through increased use.

The GPEIR stated that buildout of the General Plan would increase the overall demand on park facilities throughout the city and generate additional demand for various recreation programs currently provided by city agencies. While the GPEIR found that new park facilities and recreation programs would be required in order to provide adequate recreational opportunities to serve future growth, it stated that the additional personnel and materials costs would be offset through increased revenue and fees generated by future development. This impact was deemed potentially significant. Implementation of General Plan policies and the revised Implementation Measure #21, which states that the City will conduct an assessment to determine where fees need to be levied for new and expanded services, reduced this impact to less than significant.

The Proposed Project would not increase growth above that already allowed by the General Plan outside of the downtown area, and would therefore not lead to increased use or demand for parks or other recreational facilities that could cause physical deterioration of these resources. New bicycle and pedestrian paths, depending on location, may increase access to existing park and recreational areas, enhancing recreational opportunities. New waste management facilities would not be proposed in recreational areas. New solar roofs would not degrade recreational areas. Solar installations over parking areas, if proposed at recreational areas, would provide shade for vehicles and assembly areas which would be an amenity, not a degradation or park resources. Outside the downtown area, the Proposed Project would not increase the significance of this impact.

The proposed project could result in an increase in residents in the downtown areas, with concomitant increase demand for nearby parks and recreation facilities, however, overall the Proposed Project would not increase growth by the year 2035 above the amount allowed for in the General Plan, and would therefore not cause a consequent substantial increase in the use of parks and other recreational facilities and thus would not substantially increase the severity of the impact identified in the GPEIR.

Impact RW-2: Development under the General Plan, as modified by the Proposed Project, would include recreational facilities or require the construction or expansion of recreational facilities which would have an adverse physical effect on the environment.

The Recreation and Waterways Element of the General Plan was developed to help protect and enhance local waterways, and to enhance and maintain existing and future parks through long-range preservation of open space areas. The GPEIR determined that construction and expansion of recreational facilities associated with implementation of the General Plan would cause significant impacts. While various policies are included in the General Plan reduce this impact (including policies RW-1.1, PFS-4.2, and RW 3.4-3.6), the GPEIR stated that the ability to mitigate potential impacts would be contingent upon a variety of factors, including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. The impact was therefore determined to be significant and unavoidable.

The Proposed Project does not include the construction of any additional or expanded recreational facilities. In addition, the Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR. Therefore, the amount of recreational facilities considered in the GPEIR is sufficient to serve the population of the city by 2035 under the Proposed Project. The impact would remain significant and unavoidable due to impacts associated with construction of recreational facilities considered in the GPEIR, but impacts would not be more severe under the Proposed Project.

Impact RW-3: Development under the General Plan, as modified by the Proposed Project, would increase the potential risk of fire hazards along open space corridors or other recreational facilities through increased use.

The GPEIR stated that buildout of the General Plan in 2035 would increase the potential impact of wildland fires along various open space corridors or other recreation facilities through increased recreation use and consequent increased human exposure. Various policies and Implementation Measures minimize fire risk potential resulting from increased use along City-owned trails and waterway areas (see policies RW 1.1-1.3, 2.3, 5.1-5.5, and Implementation Measures 8-10, and 12). With implementation of these measures and policies, this impact was deemed to be less than significant.

Because the Proposed Project is not expected to result in growth above the amount allowed for in the General Plan by 2035, it would not increase the significance of this impact. Recreational activity and the use of recreational facilities would remain similar to the amount assumed in the GPEIR, and therefore potential exposure to wildland fires would also remain similar. The impact would remain less than significant.

Impact RW-4: Development under the General Plan, as modified by the Proposed Project, would increase the potential for crime to occur within and adjacent to open space corridors or other recreational facilities through increased use.

The GPEIR stated that buildout of the General Plan had the potential to result in an increase in criminal activity occurring within and adjacent to local waterways or trail corridors related to new or increased trail use. However, the GPEIR found that various policies and Implementation Measures (Policies RW 1.2, RW 2.3, RW 5.4 and RS 5.6, and Implementation Measures 8–10, and 12) could be implemented to address these public safety concerns along City-owned trails and waterway areas. Therefore, this impact was considered less than significant.

As detailed above, because the Proposed Project is not expected to result in growth above the amount allowed for in the General Plan by 2035, the Proposed Project would not increase the significance of this impact. Recreational activity and the use of recreational facilities would remain similar to that assumed in the GPEIR, and therefore any potential increase in the potential for crime to occur would remain similar. The impact would remain less than significant.

Impacts through Buildout

Within the GDSA, the Proposed Project would promote a level of growth above that assumed in the GPEIR. Specifically, this additional development would include as many as 300 to 1,110 additional residential units beyond that allowed by the existing General Plan. While growth associated with the Proposed Project could result in impacts to recreational facilities and waterways that are greater

than those identified in the GPEIR at buildout, it would be speculative to precisely quantify these impacts, given that buildout would be unlikely to occur between 2050 and 2055.

Additional growth could produce the following specific impacts.

- The additional growth could lead to an increase in use of parks and recreational facilities in and around the GDSA, which could consequently lead to an increase in their deterioration. While this impact would be more than the impact disclosed in the GPEIR, it is reasonable to assume that, as stated in the GPEIR, additional costs needed to either maintain existing parks or construct additional parks would be offset through increased revenue and fees generated by future development. In addition, implementation of General Plan policies and implementation measures would still be required for the additional growth allowed for by the Proposed Project, ensuring any impacts associated with increased deterioration of parks and recreational facilities would be reduced to a less than significant level.
- The Proposed Project could require the construction of new recreational facilities or the expansion of existing facilities that could result in significant and unavoidable impacts. This impact would be more than under the Proposed Project, as additional growth would cause a consequent increase in need for new or expanded recreational facilities. However, because this impact was identified as significant and unavoidable in the GPEIR and the additional residential population would be a modest change in buildout potential (perhaps 6 months to one year extension of buildout in the long run) the Proposed Project would not increase the level of significance disclosed in the GPEIR.
- The Proposed Project could increase exposure of residents to wildland fires and crime due to an increase in use of recreational facilities and waterways above the amount considered in the GPEIR. However, the mitigating General Plan policies identified in the GPEIR would remain applicable under the Proposed Project, and it is reasonable to assume these policies would be sufficient to reduce any additional impacts associated with the Proposed Project to a less than significant level. These impacts would remain less than significant.

The Proposed Project would not increase growth at buildout above the amount already assumed in the GPEIR outside the GDSA, and therefore would not increase deterioration of existing parks and facilities, cause construction of new facilities or expansion of existing facilities, or increase exposure to wildland fires or crime.

Chapter 11
Health and Safety

Setting

Health and safety information for the Planning Area is described in Chapter 11, *Health and Safety Element*, in the GPEIR, and Chapter 11, *Health and Safety*, in the General Plan Background Report. Relevant goals and policies are summarized in Chapter 11 of the GPEIR. The *Health and Safety Element* chapter of the GPEIR addresses a variety of public health and safety issues, including noise, geologic and seismic hazards, air quality, and human-made hazards. The detailed setting and policies provided in the GPEIR are fully incorporated by these references.

Impacts and Mitigation

Criteria of Significance

Implementation of the Proposed Project would have a significant effect on health and safety resources if it would result in any of the following situations.

Noise

- Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.
- Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

Geologic and Seismic Hazards

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction; or 4) landslides.

- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. The following impact was not identified as being potentially significant as part of the Initial Study (see Appendix A of this SEIR) prepared for the Proposed Project.
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

Air Quality

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

Human-Made Hazards

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or involve handling hazardous or acutely hazardous substances, or waste within 0.25 mile of an existing or proposed school
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment
- Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area
- Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impact Discussion

The following impact discussion details specific impacts associated with the Proposed Project through the year 2035, followed by a more general discussion of impacts once buildout of the General Plan occurs. Because, as discussed in Chapter 2, *Project Description,* of this document, it would be speculative to attempt to define impacts at buildout—which, given recent growth and development rates, is estimated to occur approximately 2055—these impacts are discussed qualitatively.

Impacts are assessed for the following components of the project.

- **CAP**. The CAP contains specific actions to reduce GHG emissions and address climate change. The CAP includes measure Trans-1 that could increase housing units in the City and thus affect traffic levels and noise resulting from traffic. Specific impacts related to traffic noise are presented below. In addition, implementation of the CAP could result in construction of transportation infrastructure projects and waste handling facilities, and resulting construction noise. Specific impacts related to construction noise are presented below.
- **Transit Plan/Program**. The Transit Plan includes measures to increase access to transit. These measures implement existing General Plan policies encouraging the use and expansion of transit facilities. Specific impacts related to traffic noise are presented below.

Noise

Impacts through 2035

Impact HS-1: Development under the General Plan, as modified by the Proposed Project, would result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

As noted in the GPEIR, the following sources associated with buildout of the General Plan would result in increased in ambient noise levels in excess of "normally acceptable" ranges.

- Short-term construction activities.
- On-road mobile sources.
- Railroad sources.
- Industrial sources.
- Port of Stockton activates.

The GPEIR acknowledges that additional CEQA documentation would be prepared for individual projects contributing to one or more of the above noise impacts. However, the GPEIR also states that the ability to mitigate potential impacts would be contingent upon a variety of factors, including the severity of the noise impact, existing land use conditions, and the technical feasibility of available mitigation. Given the uncertainty associated with achieving adequate mitigation, the GPEIR determined this impact to be significant and unavoidable. The potential for the Proposed Project to

contribute to new or substantially more severe noise impacts is discussed for each of the noise sources identified in the GPEIR.

Construction Activities

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR. Therefore, noise impacts associated with construction of residential development in that period would not be greater under the Proposed Project than disclosed in the GPEIR although there may be more construction in the GDSA. The impact level for additional residential development would be similar to that for other new development described in GPEIR.

Many of the GHG reduction measures associated with the CAP, such as energy efficiency retrofits (*Energy-3* and *Energy-4*), increased water diversion (*Waste-1*), and compliance with SB X7-7 (*Water-1*), are not expected to generate significant short-term noise-related impacts as these measures would be minor upgrades to existing infrastructure and/or City programs. Some measures, however, would involve grading or construction activities at individual sites. Although construction-generated noise levels would be short term, significant increases in ambient noise levels could potentially occur. For noise-sensitive land uses, activities occurring during the evening and night hours may result in increased levels of annoyance and potential sleep disruption.

Policies identified in the General Plan would help minimize increased noise from implementation of the Proposed Project. For example, HS-2.10 and HS-2.11 would reduce construction-related noise impacts to sensitive receptors. Despite these policies, construction activity associated with the Proposed Project could contribute to ambient noise levels in excess of "normally accepted" ranges. This impact would not be substantially more severe that what was previously analyzed in the GPEIR as construction activities are expected to be minor and comply with applicable ordinances and General Plan policies. However, the Proposed Project would contribute to the impact disclosed in the GPEIR, and this impact would remain significant and unavoidable.

On-Road Mobile Sources

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR. Therefore, noise impacts associated with additional traffic caused by growth would not be greater under the Proposed Project for that period than disclosed in the GPEIR.

A number of GHG reduction measures proposed as part of the CAP include roadway modifications and strategies to increase public transit and alternative modes of transportation. For example, *Trans-2* would increase the price of parking in certain areas of the city, thereby encouraging public transit use. *Trans-3* would encourage the development of transit amenities, including improved park-and-ride facilities and bus shelters, and *Trans-5* would encourage bicycling and walking. These measures would not introduce new traffic, but rather are intended to relieve current and projected future traffic congestion, thereby resulting in a potential beneficial noise impact. However, in some cases, traffic efficiency measures on certain corridors could accommodate increased travel speeds and volumes.

The General Plan noise policies were developed to address noise and land use compatibility issues, as well as provide guidance on the analysis and mitigation of future project-related noise impacts. These policies include the identification of appropriate noise levels for sensitive receptors (HS-2.1), methods to address noise compatibility issues (HS-2.2), and development of criteria for future

project-specific noise studies (HS-2.3). Implementation of these General Plan policies would help ensure future development meets applicable noise criteria for land use compatibility.

The GPEIR determined that increased noise levels from on-road mobile sources would result in a significant and unavoidable impact. As discussed above, the project will reduce vehicle trips in city, likely contributing to an overall noise reduction. However, implementation of the project could cause localized increases in noise levels due to rerouted traffic and/or changes in vehicle speeds. Depending on time of day and proximity to sensitive receptors, changes in vehicular operation may result in increased levels of annoyance. Given the overall vehicle benefits associated with the GHG reduction measures, this impact would not be substantially more severe that what was previously analyzed in the GPEIR. However, as disclosed in the GPEIR, this impact would remain significant and unavoidable.

Railroad Sources

Because implementation of the Proposed Project would not increase commercial or industrial uses, it is not expected to substantially worsen or reduce noise levels associated with railroad sources. Although the Proposed Project would not result in a new or substantially more severe significant impact, this impact, as disclosed in the GPEIR, remains significant and unavoidable.

Industrial Sources

Because implementation of the Proposed Project would not increase industrial uses, it is not expected to substantially worsen noise levels associated with industrial sources. In the GDSA area, additional residential development may actually lower industrial buildout potential which may reduce industrial noise in localized areas. Although the project would not result in a new or substantially more severe significant impact, this impact, as disclosed in the GPEIR, remains significant and unavoidable.

Port of Stockton Activities

Implementation of the Proposed Project is not expected to affect activities at the Port of Stockton, and therefore would not substantially worsen or reduce noise levels associated with the Port of Stockton. Although the project would not result in a new or substantially more severe significant impact, this impact, as disclosed in the GPEIR, remains significant and unavoidable.

Impact HS-2: Development under the General Plan, as modified by the Proposed Project, would result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

The Proposed Project would not result in substantial new sources of vibration or groundborne noise levels except for construction of new residential housing in the GDSA and minor facilities constructed to support other CAP measures (such as recycling facilities, etc.). The existing General Plan includes measures to control potential exposures to existing vibration sources for new projects that would apply to any new residential developments promoted by the Proposed Project, but it cannot be known at this time whether vibration impacts could be reduced to a less than significant level. Thus, the Proposed Project would have similar levels of impact as the adopted General Plan and not substantially increase the level of vibration impact disclosed in the GPEIR, which would remain significant and unavoidable.

Impact HS-3: Development under the General Plan, as modified by the Proposed Project, will be located within an airport land use plan area or within the vicinity of a private airstrip and could expose people residing or working with the project area to excessive noise levels.

The airport land use plan includes an area of influence that extends far more than 2 miles from the Airport and includes an area on the southwest of the GDSA. The overlap between the GDSA and the Airport area of influence is roughly west of El Dorado Street, north of Charter Way, east of S. Fresno Ave, and south of Weber Street). The overlap of the GDSA and the airport's area of influence is outside the restrictive areas in which the Airport land use plan recommends avoiding or limiting residential development. For the overlap area, the airport land use plan requires that residential developments be soundproofed to reduce interior noise to 45 DB, and that the ALUC review the development proposals (SJCOG 1993).

Since the GDSA does not overlap with the most restrictive areas in the airport land use plan, the application of the airport land use plan requirements for the outer portion of the area of influence to new residential development would reduce potential noise impacts, and impacts associated with the Proposed Project involving conflicts with an airport land use plan and safety would not be greater than those analyzed in the GPEIR.

Geologic and Seismic Hazards

Impacts through 2035

Impact HS-4: Development under the General Plan, as modified by the Proposed Project, would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issues by the State Geologist for the area or based on other substantial evidence of a known fault; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction; or 4) landslides.

As disclosed in the GPEIR, the project area is located in a region of California that is characterized by low seismic activity and hazards associated with active faults, and the site is flat, with no potential for landslides. The GPEIR therefore identified impacts associated with rupture, seismic groundshaking, seismic ground failure, and landslides as less than significant.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR, and therefore no additional structures or people would be exposed to adverse effects. Project activities would likewise not change current conditions with respect to surface rupture or faulting hazards. Thus, the Proposed Project would not result in a new or substantially more severe significant impact**.** This impact would remain less than significant.

Impact HS-5: Development under the General Plan, as modified by the Proposed Project, would not be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse.

As disclosed in the GPEIR, the city's topography is relatively flat and is not located within a delineated Alquist-Priolo Earthquake Fault Zone. Additionally, the probability of soil liquefaction is considered to be a low to moderate hazard. The GPEIR identified impacts associated with geological instability as less than significant with adherence to City Uniform Building Code and implementation

of applicable policies in the *Health & Safety Element*. Any construction associated with implementation of the Proposed Project, including proposed retrofitting of buildings, construction of solar panel systems, and development of transportation infrastructure would be subject to the same regulations and policies.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR, and therefore no additional residential structures or people would be exposed to adverse effects in that period. The Proposed Project would not result in substantial changes that would increase the risk of landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, the Proposed Project would not result in a new or substantially more severe significant impact. This impact would remain less than significant.

Impact HS-6: Development under the General Plan, as modified by the Proposed Project, could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), but would not create substantial risks to life or property.

Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when they dry) or swelling (when they become wet). The extent of shrinking and swelling is influenced by the environment, including the extent of wet or dry cycles, and by the amount of clay in the soils. Within the city, expansive soils are more common in less developed areas. The GPEIR identified impacts associated with expansive soils to be less than significant with adherence to City Uniform Building Code and implementation of applicable policies in the *Health & Safety Element*. As stated above, any construction associated with implementation of the Proposed Project would be subject to the same regulations and policies.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR, and therefore no additional residential structures or people would be exposed to adverse effects overall. The Proposed Project would not result in substantial changes that would increase risks associated with expansive soils. Therefore, the Proposed Project would not result in a new or substantially more severe significant impact. This impact would remain less than significant.

Impacts through Buildout

While the Proposed Project would allow for additional residential development beyond that disclosed in the GPEIR in the GDSA, all project construction would still occur in areas with low seismic activity and hazards associated with active faults; on flat sites with no potential for landslides; in areas not located within a delineated Alquist-Priolo Earthquake Fault Zone; in areas unlikely to include expansive soils; and in areas with a low to moderate probability of soil liquefaction. All new development would adhere to the City Uniform Building Code and require implementation of applicable policies in the *Health & Safety Element*. Therefore, impacts would remain less than significant through buildout of the Proposed Project.

Air Quality

Impacts through 2035

Impact HS-7: Development under the General Plan, as modified by the Proposed Project, would result in a cumulatively considerable net increase of criteria pollutants and would exceed the daily SJVAPCD threshold for NO_X and ROG.

The GPEIR determined that even with implementation of General Plan policies to reduce air quality issues, total NO_X and ROG emissions associated with buildout would still exceed daily San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds. Consequently, the GPEIR determined that buildout of the General Plan would result in a significant and unavoidable cumulative air quality impact.

The quantity of daily emissions, particularly ROG and NO_X emissions, generated by construction equipment would depend on the number of vehicles used and the hours of operation. The significance of fugitive dust emissions consisting of particulate matter 10 microns or less in diameter (PM10) would likewise depend on several factors, including: the aerial extent of disturbed soils and the length of disturbance time; whether or not existing structures are demolished; whether or not excavation is involved; and whether or not transport of excavated materials off site is necessary. The level of hydrocarbon emissions generated by oil-based substances, such as asphalt, would dependent on the type and amount of material utilized.

Many of the GHG reduction measures, such as energy efficiency upgrades (*Energy-3* and *Energy-4*) and the installation of solar photovoltaic systems (*Energy-5* and *Energy-6*), are not expected to generate significant short-term impacts as they are minor upgrades to existing infrastructure and/or City programs. However, some measures, including those related to transportation and possibly waste management, would involve grading, paving, and/or the construction of permanent facilities. Although individual improvements may not generate significant short-term emissions, it is possible that several improvements would be under construction at the same time and would generate cumulative construction emissions that could impact air quality.

Long-term operational emissions would result from area sources and local and regional vehicle use. Increased development in the greater downtown could generate additional emissions from these sources but these would likely be offset by the reduction in potential industrial use emissions due to changes in the GDSA. It is also probable that any emissions increases associated with downtown infill would be offset by emissions reductions achieved by policies outlined in the CAP which apply city-wide. The encouragement of public transit over personal vehicle use and the concentration of new development proximate to downtown, commercial corridors, and public transit would reduce vehicle trips and air pollutant emissions. Energy efficiency upgrades are likewise anticipated to result in a regional air quality benefit from reduced energy consumption. These and other GHG Reduction Measures would reduce operational criteria pollutant emissions, relative to what was previously considered in the GPEIR. Although the project would likely have a beneficial air quality impact, without additional site-specific modeling, air quality emissions reductions associated with the Proposed Project cannot be quantified. Thus, this impact, as disclosed in the GPEIR, remains significant and unavoidable.

Impact HS-8: Development under the General Plan, as modified by the Proposed Project, would not conflict with or obstruct implementation of an applicable air quality plan.

The General Plan was designed specifically to achieve and promote consistency with key planning documents. However, as discussed in Impact HS-5, buildout of the General Plan would generate ROG and NO_X emissions in excess of the SJVAPCD's significance thresholds. As a result, the GPEIR found potential conflicts with applicable air quality plans to be significant and unavoidable.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR. Additionally, as discussed in Impact HS-5, the Proposed Project includes a number of measures that will reduce operational criteria pollutant emissions, relative to what was previously considered in the GPEIR. Thus, implementation of the project would not result in a new or substantially more severe conflict with applicable air quality plans. Although the project would likely have a beneficial air quality impact, without additional site-specific modeling, specific emissions reductions associated with the Proposed Project cannot be quantified. Thus, this impact, as disclosed in the GPEIR, therefore remains significant and unavoidable.

Impact HS-9: Development under the General Plan, as modified by the Proposed Project, would generate emissions above the daily SJVAPCD significance threshold for NO_X and ROG, primarily due to emissions resulted to increased traffic.

As noted in the GPEIR, development associated with buildout of General Plan would generate nitrogen oxides (NO_X) and reactive organic gasses (ROG) emissions in excess the SJVAPCD's significance thresholds. Primary emissions sources identified in the GPEIR include motor vehicles, stationary sources, residential wood stoves, fireplaces, and area sources (natural gas combustion for space heating, landscaping equipment use, consumer products use, and wood stove and fireplace use). Because NO_X and ROG associated with these sources would exceed SJVPACD thresholds, this impact was determined to be significant and unavoidable.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR. Additionally, as discussed in Impact HS-5, the Proposed Project includes a number of measures that will reduce operational criteria pollutant emissions, relative to what was previously considered in the GPEIR. Thus, implementation of the project would not result in a new or substantially more severe significance impact to air quality. Although the project would likely have a beneficial air quality impact, without additional site-specific modeling, specific emissions reductions associated with the Proposed Project cannot be quantified. Thus, this impact, as disclosed in the GPEIR, therefore remains significant and unavoidable.

Impact HS-10: Development under the General Plan, as modified by the Proposed Project, would expose sensitive receptors to substantial pollutant concentrations.

The GPEIR determined that buildout of the General Plan could expose sensitive receptors to significant and unavoidable pollutant concentrations. The Proposed Project may include construction of transit facilities, which would lower overall emissions, but might increase localized emissions hotspots adjacent to transit centers. The number and severity of localized emissions increases would depend on the location of new development, relative to sensitive receptors.

The General Plan includes several policies related to the siting of sensitive land uses near incompatible uses. For example, several policies (LU-3.7, LU-3.9, LU-5.2, LU-5.7, and TC-8.1) include clustering of similar industrial land uses, which may generate TACs, away from residential land uses.

This impact would not be substantially more severe that what was previously analyzed in the GPEIR as future infill projects and new transportation and waste management facilities and other infrastructure would be required to comply with applicable ordinances and General Plan policies. However, as disclosed in the GPEIR, this impact would remain significant and unavoidable.

Impact HS-11: Development under the General Plan, as modified by the Proposed Project, would not create objectionable odors affecting substantial number of people.

The GPEIR stated that the potential for objectionable odors associated with the General Plan was found to be minimal and not likely to affect a substantial number of people. The GPEIR therefore determined that buildout of the General Plan would have a less-than-significant impact with respect to odors.

The Proposed Project, in general, would not result in substantial changes that would increase objectionable odors. While the CAP encourages recycling and composting, existing state and local regulations address any potential odor-creating impacts from new recycling and composting facilities. No additional impact would occur beyond that disclosed in the GPEIR.

Impact HS-12: Impacts related to greenhouse gas emissions

Please refer to Chapter 14 for an expanded discussion of GHG emissions and climate change impacts.

Impacts through Buildout

The Proposed Project would increase allowable development in the GDSA, causing additional construction of residential buildings and associated infrastructure beyond that considered in the GPEIR. This additional construction would increase total NO_X and ROG emissions associated with buildout, and would therefore still exceed daily SJVAPCD thresholds and conflict with applicable air quality plans. The GPEIR determined that buildout of the General Plan would result in a significant and unavoidable cumulative air quality impact. While General Plan policies related to the siting of sensitive land uses near incompatible uses would be implemented under the Proposed Project, the additional development allowed for by the Proposed Project could ultimately result in additional incompatible uses being sited within the GDSA.

These impacts would be greater under the Proposed Project than analyzed in the GPEIR for the downtown area only. But for the City as a whole, the GHG Reduction Measures associated with the Proposed Project would reduce operational criteria pollutant emissions relative to what was previously considered in the GPEIR. However, without additional site-specific modeling, emissions reductions associated with the Proposed Project cannot be quantified. Therefore, the level of significance for these impacts remains significant and unavoidable, as identified in the GPEIR.

There would be no additional odors associated with buildout of the General Plan and odor impacts would remain less than significant.

Human-Made Hazards

Impacts through 2035

Impact HS-13: Development under the General Plan, as modified by the Proposed Project, could create a significant hazard to the public or the environment through the routine

transport, use, or disposal of hazardous materials or create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials to the environment.

The GPEIR determined that impacts related to the transport, use, and disposal of hazardous materials could be reduced to less-than-significant with appropriate mitigation. The GPEIR found that the impacts of hazardous material could be fully mitigated through the adoption of Mitigation Measure HS-5.9, Hazardous Materials Studies, and compliance with federal and state regulations.

The Proposed Project would implement several GHG reduction measures to aggressively reduce GHG emissions in the city. Certain reduction measures, such as residential and commercial energy efficiency retrofits (*Energy-3* and *Energy-4*) and water efficiency upgrades (*Water-2*) could expose workers to asbestos, lead paint, and other hazardous materials during rehabilitation of older developments. Measures to encourage the use of electric-powered construction equipment (*Offroad-1*) could increase exposure to batteries containing lead. New construction of transportation, waste management, or other facilities could also encounter hazardous materials during construction or operations.

Future site-specific environmental review of new proposed facilities would ensure a reasonable level of safety for workers and residents through the identification and mitigation of health hazards. Thus, the Proposed Project would not result in a new or substantially more severe significant impact than disclosed in the GPEIR. This impact would remain less than significant.

Impact HS-14: Development under the General Plan, as modified by the Proposed Project, would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

The GPEIR determined that impacts of hazardous material on existing and proposed schools would be less than significant. The General Plan includes several policies to address hazardous materials concerns, appropriate management practices (HS-5.4), designated transport routes (HS-5.3), and requirements to site new development so as to minimize exposure to hazardous conditions (HS-5.1 and HS-5.8). Activities associated with the Proposed Project may occur in or near designated school zones. However, as noted in the GPEIR, compliance with applicable General Plan policies, as well state and federal hazardous waste regulations, would ensure that any potential impacts would be reduced to less than significant levels. Thus, the Proposed Project would not result in a new or substantially more severe significant impact. This impact would remain less than significant.

Impact HS-15: Development under the General Plan, as modified by the Proposed Project, could be located on a site which is included on a list of hazardous materials sites compiled pursuant to government code section 65962.5 and, as a result, could create a significant hazard to the public or the environment.

The GPEIR determined that buildout of the General Plan could occur on sites containing hazardous materials. However, with implementation of appropriate hazardous materials studies, potential impacts could be reduced to less than significant levels.

Similar to buildout of the General Plan, construction associated with the Proposed Project could be located on sites previously containing hazardous materials. However, as disclosed in the GPEIR, the City will implement a variety of policies designed to address hazardous materials concerns including the siting of future development within areas that minimize exposure to hazardous conditions. Thus,

the Proposed Project would not result in a new or substantially more severe significant impact. This impact would remain less than significant.

Impact HS-16: Development under the General Plan, as modified by the Proposed Project, would result in development located within an airport land use plan area or could result in a safety hazard for people residing or working in the project area.

The Proposed Project could lead to additional growth within the jurisdiction of the airport land use plan for Stockton Metropolitan Airport, as the Proposed Project would allow additional growth in the GDSA, a portion of which overlaps with the airport's area of influence.

The GPEIR identified impacts associated with development within the jurisdiction of the airport land use plan as significant and unavoidable.

The airport land use plan includes an area of influence that extends far more than 2 miles from the Airport and includes an area on the southwest of the GDSA. The overlap between the GDSA and the Airport area of influence is roughly west of El Dorado Street, north of Charter Way, east of S. Fresno Ave, and south of Weber Street). The overlap of the GDSA and the airport's area of influence is outside the restrictive areas in which the Airport land use plan recommends avoiding or limiting residential development. For the overlap area, the airport land use plan requires that residential developments file avigation easements, occupied structures be soundproofed to reduce interior noise to 45 DB, reflecting materials not be permitted on structures that would distract pilots, and that the ALUC review the development proposals (SJCOG 1993).

Since the GDSA does not overlap with the most restrictive areas in the airport land use plan, the application of the airport land use plan requirements for the outer portion of the area of influence to new residential development would reduce potential impacts, and impacts associated with the Proposed Project involving conflicts with an airport land use plan and safety would not be greater than those analyzed in the GPEIR.

Impact HS-17: Development under the General Plan, as modified by the Proposed Project, could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The GPEIR determined that even with implementation of policies designed to ensure implementation of emergency plans, buildout of the general plan would result in a significant and unavoidable impact to emergency planning. The Proposed Project would not involve activities or areas of development outside those covered by the GPEIR, and would not allow for additional growth by 2035 above the amount considered in the GPEIR. New facilities that may be constructed by the project are not facilities that would engender new emergencies or risk not already disclosed in the GPEIR. Therefore, the project would not result in a new or substantially more severe significant impact. This impact, as disclosed in the GPEIR, remains significant and unavoidable.

Impact HS-18: Development under the General Plan, as modified by the Proposed Project, could expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Wildlife risk is greatest along the northern and eastern portions of the city limits due to the prevalence of grasslands and other vegetation. The GPEIR found that with proper weed abatement,

buffer zones, and wildfire assessments, impacts to people and property would be less than significant. GHG reduction measures would result in additional construction in the city. However, these measures would not result in any new construction that would increase wildlife hazards beyond what is considered in the GPEIR. Any areas at risk for wildland fire hazards would be required to comply with the General Plan Policies and GPEIR mitigation. The Proposed Project would not result in new construction in areas subject to wildfire risk. Therefore, the project would not result in a new or substantially more severe significant impact. This impact would remain less than significant.

Impacts through Buildout

The Proposed Project would allow additional development of residential uses beyond that analyzed in the GPEIR, thereby increasing the transport, use, and disposal of hazardous materials and the potential for construction occurring on hazardous sites. However, it is reasonable to assume that implementation of mitigations identified in the GPEIR (including Mitigation Measure HS-5.9, Hazardous Materials Studies), implementation of General Plan policies related to hazardous materials, compliance with federal and state regulations, and future site-specific environmental review would continue to ensure a reasonable level of safety for workers and residents through the identification and mitigation of health hazards. Thus, the Proposed Project would not result in a new or substantially more severe significant impact. This impact would remain less than significant.

The Proposed Project would allow for additional development within the area of influence of the Stockton Municipal Airport but such development would need to comply with requirements of the Airport land use plan to avoid any substantial safety impacts. The Proposed Project would also allow for the construction of additional residential buildings and associated infrastructure, which would increase demands on emergency services and consequently impact emergency planning in the GDSA. While additional development would increase the level of Impacts HS-16 and HS-17, this increase not fundamentally alter the nature of these impacts nor be substantially more severe. These impacts were identified as significant and unavoidable in the GPEIR, and would therefore remain so under the Proposed Project.

The Proposed Project would not propose additional residential development outside the GDSA, and would therefore not expose people or structures to wildland fires, as all additional development would occur in urban settings. Therefore, the project would not result in a new or substantially more severe significant impact. This impact would remain less than significant.

Chapter 12
Youth and Education

In the General Plan, Chapter 12.0 is the Youth and Education Element. This element focuses on the development of goals and policies unique to the specific needs of these important city population groups. The assessment of environmental impacts associated with this topic area also falls into two categories: impacts that are covered elsewhere in this SEIR and issues that are not subject to CEQA analysis.

In this SEIR, land use issues are addressed in Chapter 3, *Land Use*, and impacts related to the provision of several governmental services are addressed in Chapter 9, *Public Facilities and Services*. Other topics were not considered to contribute to physical changes in the environment but rather implicated purely social concerns, and as specified in the State CEQA Guidelines (§ 15131), are not considered to be significant effects on the environment. Accordingly, youth and education are not specifically discussed further as a distinct resource area in this document.

Chapter 13
Natural and Cultural Resources

Setting

Natural and cultural resources within the Planning Area are described in Chapter 13, *Natural and Cultural Resources*, in the GPEIR and in Chapter 13, *Natural and Cultural Resources*, in the General Plan Background Report. Relevant goals and policies are summarized in Chapter 13 in the GPEIR. The *Natural and Cultural Resources* chapter of the GPEIR addresses a variety of resource areas, including hydrology (impacts addressed in *Public Facilities and Services* chapter), biological resources, cultural resources, agricultural resources, soils resources, scenic resources, and mineral and energy resources. The detailed setting and policies provided in the GPEIR is fully incorporated by these references.

Impacts and Mitigation

Criteria of Significance

Implementation of the Proposed Project would have a significant effect on natural or cultural resources if it would:

Biological Resources

- Substantially reduce the habitat of a fish or wildlife species.
- Cause a fish or wildlife population to drop below self-sustaining levels.
- Threaten to eliminate a plant or animal community.
- Substantially reduce the number or restrict the range of an endangered, rare, or threatened species.
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, including, but not limited to, marshes, vernal pools, coastal wetlands, etc., through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Cultural Resources

- Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5.
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

Agricultural Resources

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract.
- Involve other changes in the existing environment that, because of their location or nature, could result in conversion of Farmland to non-agricultural uses.

Soil Resources

- Result in substantial soil erosion or the loss of topsoil.

Scenic Resources

- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Mineral and Energy Resources

- Result in the loss or availability of a known mineral resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Impact Discussion

The following impact discussions detail specific impacts associated with the Proposed Project through 2035, followed by more general discussions of impacts once buildout of the General Plan occurs. Because, as discussed in Chapter 2 of this document, it would be speculative to attempt to define impacts at buildout, which—given recent growth and development rates—is estimated to occur in approximately 2055, these impacts are discussed qualitatively.

Impacts are assessed for the following components of the project.

- **CAP**. The CAP contains specific actions to reduce GHG emissions and address climate change. Other than changes that might result from Trans-1, which would increase downtown residential units, the CAP will not result in changes related to natural and cultural resources. The impacts associated with Trans-1 are discussed below.
- **Transit Plan/Program**. The Transit Plan/Program includes measures to increase access to transit. These measures implement existing General Plan policies that encourage the use and expansion of transit facilities. No specific programs not already contemplated in the General Plan are proposed in the Transit Plan/Program. No changes in effects on natural and cultural resources would result from adoption and implementation of the Transit Plan/Program.

Biological Resources

Impacts through 2035

Impact NCR-1: Development under the General Plan, as modified by the Proposed Project, would have a substantial adverse effect, either directly or through habitat modifications, on any fish or wildlife species, including officially designated species identified as an endangered, threatened, candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

According to the GPEIR, buildout of the General Plan will allow for the introduction of development (predominately residential land uses) into largely undisturbed areas. Such construction has the potential to result in a significant impact on sensitive habitats, individual plants, and wildlife species. The GPEIR states that buildout of the General Plan would result in the conversion of up to 500 acres designated as "Vernal Pools" and up to 3,270 acres designated as "Natural Lands" to developed or urban land uses. Sensitive plant species that could be affected include Palmate-bracted bird's-beak (federal and state endangered), Delta button-celery (state endangered), and Greene's tuctoria (federal endangered/state rare). Sensitive animal species that could be affected include but are not limited to riparian brush rabbit, giant garter snake, delta smelt, and valley elderberry longhorn beetle. The Natural and Cultural Resources element contains a number of policies that outline specific measures designed to address development impacts on these resources, and the Recreation and Waterways Element contains Policy 5.2, which focuses on improving riparian corridors. However, even with implementation of various Natural and Cultural Resources and Recreation and Waterways policies, the GPEIR found impacts on sensitive species to be significant and unavoidable.

The Proposed Project would promote increased residential development in the GDSA, which is an urbanized developed part of the City and would not reduce habitat for sensitive species more than the adopted General Plan due to residential growth. There may be the need for construction of

minor new facilities, such as recycling facilities to support increased waste diversion and reuse under CAP Measure Waste-1 or collection facilities for CAP measure HGWP GHG-1, as well as additional pedestrian and bicycle paths under CAP Measures Trans-5, 7, and 8 that could have additional impact on special status species[1].

CAP measures Energy-5 and 6 will promote solar roofs and solar parking. If these improvements are proposed in areas with overhanging trees that substantially hinder solar access, trees may need to be removed on the property where the solar installation is proposed. Given the urban location of these installations, removal of individual trees is not likely to have a significant impact on special status birds that could nest within urban trees that might be affected.

The City would continue to minimize impacts on sensitive species through those measures and policies outlined in the GPEIR. Thus, the Proposed Project would not result in a new or substantially more severe significant impact than that analyzed in the GPEIR.

Impact NCR-2: Development under the General Plan, as modified by the Proposed Project, would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

The GPEIR states that development resulting from buildout of the General Plan will result in both direct and indirect significant adverse impacts on riparian and other sensitive natural communities. Several potential impacts related to development will be mitigated through compliance with the *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* (SJMSCP). The GPEIR contains several policies in both the Natural and Cultural Resources and Recreation and Waterways Elements to protect and preserve sensitive habitats and prevent urban encroachment on the Delta. Even with implementation of various Natural and Cultural Resources and Recreation and Waterways policies, as well as required Mitigation Measure NCR-2.18 (Minimize Lighting Impacts), the GPEIR found this impact to be significant and unavoidable.

The Proposed Project would promote increased residential development in the GDSA, which is an urbanized developed part of the City and would not reduce riparian habitat or other sensitive natural communities more than the adopted General Plan. There may be the need for construction of minor new facilities, such as recycling or collection facilities, as well as additional pedestrian and bicycle paths that could have impact on riparian habitats or other sensitive natural communities if present at the facility locations. Additional solar roofs could affect individual riparian trees if proposed on buildings under riparian corridors, but this is expected to be a limited extent.

The City would continue to protect and preserve sensitive habitats and prevent urban encroachment on the Delta, as outlined in the General Plan and GPEIR. Thus, the Proposed Project would not result in a new or substantially more severe significant impact than that analyzed in the GPEIR.

[1] Measure Trans-4 includes a previously approved goods movement grade separation and thus would not represent "new" impacts over baseline.

Impact NCR-3: Development under the General Plan, as modified by the Proposed Project, would have a substantial adverse effect on "federally protected" wetlands, as defined by Section 404 of the Clean Water Act, including, but not limited to, marsh, vernal pool, etc., through direct removal, filling, hydrological interruption, or other means.

As described above, the GPEIR stated that development resulting from buildout of the General Plan would result in both direct and indirect significant adverse impacts on wetlands and other sensitive natural communities. Several potential impacts related to development will be mitigated through compliance with the SJMSCP. The GPEIR contains several policies in both the Natural and Cultural Resources and Recreation and Waterways Elements to protect and preserve sensitive habitats and prevent urban encroachment on the Delta. Even with implementation of various Natural and Cultural Resources and Recreation and Waterways policies, as well as required Mitigation Measure NCR-2.18 (Minimize Lighting Impacts), the GPEIR found this impact to be significant and unavoidable.

The Proposed Project would promote increased residential development in the GDSA, which is an urbanized developed part of the City and would not increase impacts to waters or wetlands more than the adopted General Plan. There may be the need for construction of minor new facilities, such as recycling facilities and collection facilities as well as additional pedestrian and bicycle paths that could have additional impact on wetlands and waters.

The City would continue to protect and preserve sensitive habitats and prevent urban encroachment on the Delta, as outlined in the General Plan and GPEIR. Application of City policies and GPEIR mitigation would be expected to control impacts of the Proposed Project to waters and wetlands. Thus, the Proposed Project would not result in a new or substantially more severe significant impact than that analyzed in the GPEIR.

Impact NCR-4: Development under the General Plan, as modified by the Proposed Project, would interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

The GPEIR states that development resulting from buildout of the General Plan would remove riparian and other habitat currently providing cover and would increase the distance that animals would need to traverse. Additionally, development would also cause an increase in both vehicular traffic levels and nighttime light levels, which would also serve to deter wildlife movement in the area. Several potential impacts related to development associated with buildout of the General Plan will be mitigated through compliance with the SJMSCP. The GPEIR contains several policies in both the Natural and Cultural Resources and Recreation and Waterways Elements to protect and preserve sensitive habitats and prevent urban encroachment on the Delta. Even with implementation of various Natural and Cultural Resources and Recreation and Waterways policies, as well as required Mitigation Measure NCR-2.18 (Minimize Lighting Impacts), open space would still be converted, which would result in the reduction of habitat. Thus, the GPEIR found this impact to be significant and unavoidable.

The Proposed Project would promote increased residential development in the GDSA, which is not a terrestrial wildlife corridor and residential development would not encroach on the San Joaquin River (which is a fish movement corridor). There may be the need for construction of minor new facilities, such as recycling facilities and collection facilities as well as additional pedestrian and

bicycle paths but these facilities would be located in urbanized or industrial areas and are not likely to affect wildlife movement corridors or nursery sites.

The City would continue to protect and preserve sensitive habitats and prevent urban encroachment, as outlined in the General Plan and GPEIR. Thus, the Proposed Project would not result in a new or substantially more severe significant impact than that analyzed in the GPEIR.

Impact NCR-5: Development under the General Plan, as modified by the Proposed Project, could conflict with any local tree preservation policy or ordinance, relative to promotion of additional solar roofs.

The GPEIR did not identify any significant impacts associated with conflicting local policies or ordinances protecting biological resources. The GPEIR contains several policies in both the Natural and Cultural Resources and Recreation and Waterways Elements to protect and preserve biological resources, including trees (particularly Natural and Cultural Resources Implementation Measure #4 which requires the city to adopt a tree preservation ordinance).

The Proposed Project would promote increased residential development in the GDSA, which is an urbanized developed part of the City with only limited tree cover. There may be the need for construction of minor new facilities, such as recycling facilities and collection facilities as well as additional pedestrian and bicycle paths that could have additional impact on existing trees. Under the Proposed Project, all of these facilities would need to comply with all policies and ordinances relating to tree preservation or other biological resources and would not result in any increase in the severity of the impact disclosed in the GPEIR.

CAP Measures Energy-5 and 6 promote solar roofs and solar parking. If these improvements are proposed in areas with overhanging trees that substantially hinder solar access, trees may need to be removed on the property where the solar installation is proposed. The California Solar Rights Act limits the City's authority to deny permits for solar roof installations except in cases of public health and safety, which is usually not the case with potential tree removal. While in many cases solar roofs on existing buildings will not require tree removal, it is possible that tree removal for solar access could conflict the City's tree preservation policies given that the city cannot deny a permit solely because of tree impacts given the constraints of the California Solar Rights Act. Thus, the solar promotion measures in the CAP could result in tree removal inconsistent with local tree preservation policies. No mitigation is available for this potential impact due to the constraints in state law.

Thus, relative to solar roofs only, this impact is considered potentially significant and unavoidable if tree removal occurs in conflict with the City's tree preservation policies (including the tree preservation ordinance required to be adopted by the General Plan). This impact would thus be greater under the Proposed Project than the level analyzed in the GPEIR.

Impact NCR-6: Development under the General Plan, as modified by the Proposed Project, would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

As stated in the GPEIR, the SJMSCP was approved by the California Department of Fish and Game and the U.S. Fish and Wildlife Service in 2001 to protect and manage local sensitive habitats and the special-status species associated with those habitats. A portion of the GPEIR study area and the

habitats that comprise the study area are included within the SJMSCP. The GPEIR did not identify any significant impacts associated with conflicting habitat conservation plans. Although the Proposed Project does include construction of solar panel systems, alternative transportation infrastructure, and the retrofitting of existing buildings for energy efficiency, these improvements are anticipated to occur in areas surrounded by already-existing development and would therefore not significantly affect any habitat within the City. Any new Proposed Project developments would need to comply with the SJMSCP as applicable. The Proposed Project would therefore not result in changes that conflict with the SJMSCP and would not result in greater impacts than those disclosed in the GPEIR. The impact would remain less than significant.

Impacts through Buildout

The Proposed Project would allow for the development of as many as 300 to 1,100 residential units in the GDSA above the amount disclosed in the GPEIR. The entirety of this additional development would occur in the GDSA, an urban area that does not contain a significant amount of biological resources. It would be speculative to determine the precise level of impact on biological resources associated with buildout of the Proposed Project because species and habitat locations could change significantly by the time buildout would occur (approximately 2050 to 2055). Any new Proposed Project developments would need to comply with the SJMSCP as applicable. Thus the level of impact identified in the GPEIR would not change and would remain significant and unavoidable.

Cultural Resources

Impacts through 2035

Impact NCR-7: Development under the General Plan, as modified by the Proposed Project, would cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5.

The GPEIR states that identified historic structures and sites that are eligible for the California Register of Historic Resources (CRHR) or the National Register of Historic Places (NRHP), particularly in the City's downtown area, may be vulnerable to development activities accompanying infill or redevelopment. According to the GPEIR, the General Plan contains policies in the Natural and Cultural Resources, Community Design, and Districts and Villages Elements to enhance and preserve the City's historic districts, neighborhoods, and buildings. The GPEIR also states that implementation of the Proposed Project may ultimately result in a "substantial adverse change" (physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings) through various development activities for which no possible mitigation may be available to maintain the historic integrity of the affected resource or its surroundings. Therefore, even with the implementation of General Plan policies, the GPEIR found this impact to be significant and unavoidable.

The Proposed Project would specifically increase residential development in the downtown area where many historic structures are located. Where increased residential development is proposed in areas without existing structures or with structures that are not historic resources[2], new residential development would not affect historic structures or districts. The existing General Plan

[2] Eligible for the state or federal registers of historic resources or otherwise determined to be historic resources under CEQA.

includes policies designed to preserve and maintain City historic resources including policies CD-2.1 through CD 2.4, DV-3.5, DV -3.10, and NCR-3.1 through NCR-3.4 as well as Implementation Measure #1, 4 and 5.

Implementation of General Plan policy provisions would reduce impacts on historic resources from additional residential development in the GDSA, but would not necessarily avoid significant impacts. In recent history, there has been little to no net residential growth in the downtown area due to a multiplicity of challenges to successful residential growth in this location. Given the challenging nature of promoting residential development downtown, it is considered counterproductive to the fundamental purpose of CAP Measure Trans-1 to require a mitigation that would prohibit all new residential development that might have a significant effect on existing historic buildings or districts. However, in implementing Trans-1, the City intends to complete a Specific Plan for the downtown area that would evaluate in detail how to promote greater amounts of residential growth in the GDSA. Thus, mitigation measure CUL-MM-1 would have the following requirements for that subsequent evaluation:

Mitigation Measure CUL-MM-1: Downtown Specific Plan Alternatives Analysis

During preparation of the Downtown Specific Plan, the City shall consider alternatives to promote residential development in compliance with CAP Measure Trans-1 (and the other requirements of the Settlement Agreement) that will minimize impacts on existing historic buildings and historic districts as follows:

- The City shall develop and evaluate at least one alternative that avoids impacts to all existing historic buildings and historic districts. If these alternatives are determined to not meet the Specific Plan goals for residential growth in the GDSA or otherwise to not be feasible, it need not be considered further.
- The City shall seek to minimize impacts to historic buildings and districts when developing the preferred Specific Plan.
- If the preferred Specific Plan will have a significant effect on one or more historic buildings or a historic district, the City shall develop and evaluate at least one feasible alternative that will substantially reduce the level of impact compared to the preferred plan (unless no feasible alternative exists). This alternative (or alternatives) shall be evaluated in the CEQA document for the Downtown Specific Plan.
- If the preferred Specific Plan ultimately considered for adoption by the City would have more impact than a feasible alternative that would also meet the Specific Plan goals for residential growth in the GDSA, then the City must make findings as to why the adoption of the feasible alternative would hinder or delay achievement of City goals for residential growth in the GDSA or would otherwise have deleterious impact on the City's goals, priorities, finances, or economic welfare.

While this mitigation measure may result a reduction of potential impact to historic buildings or districts, it will not necessarily avoid or reduce impacts, and impacts are considered significant and unavoidable accordingly. With the increased residential growth in the GDSA, impacts associated with historic resources would likely be greater than those disclosed in the GPEIR under the Proposed Project, and the impact would remain significant and unavoidable.

The CAP would also result in construction of additional waste collection and transfer facilities as well as new bicycle and pedestrian facilities which could also affect historic resources. Application of project level review and City policies on cultural resources would avoid substantial increases in impacts related to these facilities beyond those disclosed in the GPEIR.

It is possible that solar roofs might be proposed on historic buildings in the City due to the project. In most cases, solar roofs can be designed to not significantly alter a historic building. In addition, solar roofs are reversible because they can be removed thus rarely require permanent alteration of roof features. However, depending on the individual proposal, the addition of a solar roof in certain circumstances could substantially change a character-defining feature of an individual historic building that may be a significant impact. The California Solar Rights Act per Section 65850.5(c) does not allow a local government to deny a permit for a solar energy system unless it finds that the project would have specific, adverse impacts upon public health or safety and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. And per SB 226 (2012), solar roofs do not have to comply with CEQA (unless one of a narrow list of exceptions apply[3], none of which are for visual or historic resources impacts). Thus, the City's options for mitigation of this potential impact are limited. Given these constraints, the following mitigation is recommended:

Mitigation Measure CUL-MM-2: Historic Building Solar Roof Alternatives Review

If solar roofs are proposed for historic buildings, the City shall require the following:

- A qualified architectural historian shall determine if the building is eligible for the California Register of Historic Resources or the National Register of Historic Places. If the building is eligible for one or both of the registers, the qualified architectural historian shall identify if the proposed solar roof will substantially affect the eligibility of the building as a historic resource. If a substantial effect is identified, the qualified historian shall identify feasible alterations to the proposed solar roof installation that would avoid or minimize the substantial effects. If no feasible alterations can be identified, the qualified architectural historian shall document measures considered and why they are not feasible.
- The City shall review the architectural historian's report for completeness only.
- The project proponent shall identify which of the feasible design alternatives that avoid the substantial effect they prefer if one or more are identified by the qualified architectural historian. If the feasible alternatives will only reduce, but not avoid a substantial effect, the project proponent shall identify which of the minimization alternatives it prefers.
- The City shall only issue a permit for the preferred feasible alternative identified by the project proponent per the above requirements.
- If no feasible alternatives are available that reduce or avoid the substantial effect, then the City shall issue the permit for the proposed solar roof.

[3] PRC 21080.35 includes the following exceptions to the use of the statutory exemption: (1) if associated equipment occupies more than 500 square feet, (2) an individual permit is needed under Section 404 or 401 of the federal clean water act or the state Porter-Cologne Water Quality Control Act; (3) and individual take permit for species protected by the state or federal endangered species acts; (4) a streambed alteration permit is needed under Section 1600 of the Fish and Game Code; (5)trees will need to be removed that are related to local, state, or federal requirement; or (6) trees that are more than 25 years have to be removed.

Impact NCR-8: Development under the General Plan, as modified by the Proposed Project, would cause a substantial adverse change in the significance of a unique archaeological resource, as defined in Section 15064.5; directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature; or disturb human remains, including those interred outside of formal cemeteries.

According to the GPEIR, prehistoric sites are likely located lower in the northern and western portions of the GPEIR Study Area, although it is possible to encounter archaeological deposits in almost any location throughout the Study Area. Additionally, a review of the soils and geologic information relevant to the GPEIR Study Area indicated that fossils were likely to be encountered below the upper 5 to 10 feet of sediment. The GPEIR stated that archaeological resources and/or human remains could be damaged or inadvertently unearthed during ground-disturbing activities such as grading, trenching, or use of staging areas. Various policies and implementation measures in the Natural and Cultural Resources Element establish protocols to address archaeological resources. However, the GPEIR stated that because grading activities in an area identified for development could reveal a unique archaeological resource, and that it could be impossible or infeasible to preserve or avoid such a resource, impacts to such resources would be significant. Except in very rare instances, archaeological sites are significant for their data potential. Therefore, implementation of mitigation measures to conduct data recovery and/or interpretation (NCR-3.6 in the GPEIR) would reduce these impacts to a less than significant level. The same is true of unique geological resources or paleontological resources. Implementation of Mitigation Measure NCR-3.7 would reduce any impacts to human remains to a less than significant level.

The Proposed Project would result in development of new residential units in the GDSA in addition to the construction of potential small facilities for recycling and collection, as well as new bike and pedestrian paths. Intensified development would result in an increased chance of encountering buried archaeological or paleontological resources, or human remains. The long occupation of the downtown Stockton area in an ideal settlement location along a major river make this area sensitive for both historic and prehistoric resources. However, under the Proposed Project implementation of the General Plan NCR policy provisions would still occur, reducing the severity of impacts these buried resources. Therefore, the concentration of development in the downtown area would result in an increased potential impact, though the impact would remain less than significant because of the implementation of General Plan NCR policy provisions.

Impacts through Buildout

The additional commercial and residential development associated with the Proposed Project would increase the potential for physical demolition, destruction, relocation, or alteration of archaeological or paleontological resources in the GDSA through various development activities for which no possible mitigation may be available to maintain the historic integrity of the affected resource or its surroundings. In addition, there may be impacts to archaeological or paleontological resource due to the construction of facilities for recycling and collection services for waste reduction and transfer or for bicycle and pedestrian paths. Therefore, this impact would be more severe than that disclosed in the GPEIR and would be significant and unavoidable.

The GPEIR stated that it is possible to encounter archaeological deposits in almost any location throughout the City, including the GDSA. Because additional development would occur in this area, the risk of damaging archaeological resources is greater under the Proposed Project than the risk disclosed in the GPEIR and would be significant and unavoidable.

Agricultural Resources

Although the Proposed Project would allow additional development in the GDSA, beyond that analyzed in the GPEIR, operational farming activities, land designated as Important Farmland, or land under Williamson Act contract is currently not found in the GDSA. The Proposed Project would not allow additional development outside the GDSA where farming activities do occur beyond the amount disclosed in the GPEIR. In addition, as stated above, Proposed Project elements that include new construction (e.g., alternative transportation infrastructure, solar panel systems, retrofits of existing buildings for energy efficiency) are not anticipated to conflict with existing zoning or Williamson Act contracts because they would not alter the use of any parcel where such development would occur. Therefore, impacts on agricultural resources associated with the Proposed Project would not be more severe than the impacts analyzed in the GPEIR.

Soil Resources

Impacts through 2035

Impact NCR-12: Development under the General Plan, as modified by the Proposed Project, would not result in substantial soil erosion or the loss of topsoil.

According to the GPEIR, the Study Area is relatively flat, with soil conditions that exhibit minimal potential for erosion impacts. However, development activities resulting from buildout of the General Plan would accelerate the GPEIR Study Area's erosion rate through both an increase in short-term construction-related activities and an overall increase in the amount of impervious surfaces. The GPEIR states that development associated with buildout would be subject to local and state codes as well as requirements for erosion control and grading. In addition, project sites encompassing an area of 1 acre or more would require compliance with a National Pollutant Discharge Elimination System (NPDES) permit and consequently the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). Erosion-related effects can be further minimized through implementation of the policies provided as part of the Natural and Cultural Resources Element and through implementation of the erosion control measures required as part of NPDES and SWPPP permitting requirements. Therefore, the GPEIR found this impact to be less than significant.

The Proposed Project is not expected to result in a higher level of growth by 2035 than that analyzed in the GPEIR and would therefore not cause additional development that could increase soil erosion or loss of topsoil. Short-term construction activities would occur (e.g., construction of solar panel systems); however, compliance with NPDES and SWPPP permit requirements, as well as implementation of relevant General Plan policies, would ensure that the severity of this impact is not increased. Because the Proposed Project would not increase the severity of this impact or result in a new impact that was not addressed in the GPEIR, this impact would remain less than significant.

Impacts through Buildout

The Proposed Project would allow additional development in the GDSA, compared with the amount disclosed in the GPEIR, and additional waste and transportation facilities, thereby increasing the amount of short-term construction activities and impervious surfaces and consequent erosion levels. All development under the Proposed Project would comply with NPDES and SWPPP permit requirements and relevant General Plan policies, which would ensure that these additional impacts

would be reduced to the extent feasible. Impacts associated with erosion under the Proposed Project would therefore be more severe than the impacts disclosed in the GPEIR but would remain less than significant.

Scenic Resources

Impacts through 2035

Impact NCR-13: Development under the General Plan, as modified by the Proposed Project, would substantially degrade the existing visual character or quality of the site and its surroundings.

The GPEIR states that new development along the periphery of the existing City boundary would substantially degrade the existing visual character or quality of the site and its surroundings through the introduction of developed uses within areas currently used for open space/agricultural activities. Various policies in the Community Design, Districts and Villages, and Natural and Cultural Resources Elements are aimed at improving visual quality and reducing visual impacts. However, even with implementation of these policies and implementation measures, the GPEIR found this impact to be significant and unavoidable.

Inside the GDSA, the project could change the visual character from a mix of low and high-density residential, commercial and industrial land uses to one more dominated by higher density residential and mixed residential/commercial land uses. The change from industrial uses to residential and mixed use development could represent an improvement in visual character and quality. However, increased residential growth in the downtown area could affect historic buildings, which could adversely change the downtown visual character. Finally, an increase in high-density residential or mixed use development could increase the intensity of land uses adjacent to lower density residential areas, which could create some inconsistent visual character. As discussed above, **Mitigation Measure CUL-MM-1** is proposed to reduce the potential impacts of additional residential growth on historic buildings and districts, which could also reduce the level of visual impact associated with residential growth downtown. However, even with this mitigation, in the downtown area, the Proposed Project may increase the severity of this impact relative to that disclosed in the GPEIR.

The CAP would also result in additional waste collection and transfer facilities as well as new bicycle and pedestrian facilities which could also affect visual aesthetics. New bicycle and pedestrian facilities usually do not create substantial visual effects. New waste collection and transfer facilities are most likely to be proposed in areas of existing industrial or commercial use and thus also not likely create substantial new visual impacts beyond those disclosed in the GPEIR.

The Proposed Project would result in expansion of solar panels on residential and nonresidential rooftops and parking areas. This would change the character of rooftops that could affect the visual character of individual buildings and parking areas. As parking areas are not considered visually significant resources, the addition of solar panels is not considered a significant visual impact. For most commercial and industrial buildings, the addition of rooftop solar panels is not likely to result in a substantial change in visual character, unless the building has a visually vivid and unique roof character. In many residential settings, solar panels will lie flat against the roof, minimizing their visual impact. However, in some settings the solar panels could be angled up from the roof surface in order to maximize electricity output and improve the positional angle; in those settings the solar

panels will be more visually apparent. In addition, if solar panels were proposed on a historic building (residential, commercial or otherwise), it is possible that there could be a significant visual change in the character of that building. Overall, solar roofs are not likely to substantially change the dominant visual character of different City neighborhoods and districts, but may change the visual character of certain individual buildings.

Per SB 226 (2012), solar roofs are statutorily exempt from CEQA with certain exceptions, which do not include visual impacts or impacts to historic buildings. Thus, project-level CEQA review cannot be counted on to address potential visual or cultural resource impacts. Furthermore, the California Solar Rights Act (1979) requires that local governments use an administrative, nondiscretionary review process for on-site solar energy systems and cannot impose restrictions related to visual or aesthetic concerns are permitted. As a result, no mitigation is available for visual impacts that might occur with solar roof installations. **Mitigation Measure CUL-MM-2** (see description above) is proposed to help reduce this impact on historic buildings from a cultural resources perspective.

Overall, the Proposed Project would increase the severity of the visual impact disclosed in the GPEIR and the impact would remain significant and unavoidable.

Impact NCR-14: Development under the General Plan, as modified by the Proposed Project, would have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

The GPEIR states that buildout of the General Plan would result in several permanent changes to existing views associated with new "village" or industrial development in the northern, eastern, or southern portions of the Study Area. This new development was proposed for land with a variety of rural residential, agricultural, and open space uses. As such, new development would alter the existing open space views of surrounding areas and contrast with the surrounding open space/agricultural environment at the edge of these new development areas. The GPEIR states that a major focus of General Plan implementation is improving the visual quality of the City and its surroundings. In addition, various policies in the Community Design, Districts and Villages, and Natural and Cultural Resources Elements are aimed at improving visual quality and reducing visual impacts. However, even with implementation of these policies and the implementation measure, the GPEIR still found this impact to be significant and unavoidable.

The Proposed Project would not change the development potential in the northern, eastern, or southern parts of the City/Study Area and would not change impacts within a state scenic highway. The project would result in changes in development in the downtown area, but the likely change from industrial areas to residential and mixed use areas is likely, if anything, to improve the visual aesthetics within the downtown area. However, it is also possible that new residential or mixed-use projects in the downtown area could result in substantial alteration of historic buildings, some of which are considered scenic resources in the downtown area. **Mitigation Measure CUL-MM-1** is proposed to reduce the potential impacts of additional residential growth on historic buildings and districts, which could also reduce the level of visual impact associated with residential growth downtown. Even with this mitigation, the Proposed Project could change the severity of this impact in the downtown area as it relates to potential effects on historic buildings.

The CAP would also result in additional waste collection and transfer facilities as well as new bicycle and pedestrian facilities which could also affect scenic resources. However, given the type of these facilities, project-level review and application of City policies and design review would limit

potential impacts to scenic resources such that impacts would not be greater than that disclosed in the GPEIR.

As noted above, it is possible that solar roofs might be proposed on historic buildings in the City due to the project. Depending on the individual proposal, the addition of a solar roof could change the visual character of an individual historic building that may be a significant impact as well. As described above, the California Solar Rights Act per Section 65850.5(c) does not allow a local government to deny a permit for a solar energy system unless it finds that the project would have specific, adverse impacts upon public health or safety and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. And per SB 226 (2012), solar roofs do not have to comply with CEQA (except unless one of a narrow list of exceptions apply). Thus, the City's options for mitigation of this potential impact are limited. **Mitigation Measure CUL-MM-2** (see description above) is proposed to help reduce this impact.

This mitigation would reduce but not necessarily avoid significant impacts to historic buildings of solar roofs. This would also be an increase in the severity of this impact relative to that disclosed in the GPEIR. This impact overall would remain significant and unavoidable.

Impact NCR-15: Development under the General Plan, as modified by the Proposed Project, would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The GPEIR states that with buildout of the General Plan, additional lighting will be required to provide nighttime street and building illumination, security lighting, nighttime traffic lights, and light for new recreational areas. New "village" development on the periphery of the City's existing boundary will result in the addition of several new sources of illumination within the northeastern, eastern, and southeastern portions of the GPEIR Study Area. The Community Design Element, as well as the Districts and Villages and Natural and Cultural Resources Elements, contain various policies that address potential glare effects through a variety of design policies that guide use of building materials, lighting in pedestrian areas, and signs. However, even with these policies, overall buildout of the General Plan would increase the amount of light and glare associated with the development of urban uses. Therefore, the GPEIR found this impact to be significant and unavoidable.

The Proposed Project would introduce new sources of light and glare to the GDSA associated with new residential development as well as lighting infrastructure that would most likely be necessary to accommodate the additional residents this additional development would bring to the area. The San Joaquin Airport Land Use Plan contains restrictions related to reflective surfaces within the Airport area of influence which includes a portion of the GDSA in which CAP Measure Trans-1 would support increased residential development. The application of Airport land use plan restrictions on reflective services would address this potential impact for new residential development in the GDSA. Nighttime street and building illumination, security lighting, nighttime traffic lights, and light for new recreational areas could also be greater under the Proposed Project than the lighting disclosed in the GPEIR. The additional lighting that would be constructed as a result of the project in the GDSA would be in a highly developed urban area already well lighted with streetlights, security lights, advertising, and other forms of lighting. In addition, the Proposed Project would include upgrades to existing municipal and private lighting, although this project element is not expected to alter significantly the amount of light the current light fixtures provide. For this reason, the increased

residential development in the GDSA and lighting improvements would not increase the severity of this lighting impact relative to that disclosed in the GPEIR.

The CAP would also result in additional waste collection and transfer facilities as well as new bicycle and pedestrian facilities which could also affect light and glare. However, given the type of these facilities, project-level review and application of City policies and design review would limit potential impacts to light and glare such that impacts would not be greater than that disclosed in the GPEIR.

CAP Measures Energy-5 and Energy -6 would support increased solar roofs throughout the City. Some of those installations could be in the Airport area of influence and could produce glare that might affect Airport operations. In most cases, the solar installations will be above the street level line of sight and thus will not create glare that could be a safety hazard to ground-level vehicle transit or would substantially affect daytime views from many parts of the City. However the solar panels would likely be more readily observable from elevated viewpoints which could be locally affected by increased glare. An anti-reflective coating or glass on a solar panel can reduce the sunlight that is reflected and increase the amount of sunlight that is absorbed. Most solar panels are now designed with at least one anti-reflective layer and some panels have multiple layers.

While the California Solar Rights Act prohibits local jurisdictions from restricting on-site solar installations for visual or aesthetic purposes, the Act does not prohibit local jurisdictions from restrictions or conditions that promote public health or safety. As such, the City can impose requirements to avoid light and glare that would affect public safety, but cannot impose requirements for aesthetic impacts unrelated to public safety. Accordingly, the following mitigation is recommended:

Mitigation Measure AES-MM-1: Solar Roof Design Requirements to Reduce Glare Where Necessary for Public Safety

The city shall adopt the following mandatory requirements for new solar roof design:

- New solar installations within the Airport area of influence, that would produce glare on public roadways, or would otherwise create a public hazard due to glare shall be required to implement the following:
  - Utilize anti-reflective coatings or glass; and
  - be oriented horizontally or vertically so as to avoid casting glare in the direction of the safety hazard defined as including:
    - the airport operational areas;
    - flight path within the Airport area of influence;
    - public roadways;
    - other areas of public safety concern such as lines of sight along railroads and entrances to police and fire stations, hospitals, and schools.
  - for street level glare concerns, screening by structures or vegetation may be used in combination or instead of solar panel orientation provided substantial roadway glare is avoided.

- Permits for solar installations determined to result in substantial glare (after consideration of feasible coatings/glass or orientation or other measures) that may affect the airport or flight path approach safety, public roadways, or otherwise create public safety concerns shall be denied. The public safety reasons for the denial shall be documented in the decision document.

With the mitigation above, new solar roofs may result in additional glare that may be adverse for aesthetic reasons, but new safety hazards would be minimized.

The impact was found to be significant and unavoidable in the GPEIR, and this would not change.

Impacts through Buildout

The Proposed Project would introduce new sources of light and glare to the GDSA associated with new residential development as well as lighting infrastructure that would most likely be necessary to accommodate the additional residents this additional development would bring to the area. Nighttime street and building illumination, security lighting, nighttime traffic lights, and light for new recreation areas could all be greater under the Proposed Project than the levels disclosed in the GPEIR. Determining the precise increase in severity of this impact would be speculative given that buildout of the Proposed Project is not anticipated to occur until approximately 2050 to 2055.

As described above, with implementation of Mitigation Measure AES-MM-1, additional solar roofs are not expected to result in public safety hazards, but may result in increased aesthetic impact compared to that disclosed in the GPEIR.

Although the impact would be more severe than disclosed in the GPEIR, this increase would be incremental and would not alter the designation in the GPEIR of this impact as significant and unavoidable.

Mineral and Energy Resources

Impact NCR-16: Development under the General Plan, as modified by the Proposed Project, would result in the loss of availability of a known mineral resource that would be of a value to the region and the residents of the state or result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Impacts through 2035 and Buildout

The State of California designates a majority of the Study Area as MRZ-1, with no significant mineral resources mined within its boundaries. However, the GPEIR states that gas extraction activities continue to occur at the French Camp Gas Field. The GPEIR states that, under buildout of the General Plan, the location of the French Camp Gas Field was designated as Institutional, which allows for a range of public and quasi-public land uses. Areas surrounding the French Camp Gas Field were proposed for a variety of residential and commercial uses. Changes in land use associated with implementation of the General Plan were therefore found to increase the likelihood of land use conflicts between the existing natural gas facility and future residential land uses. The General Plan includes several policies in the Natural and Cultural Resources Element and the Health and Safety Element that strive to minimize land use conflicts between incompatible land uses through the establishment of buffer areas or zones. Additional policies call for the continued protection of the

Delta's Primary Zone, which traditionally included several areas known for natural gas extraction activities. With implementation of these policies, the GPEIR found this impact to be less than significant.

The Proposed Project would not allow for additional development in areas surrounding the French Camp Gas Field, which is located on the southern edge of Stockton. The GDSA is designated as MRZ-1, with no significant mineral resources mined within its boundaries. Therefore, the Proposed Project would not increase the severity of this impact, and it would remain less than significant, as designated in the GPEIR.

Chapter 14
Greenhouse Gas Emissions and Climate Change

This section discusses the Proposed Project and its ability to address GHG emissions under the jurisdiction of the City.

When considering GHG emissions and climate change, two fundamental questions must be evaluated.

- How do development and other activities associated with the Proposed Project affect climate change and global GHG emissions?
- How will the City be affected by climate change?

The first question is addressed by conducting an emissions inventory for development within the city and identifying GHG mitigation opportunities. Many of the policies in the existing General Plan will help reduce GHG emissions. The proposed CAP also identifies goals and strategies to ensure future GHG emissions generated within Stockton are reduced in a manner that is consistent with AB 32. The GPEIR evaluated GHG emissions generated by buildout of the General Plan in Impact HS-12 (Health and Safety). Despite the adoption of a number of policies in the General Plan that would help to reduce GHG emissions, the GPEIR concluded that buildout under the General Plan would have a significant and unavoidable impact. As one of the primary purposes of the project is to reduce communitywide GHG emissions, an expanded discussion of GHG emissions and climate change impacts is presented in this section. As discussed below, the conclusion of this SEIR is that, up to 2020, GHG emissions associated with growth in Stockton will be less than significant with implementation of the CAP and the Transit Plan/Program. In addition, the CAP and Transit Plan/Program will help to reduce GHG emissions associated with buildout of the General Plan, but not necessarily to a less than significant level, due to the lack of current long-term state or federal planning for the period beyond 2020 up to 2050.

The second question is addressed by characterizing the foreseeable changes in climate within the state and by analyzing how those changes may affect future development in Stockton. Scientific measurements have shown that changes in the global climate system are already occurring as result of increased GHG emissions. While some uncertainty exists with regard to climate change projections and the precise extent of subsequent impacts on human society and the environment, a certain amount of environmental change in Stockton inevitable. Developing strategies to adapt to foreseeable changes in climate will make new and existing development more resilient to future conditions. It should be noted that due to a number of recent appellate court rulings (most prominently *Ballona Wetlands Land Trust et al. v. City of Los Angeles* (2011) 201 Cal.App.4th 455 (Ballona Wetlands), there is presently a question as to whether CEQA requires analysis of impacts of the environment on a project or not. This SEIR errs on the side of caution in providing such an analysis. However, absent contrary appellate court rulings or California Supreme Court rulings, at this time such an analysis may not be strictly legally required.

This section begins with a description of global warming and GHG emissions. Predicted changes in state and local climatic conditions are also identified. Following the environmental setting, key regulatory documents associated with climate change and GHG emissions are summarized. Finally,

the chapter analyzes impacts of the Proposed Project on GHG emissions, as well as effects of climate change on environmental conditions in Stockton.

Setting

Environmental Setting

Global Warming and Principal Greenhouse Gases

Climate change is a term used to describe large-scale shifts in existing (i.e., historically observed) patterns in earth's climate system. Although the climate has historically responded to natural drivers, recent climate change has been unequivocally linked to increasing concentrations of GHGs in Earth's lower atmosphere and the rapid timescale in which these gases have accumulated (Intergovernmental Panel on Climate Change 2007a). The rapid loading of GHGs into the atmosphere is due to the burning of fossil fuels since the industrial revolution.

Higher concentrations of heat-trapping GHGs in the atmosphere result in increasing global surface temperatures, a phenomenon commonly referred to as *global warming*. In absence of anthropogenic (i.e., human-made) emissions, GHGs play a critical role in maintaining the Earth's temperature for the successful habitation by humans and other forms of life. However, increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the industrial revolution.

Rising atmospheric concentrations of GHGs in excess of natural levels have increased global surface temperatures, which in turn result in changes to the Earth's climate system. Warming of the Earth's lower atmosphere induces large-scale changes in planetary systems, including ocean circulation patterns, precipitation patterns, global ice cover, and biological distributions (Intergovernmental Panel on Climate Change 2007a, 2007b). Some of the above changes will result in specific impacts at the state and local levels.

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to understanding climate change, its potential impacts, and options for adaptation and mitigation. The IPCC identifies the following compounds as key GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), perfluorinated carbons (PFCs), sulfur hexafluoride (SF_6), and hydrofluorocarbons (HFCs) (Intergovernmental Panel on Climate Change 2007a). Each is discussed in detail below.

To simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in terms of a single gas. The most commonly accepted method to compare GHG emissions is the global warming potential (GWP) methodology defined in the IPCC reference documents (Intergovernmental Panel on Climate Change 1996, 2001:241–280). The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO_2 equivalent (CO_2e), which compares the gas in question to that of the same mass of CO_2 (CO_2 has a global warming potential of 1 by definition).

Table 14-1 lists the global warming potential of CO_2, CH_4, N_2O, PFCs, SF_6, and HFCs; their lifetimes; and abundances in the atmosphere.

Table 14-1. Lifetimes and Global Warming Potentials of Several Greenhouse Gases

Greenhouse Gases	Global Warming Potential (100 years)	Lifetime (years)	2005 Atmospheric Abundance
CO_2 (ppm)	1	50–200	379
CH_4 (ppb)	21	9–15	1,774
N_2O (ppb)	310	120	319
CF_4 (ppt)[a]	6,500	50,000	74
C_2F_6 (ppt)[a]	9,200	10,000	2.9
SF_6 (ppt)	23,900	3,200	5.6
HFC-23 (ppt)	11,700	264	18
HFC-134a (ppt)	1,300	14.6	35
HFC-152a (ppt)	140	1.5	3.9

Sources: Intergovernmental Panel on Climate Change 1996, 2001.
ppm = parts per million.
ppb = parts per billion.
ppt = parts per trillion.
[a] CF_4 and C_2F_6 are perfluorinated carbons.

Carbon Dioxide

CO_2 is the most important anthropogenic GHG and accounts for more than 75% of all GHG emissions caused by humans. Its atmospheric lifetime of 50–200 years ensures that atmospheric concentrations of CO_2 will remain elevated for decades even after mitigation efforts to reduce GHG concentrations are promulgated (Intergovernmental Panel on Climate Change 2007a). The primary sources of anthropogenic CO_2 in the atmosphere include the burning of fossil fuels (including motor vehicles), gas flaring, cement production, and land use changes (e.g., deforestation, oxidation of elemental carbon). CO_2 can also be removed from the atmosphere by photosynthetic organisms.

Atmospheric CO_2 has increased from a pre-industrial concentration of 280 parts per billion (ppb) to 379 parts per million (ppm) in 2005 (Intergovernmental Panel on Climate Change 2007b).

Methane

CH_4, the main component of natural gas, is the second most abundant GHG and has a GWP of 21 (Intergovernmental Panel on Climate Change 1996). Sources of anthropogenic emissions of CH_4 include growing rice, raising cattle, using natural gas, landfill outgassing, and mining coal (National Oceanic and Atmospheric Administration 2005). Certain land uses also function as a both a source and sink for CH_4. For example, the primary terrestrial source of CH_4 are wetlands, whereas undisturbed, aerobic soils act as a CH_4 sink (i.e., they remove CH_4 from the atmosphere).

Atmospheric CH_4 has increased from a pre-industrial concentration of 715 ppb to 1,774 ppb in 2005 (Intergovernmental Panel on Climate Change 2007b).

Nitrous Oxide

N_2O is a powerful GHG, with a GWP of 310 (Intergovernmental Panel on Climate Change 1996). Anthropogenic sources of N_2O include agricultural processes (e.g., fertilizer application), nylon production, fuel-fired power plants, nitric acid production, and vehicle emissions. N_2O also is used in

rocket engines and racecars and as an aerosol spray propellant. Natural processes, such as nitrification and denitrification, can also produce N_2O, which can be released to the atmosphere by diffusion. In the United States more than 70% of N_2O emissions are related to agricultural soil management practices, particularly fertilizer application.

N_2O concentrations in the atmosphere have increased 18% from pre-industrial levels of 270 ppb to 319 ppb in 2005 (Intergovernmental Panel on Climate Change 2007b).

Perfluorinated Carbons

The most abundant PFCs are CF_4 (PFC-14) and C_2F_6 (PFC-116). These human-made chemicals are emitted largely from aluminum production and semiconductor manufacturing processes. PFCs have very long lifetimes, as they are extremely stable compounds that are destroyed only by very high-energy ultraviolet rays. The IPCC estimates that global concentrations of CF_4 have risen to over 74 parts per trillion (ppt) (Intergovernmental Panel on Climate Change 2007b).

Sulfur Hexafluoride

SF_6, a human-made chemical, is used as an electrical insulating fluid for power distribution equipment, in the magnesium industry, in semiconductor manufacturing, and also as a tracer chemical for the study of oceanic and atmospheric processes (U.S. Environmental Protection Agency 2006). In 2005, atmospheric concentrations of SF_6 were 5.6 ppt and steadily increasing in the atmosphere. SF_6 is the most powerful of all GHGs listed in IPCC studies, with a GWP of 23,900 (Intergovernmental Panel on Climate Change 1996).

Hydrofluorocarbons

HFCs are human-made chemicals used in commercial, industrial, and consumer products and have high GWPs (U.S. Environmental Protection Agency 2006). HFCs are generally used as substitutes for ozone-depleting substances (ODS) in automobile air conditioners and refrigerants. As seen in Table 14-1, the most abundant HFCs—in descending order—are HFC-134a (35 ppt), HFC-23 (17.5 ppt), and HFC-152a (3.9 ppt) (Intergovernmental Panel on Climate Change 1996, 2001, 2007a). Concentrations of HFCs have risen from 0 to over 35 ppt since pre-industrial times (Intergovernmental Panel on Climate Change 2007b).

Greenhouse Gas Emissions Inventories

A GHG inventory is a quantification of all GHG emissions and sinks within a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (i.e., for global and national entities) or on a small scale (i.e., for a particular building or person). Although many processes are difficult to evaluate, several agencies have developed tools to quantify emissions from certain sources.

The majority (83%) of U.S. GHG emissions are the result of the burning of fossil fuels. Fossil fuels are burned to create electricity, which powers homes, commercial buildings, and vehicles. Energy used to power buildings is the other primary source of GHGs in the U.S. and California. Vehicle emissions follow a close second, constituting approximately 30% of total U.S. emissions and 37% of total statewide emissions (U.S. Environmental Protection Agency 2012; California Air Resources Board 2013). Other sources of GHG emissions include agriculture, land clearing, the landfilling of waste, refrigerants, and certain industrial processes.

To help contextualize the magnitude of Stockton's GHG emissions (discussed in the following subsection), Table 14-2 shows MT CO_2e from the most recent global, national, and statewide GHG inventories.

Table 14-2. Global, National, and State Greenhouse Gas Emissions Inventories

Emissions Inventory	MT CO_2e
2004 IPCC Global GHG Emissions Inventory	49,000,000,000
2010 EPA National GHG Emissions Inventory	6,821,800,000
2010 CARB State GHG Emissions Inventory (without sinks)	449,600,000

Sources: Intergovernmental Panel on Climate Change 2007a; U.S. Environmental Protection Agency 2012; California Air Resources Board 2013.
CARB = California Air Resources Board.
EPA = U.S. Environmental Protection Agency.
GHG = greenhouse gas.
IPCC = Intergovernmental Panel on Climate Change.
MT CO_2e = metric tons of carbon dioxide equivalent.

City of Stockton Greenhouse Gas Emissions

1990 Emissions Estimate

An emissions backcast was used to estimate 1990 GHG emissions generated by the community of Stockton. The 1990 emissions backcast uses historic data and levels of development to "scale back" estimated 2005 GHG emissions (discussed below) to 1990 levels. For example, to estimate emissions generated by residential building energy consumption in 1990, GHG emissions produced by households in 2005 were multiplied by the reserve growth rate for households between 2005 and 1990. The methodology used to calculate these emissions is described in more detail in the Draft Climate Action Plan.

As shown in Table 14-3, it is estimated that the community of Stockton emitted 1,791,120 MT CO_2e in 1990. The largest source of GHG emissions in 1990 was transportation (47%). Emissions from building energy were likewise nontrivial (31% of total emissions). The next largest source of GHG emissions was off-road vehicle use (9%). It should be noted that the values provided in Table 14-3 are estimates; given the methodology used, they should not be considered a precise accounting of 1990 GHG emissions.

Table 14-3. Estimate of 1990 City of Stockton Community Greenhouse Gas Emissions by Sector

Emissions Sector	MT CO_2	% of Total
Agriculture	928	0.05%
Building energy	560,993	31.3%
High-GWP GHGs	76,444	4.3%
Off-road equipment	154,233	8.6%
On-road transportation	836,037	46.7%
Solid waste management	79,939	4.5%
Wastewater treatment	75,569	4.2%
Water importation	6,977	0.4%
Total emissions	1,791,120	100%[a]

Source: Draft Climate Action Plan, 2014
GHG = greenhouse gas.
GWP = global warming potential.
MT CO_2 = metric tons of carbon dioxide.
[a] Values do not add to 100 due to rounding.

2005 Emissions Inventory

GHG emissions for 2005 were calculated using activity data specific to the City's operations. The primary protocols consulted for the analysis are listed below.

- *Local Governments Operations Protocol for the Quantification and Reporting of GHG Emissions Inventories (Version 1.1)* (California Air Resources Board 2010).
- *2006 IPCC Guidelines for National Greenhouse Gas Inventories* (Intergovernmental Panel on Climate Change 2006).
- *Climate Action Registry General Reporting Protocol (Version 3.1): Reporting Entity-Wide Greenhouse Gas Emissions* (Climate Action Registry 2009).

As shown in Table 14-4, Stockton generated 2,360,932 MT CO_2e in 2005. The largest source of emissions within the City is on-road transportation, which represented 48% of total community emissions in 2005. (Transportation emissions are often the largest source of emissions in community inventories due to the sheer number of vehicles traveling throughout a jurisdiction.) Building energy emissions are the second largest source of emissions, accounting for 33% of total community emissions. This sector includes emissions associated with natural gas combustion and electricity consumption in residential, non-residential, and industrial buildings in Stockton. The third largest source is off-road equipment, with a contribution of 8% of the total 2005 emissions. The remaining sources in order of greatest contributions are high GWP GHGs (4%), wastewater treatment (4%), solid waste management (3%), water importation (0.4%), and agriculture (0.04%).

Table 14-4. City of Stockton Community 2005 Greenhouse Gas Emissions by Sector

Emissions Sector	MT CO_2	% of Total
Agriculture	928	0.04%
Building energy	776,186	32.9%
High GWP GHG	100,931	4.3%
Off-road equipment	176,431	7.5%
On-road transportation	1,132,265	48.0%
Solid waste management	65,720	2.8%
Wastewater treatment	99,777	4.2%
Water importation	8,694	0.4%
Total emissions	2,360,932	100%[a]

Source: Draft Climate Action Plan, 2014
GHG = greenhouse gas.
GWP = global warming potential.
MT CO_2 = metric tons of carbon dioxide.
[a] Values do not add to 100 due to rounding.

2020 Business-as-Usual Emissions Estimate

BAU represents a future scenario that does not consider the possible reduction of GHG emissions from legislation or regulation that would go into effect after the baseline year (i.e., 2005). The BAU projection is therefore an estimate of future emissions based on energy and carbon intensity in the existing economy. Emissions in 2020 were estimated using anticipated growth in housing, employment, and population between 2005 and 2020. Additional information on the forecast methodology is provided in the draft CAP.

As shown in Table 14-5, the City is forecast to generate 2,672,519 MT CO_2e in 2020 under BAU conditions. This represents an increase of 13%, relative to 2005 levels. The increase will occur primarily because of changes in VMT, building energy, water use, and wastewater generation. As the population and employment in Stockton grow, transportation activity and energy consumption increase. Likewise, water consumption and wastewater generation will increase due to higher demand.

Table 14-5. City of Stockton 2020 Business-as-Usual Community Greenhouse Gas Emissions Forecast

Emissions Sector	MT CO_2	% of Total
Agriculture	928	0.03%
Building Energy	911,272	34.1%
High GWP GHGs	112,478	4.2%
Off-Road Equipment	213,300	8.0%
On-Road Transportation	1,232,663	46.1%
Solid Waste Management	78,347	2.9%
Wastewater Treatment	111,191	4.2%
Water Importation	12,340	0.5%
Total Emissions	2,672,519	100% [a]

Emissions Sector	MT CO_2	% of Total

Source: Draft Climate Action Plan, 2014
GWP = global warming potential.
MT CO_2 = metric tons of carbon dioxide.
[a] Values do not add to 100 due to rounding.

Climate Change Trends and Projections

Global annual surface temperatures increased at a rate of 0.13°C per decade during the period 1950–2000. This rate is double the rate observed during the period 1900–1950. Further, 11 of the 12 years during the period 1995–2006 rank among the 12 warmest years in the instrumental record of global surface temperature (since 1850). Warming trends appear to have led to a shift in cool season precipitation towards more rain and less snow, which has caused increased rainfall-runoff volume during the cool season accompanied by less snowpack accumulation in some locations. Sea levels have risen on average 1.8 mm per year with sea level rise during the period 1993–2003 rising at a rate of 3.1 mm per year. (Intergovernmental Panel on Climate Change 2007a.)

Scientific measurements and observations indicate that California's climate is already changing in a manner consistent with what would be expected from global climate change. Since 1920, California's average temperature has been increasing at a rate of 0.6°C per decade, although this change, or any climate change impacts, is not uniform across California. Nighttime temperatures are rising across California and at a higher rate than daytime temperatures. Further, daytime and nighttime heat wave events throughout California have increased in intensity, particularly the nighttime component (Moser et al. 2009). During the last century, sea level along the California coast has increased approximately 7 inches, with higher rates of increase occurring since 1993 (Cayan et al. 2009).

California's water supply system is dependent on snowpack storage in the Sierra Nevada. Temperatures over the Sierra Nevada have increased during the last 100 years, resulting in less snowfall (and more rainfall) and an earlier snowmelt (Moser et al. 2009). The average early spring snowpack in the Sierra Nevada has decreased by about 10% during the last century, a loss of 1.5 million acre-feet (MAF) of snowpack storage (California Department of Water Resources 2008).

Data also show evidence for the following additional changes to California climate and conditions during the last 50 years (Moser et al. 2009).

- Warming of Lake Tahoe.
- Decreasing chill hours and increased stresses on California agriculture.
- Shifts and disturbances in landscapes.
- Increased frequency of wildfire.
- Increases in photochemical smog production.
- Increased frequency and intensity of heat wave events.
- Changes in precipitation.

Plants and animals around the globe are already reacting to changes caused by increasing temperatures. In California, species are also reacting to extreme conditions, including heat waves and the fires generated by that heat, cold snaps, droughts, and the saltwater intrusion that droughts

often cause floods and coastal upwelling. Observed changes also include altered timing of animal and plant lifecycles (phenology), disruption of biotic interactions, changes in physiological performance, species range and abundance, increase in invasive species, altered migration patterns of fishes, aquatic-breeding amphibians, birds and mammals, changes in forage base, local extinction of plant and animal populations, and changes in habitat, vegetation structure, and plant and animal communities (California Department of Fish and Game 2010).

During the 21st century, additional changes in temperature, precipitation, and sea level are expected, which may have substantial effects throughout the state. Potential effects of climate change anticipated in California are listed below (California Natural Resources Agency 2009).

- Increased average temperatures (air, water, and soil).
- Reduced or slightly increased annual precipitation amounts.
- Change from snowfall (and spring snowmelt) to rainfall.
- Decreased Sierra Nevada snowpack (earlier runoff, reduced maximum storage).
- Increased evapotranspiration.
- Increased frequency and intensity of Pacific storms (flood events).
- Increased severity of droughts.
- Increased frequency and severity of extreme heat events.
- Increased frequency and severity of wildfire events.
- Sea level rise (with increased salt water intrusion in the Delta).
- Changes in species distribution and ranges.
- Decreased number of species.
- Increased number of vector-borne diseases and pests (including impacts to agriculture).
- Altered timing of animal and plant lifecycles (phenology).
- Disruption of biotic interactions.
- Changes in physiological performance, including reproductive success and survival of plants and animal.
- Increase in invasive species.
- Altered migration patterns of fishes, aquatic-breeding amphibians, birds and mammals.
- Changes in food (forage) base.
- Changes in habitat, vegetation structure, and plant and animal communities.

These changes have implications for future development in Stockton and the San Joaquin Valley. Changes in water quality and supply, severity of flooding and wildfire hazards, distribution of natural ecosystems, and agricultural conditions may increase the city's vulnerability to adverse environment and public health conditions.

Regulatory Setting

A summary of federal, state, and local regulations on GHG emission is presented below and in Figure 14-1.

Federal

Although there is currently no federal overarching law specifically related to climate change or the reduction of GHGs, regulation under the federal Clean Air Act is being developed by the U.S. Environmental Protection Agency (EPA) in a lead role.

Mandatory Greenhouse Gas Reporting Rule (2009)

On September 22, 2009, EPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year (FY) 2008 Consolidated Appropriations Act (H.R. 2764; PL 110-161), which required EPA to develop "mandatory reporting of greenhouse gasses above appropriate thresholds in all sectors of the economy." The Reporting Rule applies to most entities that emit 25,000 MT CO_2e or more per year. Starting in 2010, facility owners were required to submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule also mandates recordkeeping and administrative requirements in order for EPA to verify annual GHG emissions reports.

Environmental Protection Agency Endangerment and Cause and Contribute Findings (2009)

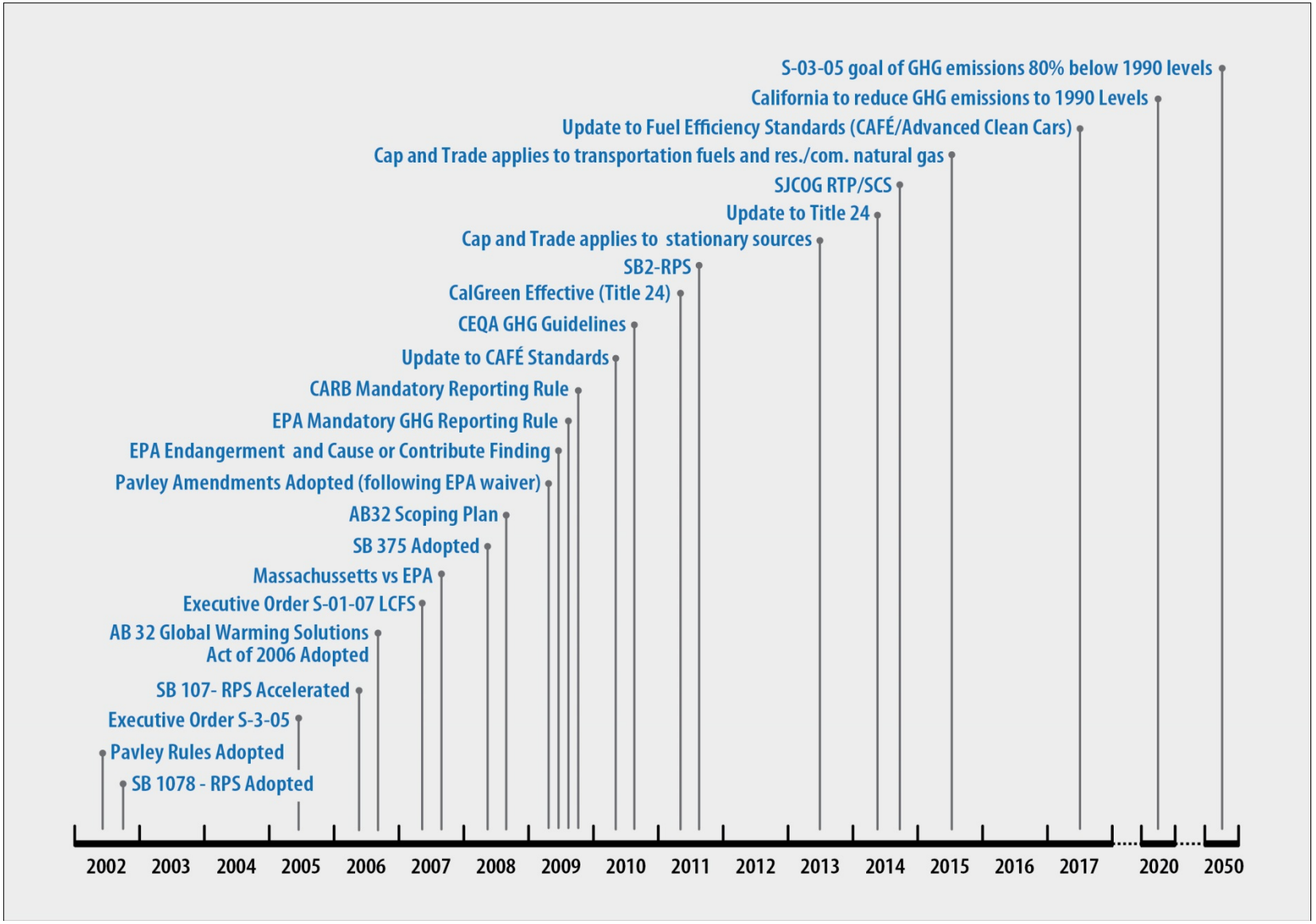
On December 7, 2009, EPA signed the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. Under the Endangerment Finding, EPA finds that the current and projected concentrations of the six key well-mixed GHGs—CO_2, CH_4, N_2O, PFCs, SF_6, and HFCs—in the atmosphere threaten the public health and welfare of current and future generations. Under the Cause or Contribute Finding, EPA finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing EPA's proposed new corporate average fuel economy standards for light-duty vehicles.

Update to Corporate Average Fuel Economy Standards (2009)

The new Corporate Average Fuel Economy (CAFE) standards incorporate stricter fuel economy standards promulgated by the State of California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25% by 2016. Rule-making to adopt these new standards is still in process and thus they are not yet in effect. When the national program takes effect, California has committed to allowing automakers who show compliance with the national program to also be deemed in compliance with state requirements. Federal agencies are presently developing higher standards for the 2017–2025 period.

Figure 14-1. Milestones in Federal and State Legislation and Regulation



Updates to Corporate Average Fuel Economy Standards (2010/2012)

The current CAFE standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and the State of California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25% by 2016 (resulting in fleet average of 35.5 miles per gallon or mpg by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in summer 2012 for model years 2017–2025 that will require a fleet average in 2025 of 54.5 miles per gallon (mpg).

United States Environmental Protection Agency Regulation of Greenhouse Gas Emissions under the Clean Air Act (Ongoing)

Under the authority of the Clean Air Act, EPA is beginning to regulate GHG emissions starting with large stationary sources. In 2010, EPA set GHG thresholds to define when permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities. In 2012, EPA proposed a carbon pollution standard for new power plants.

State

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this legislation is not directed at citizens or jurisdictions specifically, but rather it establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. Former Governor Schwarzenegger also issued several EOs related to the state's evolving climate change policy that are still in force today.

Executive Order S-03-05 (2005)

Signed by Governor Arnold Schwarzenegger on June 1, 2005, EO S-3-05 asserts that California is vulnerable to the effects of climate change. To combat this concern, Executive Order S-3-05 established the following GHG emissions reduction targets for state agencies.

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

EOs are binding only on state agencies. Accordingly, EO S-03-05 will guide State agencies' efforts to control and regulate GHG emissions but will have no direct binding effect on local government or private actions. The Secretary of the California Environmental Protection Agency (CalEPA) is required to report to the Governor and State legislature biannually on the impacts of global warming on California, mitigation and adaptation plans, and progress made toward reducing GHG emissions to meet the targets established in this EO.

The reduction target of 80% below 1990 levels was identified to correspond to the reductions estimated as necessary in developed countries by 2050 to limit atmospheric concentrations of GHGs to 450 ppm CO_2e, which is the estimate of what is needed to keep global average temperature increases to 2°C (Intergovernmental Panel on Climate Change 2007a, 2007b). This goal for limiting

global average temperatures has been identified in order to limit the scale of changes in global climate and is often referred to as the "climate stabilization" goal in order to avoid "dangerous anthropogenic in interference" (or DAI) within the global climate system.

Assembly Bill 1493—Pavley Rules (2002, Amendments 2009)

Known as "Pavley I," AB 1493 standards are the nation's first GHG standards for automobiles. AB 1493 requires CARB to adopt vehicle standards that will lower GHG emissions from new light duty autos to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2020. Together, the two standards are expected to increase average fuel economy to roughly 43 mpg by 2020 and reduce GHG emissions from the transportation sector in California by approximately 14%. In June 2009, EPA granted California's waiver request enabling the State to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

EPA and CARB have worked together to on a joint rulemaking to establish GHG emissions standards for model-year 2017–2025 passenger vehicles. As noted above, the federal government completed rulemaking in summer 2012 resulting in adoption of new standards that would lead to fleet average of 54.5 mpg in 2025.

Senate Bills 1078 (2002), Senate Bill 107 (2006) and Senate Bill 2 (2011) — Renewable Portfolio Standard

Senate Bill (SB) 1078 and SB 107, California's Renewable Portfolio Standard (RPS), obligates investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The California Public Utilities Commission (CPUC) and California Energy Commission (CEC) are jointly responsible for implementing the program. SB 2 set forth a longer-range target of procuring 33% of retail sales by 2020.

Assembly Bill 32—California Global Warming Solutions Act (2006)

In September 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 establishes a cap on statewide GHG emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emission levels. Under AB 32, CARB is required to take the following actions.

- Adopt early action measures to reduce GHGs.
- Establish a statewide GHG emissions cap for 2020 based on 1990 emissions.
- Adopt mandatory reporting rules for significant GHG sources.
- Adopt a scoping plan indicating how emission reductions would be achieved through regulations, market mechanisms, and other actions.

Adopt regulations needed to achieve the maximum technologically feasible and cost-effective reductions in GHGs.

Executive Order S-01-07—Low Carbon Fuel Standard (2007)

EO S-01-07 mandates: (1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020 and (2) that a low carbon fuel standard (LCFS) for transportation fuels be established in California. The EO initiates a research and regulatory process at CARB. Based on an implementation plan developed by CEC, CARB will be responsible for implementing the LCFS. On December 29, 2011, a federal judge issued a preliminary injunction blocking enforcement of the LCFS, ruling that the LCFS violates the interstate commerce clause (Georgetown Climate Center 2012). CARB has appealed this ruling. The injunction was lifted in April 2012 so that CARB can continue enforcing the LCFS pending CARB's appeal of the federal district court ruling.

Senate Bill 375—Sustainable Communities Strategy (2008)

SB 375 provides for a new planning process that coordinates land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires regional transportation plans, developed by metropolitan planning organizations (MPOs) to incorporate a sustainable communities strategy (SCS) in their regional transportation plans (RTPs). The goal of the SCS is to reduce regional VMT through land use planning and consequent transportation patterns. The regional targets were released by CARB in September 2010. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. However, those provisions will not become effective until an SCS is adopted. The regional GHG reduction target for SJCOG is a 5% reduction in GHG emissions by 2020. SJCOG is developing an SCS and is expected to adopt an RTP incorporating an SCS in 2014.

California Energy Efficiency Standards for Residential and Nonresidential Buildings—Title 24 (2008), Green Building Code (2011), Title 24 Update (2014)

California has adopted aggressive energy efficiency standards for new buildings for many years. The latest updated standards were adopted in 2008. Also, in 2008, the California Building Standards Commission adopted the nation's first green building standards which include standards for many other built environment aspects apart from energy efficiency. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code (24 CCR). Part 11 establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The voluntary standards took effect on January 1, 2011. The next update of the Title 24 energy efficiency standards was adopted in mid-2012 and will take effect in 2014.

California Air Resources Board Greenhouse Gas Mandatory Reporting Rule Title 17 (2009)

In December 2007, CARB approved a rule requiring mandatory reporting of GHG emissions from certain sources, pursuant to AB 32. Facilities subject to the mandatory reporting rule must report their emissions from the calendar year 2009 and have those emissions verified by a third party in 2010. In general the rule applies to facilities emitting more than 25,000 MT CO_2e in any given

calendar year or electricity-generating facilities with a nameplate generating capacity greater than 1 megawatt (MW) and/or emitting more than 25,000 MT CO_2e per year. Additional requirements also apply to cement plants and entities that buy and sell electricity in the state.

State CEQA Guidelines (2010)

The State CEQA Guidelines require lead agencies to describe, calculate, or estimate the amount of GHG emissions that would result from a project. Moreover, the State CEQA Guidelines emphasize the necessity to determine potential climate change effects of the project and propose mitigation as necessary. The State CEQA Guidelines confirm the discretion of lead agencies to determine appropriate significance thresholds, but require the preparation of an EIR if "there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with adopted regulations or requirements" (Section 15064.4).

State CEQA Guidelines section 15126.4 includes considerations for lead agencies related to feasible mitigation measures to reduce GHG emissions, which may include, among others, measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision; implementation of project features, project design, or other measures which are incorporated into the project to substantially reduce energy consumption or GHG emissions; off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions; and measures that sequester carbon or carbon-equivalent emissions.

Greenhouse Gas Cap-and-Trade Program (2013)

On October 20, 2011, CARB adopted the final cap-and-trade program for California. The California cap-and-trade program has created a market-based system with an overall emissions limit for affected sectors. The program is proposed to regulate more than 85% of California's emissions and will stagger compliance requirements according to the following schedule: (1) electricity generation and large industrial sources (2013) and (2) fuel combustion and transportation (2015). The first auction occurred in late 2012 with the first compliance year in 2013.

Local

The AB 32 Scoping Plan (CARB 2008) establishes a framework for achieving statewide GHG reductions required by AB 32. Specifically, it describes a list of measures that the State will undertake and the anticipated GHG reductions associated by these measures by 2020. Because the State does not have jurisdictional control over all of the activities that produce GHG emissions in California, the AB 32 Scoping Plan articulates a unique role for local governments in achieving the State's GHG reduction goals. The AB 32 Scoping Plan recommends that local governments reduce GHG emissions from both their municipal operations and community at large. Many jurisdictions across California have completed a CAP. In San Joaquin County, Tracy is the only jurisdiction that has currently adopted a plan (City of Tracy 2011) to reduce GHG emissions, but San Joaquin County, the City of Manteca and the City of Lodi have also been developing their CAPs.

SJVAPCD has adopted GHG guidance to help streamline CEQA review for development projects. The GHG guidance pre-quantifying emissions reductions that would be achieved through the implementation of best performance standards (BPS). Development projects are considered to have a less-than-significant cumulative impact on climate change if any of the following conditions are met.

- Complies with an approved GHG reduction plan.
- Achieves a score of at least 29 using any combination of approved operational BPS.
- Reduces operational GHG emissions by at least 29% (demonstrated quantitatively).

SJVAPCD guidance recommends quantification of GHG emissions for all projects in which an EIR is required, regardless of whether BPS achieve a score of 29, which is equivalent to 29% reductions (San Joaquin Valley Air Pollution Control District 2009).

Impacts and Mitigation

Criteria of Significance

Greenhouse Gas Emissions

Potential GHG impacts were assessed in relation to applicable laws and regulations, including Appendix G of the State CEQA Guidelines. An impact was considered to be significant if it would result in any of the following conditions.

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

The Proposed Project includes policies to reduce GHG emissions that are reasonably attributed to private industry and development located within the areas subject to the City's land use and building permit authority. For the purposes of this analysis, the consistency with AB 32's reduction target for 2020 will be evaluated to determine significance. As noted in the CAP, the AB 32 Scoping Plan was developed using statewide inventories that were completed between 1990 and 2004 (CARB 2007). Subsequent to the AB 32 Scoping Plan, CARB completed state inventories for 2005 to 2008. Based on these most recent inventories, attainment of statewide 1990 emissions levels (433.29 million MT CO_2e) is approximately equivalent to approximately 10% below 2005 levels (482.09 million MT CO_2e) (CARB 2013). Consequently, the Proposed Project will have to decrease community GHG emissions to a level approximately 10% below current emissions by the year 2020 for its emissions-related impacts be considered less than significant. Based on the City's 2005 GHG emissions of 2.4 million MT CO_2e, the significance criteria for 2020 is approximately 2.1 million MT CO_2e.

For the period beyond 2020, there is no state or federal adopted law with a GHG reduction target for 2035 or 2050. While EO S-03-05 includes a goal of reducing emissions by 80% below 1990 levels, as an EO this goal is not binding on local governments. Given the inability to completely eliminate GHG emissions, a general convention in policy analysis has been developed to recommend limitation of atmospheric concentrations of GHG emissions to the equivalent of 450 ppm of CO_2, which would require reduction of emissions by 80% below 1990 levels by 2050 on average in the developed countries (Intergovernmental Panel on Climate Change 2007a, 2007b). Since buildout of the General Plan is now expected to occur sometime between 2050 and 2055, this SEIR uses a significance criteria of emissions of 80% below 1990 level for the evaluation of GHG emissions beyond 2020. Since the estimate of 1990 City emissions is approximately 1.8 million MT CO_2e, the 2050 criteria

would be approximately 358,000 MT CO_2e.

Note that the following impact discussion details specific impacts associated with the Proposed Project through the year 2020, followed by a more general discussion of impacts once buildout of the General Plan occurs. Impacts at buildout—which, given recent growth and development rates, is estimated to occur between 2050 and 2055—are discussed qualitatively.

Climate Change Adaptation

As discussed above, unavoidable future increases in worldwide GHG emissions make a certain amount of environmental change in the city inevitable. Impacts on city agriculture, water supplies, flooding, wildfire potential, environmental health, and other conditions is reasonably foreseeable, although not quantifiable, in many aspects at present. New development allowed by the Proposed Project could place persons and property at higher levels of susceptibility to climate change effects if it does not anticipate reasonably foreseeable changes in environmental conditions. Thus, for this SEIR, the Proposed Project would result in a significant impact if would increase the severity or intensity of risk associated with climate change through buildout.

The following impact discussions detail specific impacts associated with the Proposed Project through 2020 and from 2020 to 2050. As described in Chapter 2, *Project Description*, the project analyzed in this SEIR includes the CAP and the Transit Plan/Program.

Impact CC-1: Greenhouse gas emission associated with development under the General Plan through 2020, as modified by Proposed Project, would be reduced consistent with AB 32.

As described in Chapter 2, in the near-term the Proposed Project is not expected to increase overall development in Stockton above level assumed in the GPEIR, primarily because the expected growth rate is now much lower than presumed in the GPEIR. Thus, the dominant effect of the project is to reduce GHG emissions through 2020 compared to BAU conditions. Since the GPEIR did not analyze the GHG emissions impact quantitatively, this SEIR analyzes the impact of GHG emissions for the city as a whole through 2020.

As shown in Table 14-6, the City generated approximately 2.4 million MT CO_2e in 2005. Unmitigated (BAU) emissions in 2020 are projected to increase to approximately 2.7 million MT CO_2e, or by 13% relative to existing conditions. Table 14-7 compares the 2005 emissions inventory to the 2020 BAU emissions forecast. As previously noted, in order for the City to achieve consistency with AB 32, existing emissions will need to be reduced by approximately 11% by 2020 (to approximately 2.1 million MT CO_2e).

Table 14-6. City of Stockton Community Emissions Growth Projections by Sector under 2005 Baseline and 2020 Business as Usual Conditions

Emissions Sector	2005 MT CO_2e	2020 MT CO_2e	% Change
Agriculture	928	928	0%
Building energy	776,186	911,272	17%
High-GWP GHG	100,931	112,478	11%
Off-road equipment	176,431	213,300	21%
On-road transportation	1,132,265	1,232,663	9%
Solid waste management	65,720	78,347	19%
Wastewater treatment	99,777	111,191	11%
Water importation	8,694	12,340	42%
Total emissions	2,360,932	2,672,519	13%

Source: Draft Climate Action Plan, 2014.
GHG = greenhouse gas.
GWP = global warming potential.
MT CO_2e = metric tons of carbon dioxide equivalent.

The City's CAP includes existing state and proposed local measures that would result in GHG emissions reductions within the community.[1] State mandates do not require additional local action, but would result in local GHG reductions and would often require local effort. To supplement statewide initiatives, the City has identified a series of voluntary, performance-based, and mandatory reduction measures that are either currently being implemented, or would be implemented by the City. The reduction measures can be grouped into eight broad emission sectors that would affect emissions throughout community activities. The measures include programs that improve building energy efficiency, increase transit and alternatives to vehicular travel, increase use of renewable energy, reduce water consumption, and reduce waste, as well as other measures.

Table 14-7 summarizes GHG emissions reductions in 2020 by sector. Local GHG reduction measures are discussed further in the draft CAP. When combined with State efforts, the GHG reduction measures would reduce community GHG emissions by approximately 565,000 to 571,000 MT CO_2e. The largest GHG reductions due to local initiatives are achieved by residential and commercial energy (both energy efficiency and renewable energy) programs, transportation measures, and waste reduction measures.

[1] At present, the only federal mandate that would specifically reduce GHG emissions in Stockton are the CAFE standards. These standards were adopted to be consistent with previously passed California vehicle efficiency standards per AB 1493. As a result, these standards are subsumed in the state regulations. The federal government is proposing new CAFE standards for 2017 to 2025 at this time, while CARB is pursuing the Advanced Clean Car Initiative. It is expected that California standards, as they have in the past, will eventually become federal standards, and thus, the Advanced Clean Car standards are presumed to take effect in California in 2017.

Table 14-7. Summary of Greenhouse Gas Emissions Reductions

GHG Emissions	MT CO_2e	% Total Reduction
State programs	**473,415**	**83%**
Local programs		
Development review process	4,963	1%
Building energy use measures	49,271	9%
Land use and transportation measures	13,619 – 19,360	2 to 3%
Waste generation measures	4,245	1%
Water consumption measures	16,228	3%
Wastewater treatment measures	312	0.1%
Urban forestry measures	75	0.0%
High-GWP GHG measures	255	0.0%
Off-road vehicle measures	2,622	0.5%
Subtotal for local programs	**91,590 – 97,331**	**16% to 17%**
Total reductions	**565,005 – 570,746**	**100%**
2005 GHG Emissions	*2,360,932*	
2020 BAU GHG Emissions	*2,672,519*	
2020 GHG Emissions with State Measures	*2,199,104*	
2020 GHG Emissions with CAP (State + Local)	*2,101,774 to 2,107,515*	
Emissions Reduction Target (10.12% below 2005)	*2,122,006*	
Target Achieved?	*Yes (exceeds goal)*	

Source: Draft Climate Action Plan 2014
GHG = greenhouse gas.
GWP = global warming potential.
MT CO_2e = metric tons of carbon dioxide equivalent.

The GHG reduction measures summarized in CAP have been identified as either mandatory, voluntary, or as part of the Development Review Process. Measures that are required by State law, such as compliance with Senate Bill X7-7, or existing City regulations, such as the Green Building Ordinance, would be mandatory for either existing and/or new development. The City would require implementation of these measures, pursuant to State and new or existing local laws and regulations. Measures that would be implemented through incentive-based approaches, such as building retrofits, would be voluntary, but the City is confident that voluntary, incentive-based approaches can produce real and substantive reductions in part due to people acting to reduce their own costs related to the consumption of fossil fuels (i.e., making energy efficient improvements to their homes; carpooling, using public transit, or reducing driving, minimizing waste, and reducing water use). GHG reductions associated with these incentive-based measures were quantified based on anticipated participation rates.

Emissions reductions from new development will be achieved through the City's Development Review Process (DRP). The Development Review Process would include a performance standard for new private developments as part of the discretionary approval process under CEQA. Under the Development Review Process, new projects would be required to feasible reduction measures to

reduce project emissions to a level 29% below BAU project emissions.[2] The DRP does not require project applicants to implement a pre-determined set of measures. Rather, project applicants are encouraged to choose the most appropriate measures for achieving the 29% reduction goal, while taking into consideration cost, environmental or economic benefits, schedule, and other project requirements.

Based on the quantified emissions reductions shown in Table 14-7, implementation of the project would enable the City to reduce its community GHG emissions to meet the reduction target of 11% below 2005 levels. Actions not currently quantified, as well as local effects of the State's cap-and-trade program, will likely contribute to additional reductions.[3] Implementation of the project will therefore be consistent with State measures to reduce GHG emissions, including AB 32 and the AB 32 Scoping Plan. This would be a less than significant impact through 2020.

Impact CC-2: Greenhouse gas emissions associated with General Plan from 2020 to 2050, as modified by the Proposed Project will contribute considerably to cumulative GHG emissions despite implementation of the CAP and Transit Plan/Program

At buildout, the project will increase General Plan residential buildout by an estimated 300 to 1,100 units due to the increase in downtown residential potential. In order to increase the residential potential, it may be necessary to redesignate some industrial or commercial land to residential or mixed use development. Thus, potential residential emissions may increase but may be partially offset by a reduction in industrial or commercial emissions.

As noted in the draft CAP, beginning in Phase 3 (2018), the City would commence planning for the post-2020 period. At this point, the City would have implemented the first two phases of the CAP and would have a better understanding of the effectiveness and efficiency of different reduction strategies and approaches. The new post-2020 reduction plan would include a specific target for GHG reductions for 2030, 2040, and 2050. The targets would be consistent with broader State and federal reduction targets and with the scientific understanding of the needed reductions by 2050. The City would adopt the post-2020 reduction plan by December 31, 2020.

While CAP policies to reduce GHG emissions would be implemented under the Proposed Project and the CAP commits to future development of a post-2020 reduction plan, the project would allow for additional future development beyond that included in the existing General Plan that might result in increased GHG emissions. Also, it would be premature to assume the character of such future measures and/or their effectiveness. Furthermore, AB-32 has a horizon of 2020, with no mandated requirements beyond 2020.

For the purposes of disclosure under CEQA, a rough estimate of GHG emissions for buildout with and without the CAP was developed as shown in Table 14-8.

[2] This reduction target was specifically selected to be consistent with San Joaquin Air Pollution Control District's recommended CEQA significance threshold and to require similar reductions for new development in Stockton as is likely to be required in other parts of the San Joaquin Valley.

[3] The effects of California's cap-and-trade system, which will take effect starting in 2013, are not included in the draft CAP analysis. However, it is expected that by 2020, the cap-and-trade system will result in additional reductions in the building energy and transportation sectors due to changes in energy prices directly (at the consumer level) or indirectly (at the producer level). See further discussion in the Draft CAP.

Table 14-8. City of Stockton Community Emissions Growth Projections for 2020 and 2050, with and without the Climate Action Plan

	MT CO_2e			
Emissions Sector	2020 without CAP[a]	2020 with CAP[b]	2050/Buildout Without CAP[c]	2050/Buildout With CAP[d,e,f]
Agriculture	1,000	1,000	600[g]	600[g]
Building energy	760,000	696,000	1,404,000	1,279,000
High GWP GHG	94,000	94,000	173,000	172,000
Off-road equipment	213,000	210,000	394,000	387,000
On-road transportation	964,000	944,000	1,781,000	1,734,000
Solid waste management	44,000	39,000	82,000	72,000
Wastewater treatment	111,000	111,000	206,000	204,000
Water importation	12,000	7,000	23,000	13,000
Urban forestry	0	-75	0	-75
Total emissions	2,199,000	2,102,000	4,063,000	3,860,000

Sources: 2020 estimates from Draft Climate Action Plan (2014); 2050 calculated for this SEIR. Results presented to nearest 1,000 MT. Totals may not add up due to rounding.

CAP = Climate Action Plan.

GHG = greenhouse gas.

GWP = global warming potential.

MT CO_2e = metric tons of carbon dioxide equivalent.

[a] 2020 without CAP: Based on draft CAP 2020 forecast; includes state measures but excludes local measures.

[b] 2020 with CAP: Based on draft CAP 2020 BAU Forecast and state and local reduction measures. Reductions from implementation of Development Review Process (4,963 MT CO2e by 2020) apportioned to sectors as follows: 50% building energy; 15% on-road transportation; 15% waste; 15% water; 5% off-road. Assumes 3,000 units in downtown per Trans-1. If less units achieved, emissions would be higher.

[c] As discussed in Chapter 2, *Project Description,* buildout is estimated to occur sometime between 2050 and 2055; thus emissions may be slightly lower than shown in this table at 2050.

[d] 2050 estimate without CAP: Derived by multiplying 2020 without CAP emissions times the projected population growth in Stockton at buildout. Buildout population estimated by multiplying expected number of housing units (191,215 with existing General Plan) times the General Plan assumed residents per housing unit (3.0) to get an estimate of 573,645 persons.

[e] 2050 estimate with CAP derived by multiplying 2020 with CAP emissions times the projected population in Stockton at buildout. Buildout population estimated by multiplying expected number of housing units (192,315 = 191,215 with existing General Plan plus up to 1,100 additional units from the CAP measure Trans-1) times the General Plan assumed residents per housing unit (3.0) to produce an estimate of 576,945 persons.

[f] The General Plan EIR projected that 32,520 acres (out of 102,570 acres) of important farmland would be converted in the planning area. Thus, it was assumed that there would be a 1/3 reduction of associated agricultural emissions.

As discussed above in the section entitled "Regulatory Setting," it has been roughly estimated that emissions in developed countries will need to be reduce by approximately 80% below 1990 levels in order to promote climate stabilization by 2050. Reduction of emissions to these levels was also identified as a statewide goal in EO S-03-05. As shown in Table 14-9, 2050/buildout GHG emissions will far exceed the 80% reduction goal for 2050. While emissions would be slightly less with the CAP

than without it, there would still be a need for over 90% reductions from the projected amounts to meet the 2050 reduction goal.

Table 14-9. City of Stockton 2050 Emissions Compared to 2050 Goal

Scenario	Estimated Emissions (MT CO_2e)	Reduction Target (2050) (MT CO_2e)	Reductions Needed to Meet 80% Reduction Target (MT CO_2e)	% Reduction Needed
1990 estimated emissions	1,791,120[a]	358,224	1,432,896	80%
2050 without CAP	4,063,000[b]	358,224	3,705,000	91%
2050 with CAP	3,860,000[b]	358,224	3,502,000	91%

CAP = Draft Climate Action Plan 2014.
MT CO_2e = metric tons of carbon dioxide equivalent.
[a] Draft Climate Action Plan 2014
[b] From Table 14-8.

The GPEIR disclosed that buildout GHG emissions would be significant and unavoidable, but it did not contain a specific quantitative analysis of those emissions and made no comparisons to 2050 goals. As described above, with implementation of the draft CAP, emissions at buildout would be less than they would be with the existing General Plan. However, GHG emissions around 2050 would substantially exceed goals identified for 2050 as necessary for climate stabilization. Accordingly, the impact of buildout GHG emissions is considered significant**.**

Although 2050 goals have been articulated by international organizations (such as the IPCC) and advocacy groups and the former governor included a 2050 goal in EO S-03-05, there is no existing plan by any government agency in the world at the local, state, federal, or international level that articulates a specific plan to actually achieve the 2050 reduction goal.

Despite the lack of adopted feasible plans to date, research has been done on the potential reduction efforts that would be necessary to meet a 2050 reduction target. As an example, Greenblatt and Long (2012) analyzed changes in California's energy systems that would be necessary to reduce emissions to 60% and 80% below 1990 levels by 2050. In analyzing what would be needed to achieve a level 60% below 1990 levels, the authors limited their analysis to energy systems technology that is available or in demonstration today. A summary of their findings is below.

- **Efficiency**. All buildings would either have to be demolished, retrofitted, or built new to very high efficiency standards. Vehicles of all sorts would need to be made significantly more efficient. Industrial processes would need to advance beyond technology available today.
- **Electrification**. Widespread electrification wherever technically feasible would be required, through the use of hybrid or all-electric vehicle drivetrains, heat pumps for space and water heating, and specialized electric heating technology (microwave, electric arc, etc.) in industrial applications.
- **Low carbon electricity**. The demand for electric generation capacity would have to be met with combinations of low-GHG nuclear energy, fossil fuels with carbon capture and sequestration, and renewable energy. Emissions from balancing supply and demand at all temporal and spatial scales also need to be considered.

- **Low carbon fuels**. As much of the demand for fuel as possible must be met with sustainably-produced, low net lifecycle GHG biofuels.

The authors find that with these four strategies it is technically possible to achieve reductions approximating 60% below 1990 levels. However, there are some substantial challenges to implementing those strategies, as explained below.

- **Electricity supply**. At present, it is illegal to expand nuclear power in California unless a solution to the permanent storage of nuclear waste is resolved. Carbon capture and sequestration has not been successfully deployed at scale and is best considered experimental at this time. Scenarios with high fractions of wind and solar energy create more severe challenges for load balancing (i.e., providing power when wind and sun conditions are low or nonexistent).
- **Electricity load balancing**. Load balancing becomes a more critical emissions issue over time with increased electrification and increased use of intermittent renewable energy sources. At present, the most feasible load balancing source is natural gas, but as a fossil fuel, increased use of natural gas will frustrate emission reduction goals in time. Zero emissions load balancing (ZELB) technologies include electricity storage, flexible demand management, and possibly other strategies. Greenblatt and Long did not analyze the likelihood of achieving any particular technology for accomplishing ZELB, and this issue clearly deserved further study.
- **Biomass fuel supply**. For transportation and stationary uses that cannot be electrified, Greenblatt and Long state that a substantial increase of biomass-produced fuels will be needed. They estimate that perhaps 13 to 42% of the median supply needed could be met from California waste products, crop residues, and use of marginal lands with the remainder from out-of-state and out-of-country sources. The authors note there is substantial uncertainty as to the worldwide supply of biomass fuels; there is also uncertainty in calculating GHG intensities for biofuels.

In analyzing what would be needed to achieve a level 80% below 1990 levels, Greenblatt and Long examined more radical measures beyond those discussed above in the 60% scenario. They list the following ten strategies that could reduce emissions by 80%.

- Develop the technology to make carbon capture and sequestration (CCS) 100% effective and economical.
- Eliminate fossil fuels with CCS from the electricity mix, and rely only on nuclear energy, renewable energy, or a combination of these sources for making electricity.
- Increase the amount of load balancing that is achieved without emissions from 50% to 100%.
- Produce biomass with net zero carbon emissions by eliminating net emissions from land use change.
- Reduce energy demand through ubiquitous behavior change.
- Produce hydrogen fuel (from coal with CCS) and use it to reduce fuel and electricity use.
- Burn all domestic biomass with CCS to make electricity with net negative GHG emissions, creating an offset for the required fossil fuel use.
- Increase the supply of sustainable biomass twofold, and use it to make low-carbon biofuels, using feedstocks that best fit efficient conversion to the needed energy mix.

- Gasify coal and biomass together with CCS, and use it to make low-carbon fuels plus some electricity.
- Using CCS, convert biomass to fuels (plus some electricity) with net negative GHG emissions, creating an offset for the required fossil fuel use.

Only the last three strategies are sufficient, on their own, to achieve the 80% reduction target (on top of the 60% measures). There are myriad theoretical combinations that could achieve the 80% reduction target. The authors stress that "the challenges are great for implementing even one of these strategies, let alone several." As an example of the magnitude of challenges, the authors note that "It is possible to conceive of biomass-derived energy without disastrous impacts on food supply, if the biomass for energy production is limited to marginal lands, wastes and off-season cover crops, but this is not something to take for granted." Another example of challenges the authors describe is that "the widespread availability of CCS is not a foregone conclusion; much development work remains to be done." The reader is referred to the Greenblatt and Long (2012) paper as well as other long-range analyses in this field (such as Williams et al. 2012; Yang et al., 2008; and CCST 2011) for further details.

As should be evident from this review above, the changes needed statewide are substantial and severe and would represent fundamental change in California's energy system—many of which are outside the jurisdiction of individual cities like Stockton.

While a significant impact can be disclosed at this time for 2050 GHG emissions associated with the General Plan buildout, this EIR does not identify mitigation to reduce this impact because doing so at this time is subject to numerous uncertainties and difficulties that make such an analysis premature and speculative given the lack of any statewide planning to reduce 2050 emissions on a broader level. These challenges are discussed below.

- **Long-term emissions forecasting speculation**. Although a very rough estimate of 2050 emissions was presented above, forecasting for a point nearly 40 years in the future is fraught with issues and large margins of error. One only need to look at the pre-2008 population, housing, and economic forecasts compared to actual events and current forecasts to understand how profoundly socioeconomic forecasts can change. More accurate forecasting to 2050 requires numerous assumptions to be made about the energy and transportation systems related to the project's energy use and related GHG emissions—for example, how GHG-intensive will electricity be, what will energy prices be, and what will the regional transportation network look like? Assumptions must also be made about technology—what kinds of vehicles will be available, what kinds of transportation fuels will be readily available, what will be the feasibility of project-level renewable energy? Per PRC Section 210802.2(c), speculation does not constitute substantial evidence for the purposes of determining whether a project may have a significant effect on the environment. As result, although a significant effect was identified in this SEIR as a conservative approach, the actual level of this impact is highly speculative at this time.
- **Regulatory uncertainty**. With the passage of AB 32, a clear framework of analysis was established that eventually became the basis for significance determination under CEQA and for the establishment of reduction goals for climate action plans. The development of California's plan to achieve 2020 reduction targets provided a critical context by which to understand how the GHG emissions of local projects and plans fit into the picture overall No such clarity exists for 2050 since there are no actual plans for achieving 2050 reduction targets (ES S-03-05 is a goal—not a plan). A local or regional CEQA lead agency is left to its own guesses as to what the State or

federal government may (or may not) implement to achieve a 2050 reduction goal. Current CEQA practice is dependent on analysis of consistency with AB 32 (either directly through a significance threshold or indirectly through consistency with a climate action plan with an AB 32–consistent reduction target).

- **Significance determination**. The "zero threshold" approach that any new GHG emission results in a cumulatively considerably impact has been rejected by nearly all CEQA lead agencies and practitioners. Instead current CEQA analyses are examining project GHG emissions in the context of their potential to adversely affect the State's ability to meet AB 32 for 2020. That is feasible given that lead agencies can evaluate the State's plan to implement AB 32 for 2020 and can evaluate their jurisdiction's contributions to GHG emissions and identify the amount of reduction needed on a local level that would then meet the AB 32 goal using the combined effect of State and local action. It would be speculative (as defined by CEQA) to predict the impacts of a State or federal action to 2050—accordingly, one cannot complete such a gap analysis for 2050 and determine the city's target for local actions for 2050.
- **Mitigation fair-share determination**. Setting aside the challenges with forecasting, regulatory uncertainty, and significance determination described above, it is speculative and problematic to determine the fair-share mitigation level for 2050 at this time Constitutional limitations (*Nollan*, *Dolan*, etc.) mandate that mitigation must be proportional to the project's level of impact. In the case of a cumulative impact, mitigation must be proportional to a project's contribution to a cumulative impact. As noted above, absent a real state plan to reduce emissions for 2050, it is hard to see how a local or regional plan or project can fairly be assigned approximately 90% of the mitigation burden and still be called proportional. Stockton would be flying blind if it were to speculate what its local fair-share would be at this time and would risk unduly burdening the citizens and businesses in Stockton with disproportionate mitigation responsibilities were it to impose additional mitigation beyond 2020 at this time.
- **Mitigation feasibility**. In addition to the fair-share mitigation issue is a question of mitigation feasibility. Technically, there are numerous ways to reduce GHG emissions for new development (as described in Greenblatt and Long 2012, as summarized above, as well as many other methods). But there are also severe technical challenges to fully achieving substantial emissions reduction. Further, the feasibility to achieve substantial reductions on the order of 90% through local action only is questionable given limitations on local municipality authority. No city or county is an island completely autonomous in matters of energy and transportation systems. While a municipality can influence certain matters, many decisions about the electricity and transportation systems are under the control of the State and federal government and/or are controlled by market determinations. Even if offsets are included to overcome potential local mitigation limitations, offset purchases would impose additional substantive costs. Although CEQA allows for financial considerations to be a factor in feasibility determinations, in practice mitigation has to be prohibitively expensive and/or materially affect the viability of a project in order for a financial justification for infeasibility to be upheld. But when one thinks of requiring projects to build the houses, commercial buildings, and industries to a 2050 standard and to use the hitherto unknown vehicles and fuels of 2050 in order to mitigate GHG emissions today, it can be concluded that burdening current development would be such an economic shock and would represent such a departure from current financial realities, that it is considered impractical and infeasible to develop and impose such burdens.

The draft CAP commits the City to continuing climate action planning for the years after 2020, including to 2050. Thus, it is possible that federal, State, and local action combined may actually be

able to feasibly reduce GHG emissions by 2050 to levels sufficient to match the global effort needed to achieve climate stabilization goals. However, this cannot be known at this time for the reasons noted above, and primarily due to the lack of any actual State or federal plan to meet post-2020 and 2050 goals. Furthermore, it is premature and speculative to impose additional mitigation on Stockton residents and businesses for post-2020 impacts given the impossibility of being able to adequately determine Stockton's fair-share emissions reduction burden and thus to determine fair-share mitigation levels. As such, this impact is identified as significant and unavoidable.

Impact CC-3: Development allowed by the General Plan, as modified by the Proposed Project, would subject property and persons to otherwise avoidable physical harm in light of inevitable climate change.

As noted above, in light of the *Ballona Wetlands* appellate court ruling, current CEQA court precedent has indicated that analysis of the impact of the environment on a project, including the effects of climate change, may not be required. Nevertheless, this SEIR has taken a conservative approach by completing this analysis. The City reserves the right to argue whether such analysis is or is not actually required by CEQA, should this issue be legally challenged in relation to this SEIR.

The GPEIR did not analyze the impacts of climate change on the city or on future development in the city. This SEIR analysis addressed the impacts of climate change on the city and future development overall and also identifies whether the Proposed Project (CAP and Transit Plan/Program) would help to reduce or exacerbate the City's resiliency to climate change effects.

As discussed above, several adverse environmental effects are projected to impact California over the next century as a result of global climate change. The extent of these effects is still being defined as climate modeling tools become more refined. Potential climate change effects on Stockton are discussed by SEIR resource area and are based on the California Natural Resources Agency (2009) climate adaptation guidance. When appropriate, certain resource areas have been combined to facilitate a more comprehensive discussion of climate change impacts. Note that the GHG reduction measures proposed in the CAP will increase the City's resiliency and ability to adapt to changing climatic conditions. Resiliency benefits provided by the CAP are also discussed below.

Table 14-10 summarizes the most anticipated climate change effects for each SEIR resource area. It is important to note that climate change effects are inherently interrelated and are difficult to examine in isolation. For example, an increase in ambient air temperature will lead to increases in surface water temperature. Also note that an "X" could justifiably be entered into every cell in Table 14-10. For instance, increased soil temperature may indirectly influence transportation in a way that is not immediately apparent. However, the purpose of Table 14-10 is to identify only those effects with a clear, non-speculative nexus between climate change and each resource area.

Table 14-10. Potential Climate Change Effects by SEIR Resource Area

	Potential Climate Change Effect																
SEIR Resource Area(s)	Increased air temperature	Increased water temperature	Increased soil temperature	Reduced precipitation/ runoff volumes	Shift from snowfall to rainfall	Early snowmelt	Increased evapotranspiration	Increased frequency/severity of flood events	Increased frequency/severity of droughts	Increased frequency of extreme heat events	Changes in erosion/ sedimentation rates	Decreased species populations and quality of species habitat	Changes in species geographic range/distribution	Spreading of pests and vector-borne diseases	Increased fire risk	Increased atmospheric CO_2 concentrations and acidification
Land Use/Housing/Community Design	X		X					X							X	
Economic Development	X		X	X				X	X	X		X		X	X	
Transportation and Circulation								X		X						
Public Facilities and Services	X	X	X	X	X	X	X	X	X	X	X			X	X	X
Recreation and Waterways	X			X		X		X	X	X			X		X	
Health and Safety/Youth and Education	X			X	X			X	X	X				X	X	X
Natural and Cultural Resources	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

CO_2 = carbon dioxide.

Potential Climate Change Effects on the Proposed Project and City of Stockton

Land Use/Housing/Community Design

Local and regional changes in climate may affect future land uses and development patterns in the city. More specific climate change effects on land use, housing, and community design in Stockton are listed below.

- **Increased air temperatures.** Changes in air temperature can increase soil temperatures (Pregitzer and King 2005) and affect land use patterns. Increased air temperatures may also affect where people decide to live and work. Quality of existing and proposed open and recreational spaces may be reduced as a result of hot temperatures. With regard to agricultural land uses, increased air temperatures could make existing agriculture lands no longer viable and/or could affect crop selection.
- **Increased soil temperatures**. Changes in soil temperatures could alter oxidation rates, resulting in subsidence and damage to existing residential, commercial, and industrial land uses. Increased soil temperatures could also have an impact on carbon sequestration and net GHG emissions from soil and vegetation in the city and damage agricultural lands and urban forests and street trees.
- **Increased frequency/severity of flood events.** Frequent and severe flooding threatens existing and proposed development. Increasing urbanization in high-risk areas could result in more flood damage and require additional flood protection. Inundation could also threaten agricultural and other land uses.
- **Increased fire risk.** The increased risk of fires poses a threat to existing infrastructure. Increased fire risk could also affect the long-term viability of all land uses within the city (Moser et al. 2009).

Economic Development

Stockton and the San Joaquin County region support several productive industries, including agriculture, transportation and distribution, health services, and tourism. Changes in environmental conditions may increase the cost of providing goods and services, which could hinder local economic development by constraining growth and limiting money available for other community needs. More specific climate change effects on economic development in Stockton are listed below.

- **Increased air temperatures.** Warmer air temperatures may increase the need for air conditioners and increase associated energy costs. Likewise, increases in water demand for cooling may increase the cost of water supplies. Rising energy costs could reduce household discretionary income, which could negatively affect local businesses in the city.
- **Increased soil temperatures.** Increases in soil temperatures could make existing agricultural lands no longer viable and could affect crop selection. Changes in crop yields and crop timing may affect the availability of crops for selling in the local and regional economy.
- **Increased frequency and severity of flood events.** Increased costs for flood protection (e.g., emergency response, levee construction/maintenance) may hinder the economy. Flooding could also render some areas uninhabitable and result in decay, blight, decline in community character, and associated economic effects.

- **Increased frequency and severity of droughts.** Increased drought may damage agricultural productivity and recreational resources, reducing crop sales and tourism rates, respectively. Increased drought could also result in a decrease in population and employment, along with associated economic effects. Drought could also increase food and/or water costs.
- **Increased frequency of extreme heat events.** Extreme heat events may damage agricultural productivity and recreational resources, reducing crop sales and tourism rates, respectively. These economic effects, in addition to potential increases in energy costs, could also affect the desirability of living in heat-affected areas. (Shonkoff 2009.)
- **Decreased species populations and quality of species habitat.** Changes in species populations as a result of climate change may affect tourism and recreational income.
- **Spreading of pests and vector-borne diseases.** The increase in pests and vector-borne diseases may increase costs for hospital, healthcare, and vector-control activities. This effect could also lead to a decrease in economic activity, particularly associated with recreation.
- **Increased fire risk.** The increased frequency and severity of fires may result in increased costs for fire protection and emergency response services as well. This effect could also lead to a decrease in population, housing, and employment, along with associated economic effects, as well as a potential reduction in economic activity.

Transportation and Circulation

Stockton is a multi-modal center for the San Joaquin Valley, providing access to all major travel forms of transportation, including highways, transit, railways, marine, and air transport systems. The primary transportation modes are automobile and truck, although the city does have an active marina and bicycle/pedestrian network. Increases in extreme heat and flood events may reduce the efficiency of the existing transportation system. More specific climate change effects on transportation and circulation in Stockton are listed below.

- **Increased frequency and severity of flood events.** Increased flooding can temporarily block roadways for emergency response and access to residential homes and businesses. During these times, access and mobility could be temporarily reduced (California Department of Water Resources 2010).
- **Increased frequency of extreme heat events.** Increases in the number and severity of extreme heat events may prevent some individuals from utilizing the bicycle and pedestrian network. Mode shifts to motor vehicles could contribute to increased short-term congestion and reduce the efficiency of the transportation network.

Public Facilities and Services

Changes in environmental conditions as a result of climate change may affect the City's ability to provide public facilities and services. More specific climate change effects in Stockton are listed below.

- **Increased air temperatures.** Increased air temperatures will naturally lead to increased water temperatures (Clarke et al. 2008). Likewise, increased air temperatures may increase evaporation, which could lead to more precipitation (Intergovernmental Panel on Climate Change 2007a). Greater variability in water supplies may lead to periods of high or low ground- and surface water levels, which could affect water supply and distribution (Singh and Kumar 2010). Changing energy demand for cooling may also become more pronounced with increased

air temperatures, causing stresses on electrical infrastructure and potentially power loss for some residents, businesses, and public services (California Climate Action Team 2009). Additional pressure may also be placed on law enforcement and fire protection in the event of increased fire risk.

- **Increased water temperatures.** Increased water temperatures can alter reservoir levels and may reduce the available water supply. Changes in water levels may affect water supply and distribution to city residents and businesses.
- **Increased soil temperatures.** Changes in soil temperature may lengthen the growing season and increase soil evaporation rates (U.S. Environmental Protection Agency 2011). Agricultural demand for water may therefore increase as a result of climate change.
- **Reduced precipitation and runoff volumes.** Long-term reductions in precipitation and runoff may reduce the water supplies throughout the City (Water Research Foundation 2009; Intergovernmental Panel on Climate Change 2008).
- **Shift from snowfall to rainfall.** A shift from snowfall to rainfall (and earlier snowmelt) will likely result in reduced water supplies because of reduced maximum water storage in reservoirs (Ralph 2011). More of the rainfall and early snowmelt will be released to maintain flood control storage apace. Reduced inflow during the summer months, coupled with increased water demand for agriculture, could further strain the regional water supply systems.
- **Increased evapotranspiration.** Increased evapotranspiration will increase the water demand for crops and vegetation (note that water use efficiency may increase at higher atmospheric CO_2 which could partially offset increased evapotranspiration) (Anderson et al. 2008). Agricultural demand for water may therefore increase as a result of climate change (California Climate Action Team 2009). Increased evaporation may also reduce available water supplies.
- **Increased frequency and severity of flood events.** Increased flooding will likely result in a greater need for emergency response, hospitals, and healthcare services. Severe floods events may also damage public service infrastructure, which would decrease the ability of service providers to deliver treatment to those in need during a flood event. Regional flood events may also compromise existing reservoir infrastructure (California Department of Water Resources 2008), reducing available water supplies.
- **Increased frequency and severity of droughts.** Increased drought will likely result in a greater need for emergency response, hospital, and healthcare services. Drought will also increase the water demands for all users the city.
- **Increased frequency and intensity of extreme heat events.** Increased heat stress events will likely result in a greater need for emergency response, hospital, and healthcare services, placing stress on existing resources and potentially preventing residents in need from receiving care. Extreme heat events could also increase the water demands for all users the city.
- **Changes in erosion and sedimentation rates.** Erosion from flooding could lead to increased sedimentation in water reservoirs, reducing the quality and quantity of available water supplies to the city.
- **Spreading of pests and vector-borne diseases.** Increased incidence of vector-borne diseases will likely result in a greater need for emergency response, hospital, and healthcare services.
- **Increased frequency and intensity of wildfires.** Increase risk of wildfire will likely result in a greater need for emergency fire response, hospital, and healthcare services, placing stress on

existing resources and potentially preventing residents in need from receiving care. Depending on the fire location, wildfires may also damage public facilities and place stress on available water resources.

- **Increased atmospheric CO_2 concentrations and acidification.** Increasing acidification of rainfall may change the water quality through other chemical interactions (e.g., increased dissolution processes).

Recreation and Waterways

Potential changes in climate could affect the recreational opportunities and make outdoor activities less desirable. More specific climate change effects on recreation in Stockton are listed below.

- **Increased air temperatures.** Increases in air temperature could reduce the desirability of outdoor recreational activities.
- **Reduced precipitation and runoff volume.** Reduced precipitation and runoff may lower surface water levels. Decreased water levels and river flows will reduce opportunities for water activities. Reduced water levels may also affect regional fish populations and increase restrictions on fishing (California Climate Change Center 2009).
- **Early snowmelt.** Early snowmelt may alter stream flows in San Joaquin County, affecting recreational water opportunities (California Climate Change Center 2009).
- **Increased frequency and severity of flood events.** Extreme flood events could damage recreational infrastructure, such as docks. Sporting fields and trails may also become inundated and unavailable for use.
- **Increased frequency and severity of droughts.** Increased drought will reduce water supplies, thereby affecting opportunities for water activities. Reduced water levels may also affect fish populations and increase restrictions on fishing (California Climate Change Center 2009).
- **Increased frequency of extreme heat events.** Extreme heat events may reduce the desirability of outdoor recreational activities.
- **Changes in species geographic range and distribution.** Habitat changes may reduce bird or other wildlife viewing in certain parts of the city.
- **Increased fire risk.** Increased fire frequency and severity may reduce wildlife habitat and quality, which may reduce the desire for wildlife viewing and other activities in the city (California Department of Emergency Management and California Natural Resources Agency 2012).

Health and Safety

Potential changes in climate may affect the provision of health, safety, and educational opportunities within the city. More specific climate change effects on health and safety within in Stockton are listed below.

- **Increased air temperatures.** Increased temperatures and changes in regional air circulation patterns can result in elevated concentrations of criteria and toxic air pollutants, resulting in diminished air quality. A decline in air quality may increase asthma and related health problems; increases in allergenic plant pollen may increase allergy risks. Increased fires may also compromise respiratory health.

- **Increased frequency and severity of flood events.** Flooding can directly threaten the safety of persons and property within the city (California Emergency Management Agency et al. 2012). Flood events could also cause ruptures to existing electrical and natural gas transmission and hazardous waste facilities.
- **Increased frequency and severity of droughts.** Increased frequency and severity of droughts may result in the detriment of public health (IPCC 2008).
- **Increased frequency of extreme heat events.** Extreme heat events can result in temperature inversions and elevated concentrations of criteria and toxic air pollutants. More frequent and/or severe heat waves may increase heat-related mortality and illness. Extreme heat events may also increase the volatility of certain hazardous chemicals.
- **Spreading of pests and vector-borne diseases.** More frequent flooding may result in increased habitat for pests and vectors and increase human exposure to vector-borne disease.
- **Increased fire risk.** Increased fire risk is a threat to public safety.
- **Increased atmospheric CO_2 concentrations and acidification**. Increased CO_2 concentrations in the atmosphere can change photochemical reaction rates and affect air quality.

Natural and Cultural Resources

Stockton's rich and diverse history has created a wealth of natural, cultural, and historic resources within the city. The General Plan identifies specific areas of natural and cultural importance, including hydrology, biological, cultural, agricultural, soil, scenic, mineral, and energy resources. Protecting these resources for current and future generations is a priority for the City. Specific climate change effects on natural and cultural resources within in Stockton are listed below.

- **Increased air temperatures**. Warmer air temperatures may increase soil temperatures, which could reduce crop yields for sensitive crops. Changes in wintertime temperatures also threaten the proliferation of pests, outbreak of diseases, and the overall quality and quantity of crops. To the extent that increased air temperature also results in higher levels of evapotranspiration, crops may demand more water which, if unavailable, would result in lower yields. A loss of winter chilling days, which are needed for successful production on some crops, may also be affected by increased air temperature (Moser et al. 2009). With respect to visual and mineral resources, increased air temperatures may result in drier vegetation, reduced hydrology, and diminished natural landscapes. Such increases may also worsen air quality, producing haze that reduces the visual quality of landscapes. Biological resources would also be affected by changed in ambient air temperatures, vegetation, and hydrology.
- **Increase in soil temperatures.** Changes in soil temperature and moisture conditions can affect soil biochemical processes. Increased soil temperatures can cause increases in soil composition and resulting subsidence may degrade the quality of agricultural land use. In turn, increased rates of subsidence create more pressure on levees protecting agricultural lands from inundation, which would carry lasting effects for the viability of agricultural uses. Increased soil temperature could also damage sensitive cultural artifacts and negatively affect biological resources and other resources.
- **Reduced precipitation and runoff volume.** Changes in precipitation may reduce water availability, reducing agricultural productivity and changing stream conditions for aquatic and other biological resources.

- **Increased evapotranspiration.** Increased evapotranspiration can alter soil chemistry and reduce the amount of water available to crops and vegetation. Agricultural and landscaping demand for water may therefore increase as a result of climate change (Craufurd and Wheeler 2009).
- **Increased frequency and severity of flood events.** Flooding may accelerate soil erosion (i.e., scour) or cause sediment to be deposited (California Energy Commission 2003). Where the sediment is deposited in subsided areas, the sediment may compensate to a minor degree for the subsidence. Soil organic matter decomposition rates and therefore subsidence will be slowed in areas that are flooded. If the frequency and magnitude of flooding increase sufficiently, important soil processes such as organic matter oxidation and reduction could be affected (De-Campos et al. 2009). More frequent and larger flood events are also likely to damage cropland and structures. Increased frequency and severity of floods may also inundate landscapes of previous aesthetic appeal, important cultural and historic resources, and biological resources.
- **Increased frequency and severity of droughts.** Drought may alter soil chemistry, reducing the fertility of soils in the study area. It may also affect important soil processes such as organic matter oxidation and reduction. Severe droughts will also likely compromise agricultural water supplies. Increased frequency and severity of droughts may also expose cultural or paleontological resources that were previously inundated or underground (e.g., burial grounds). Drought could also affect the abundance and range of biological resources that may or may not be well-adapted to more extended drought conditions.
- **Increased frequency of extreme heat events.** Extreme heat events will likely increase mortality for agricultural crops and may adversely affect species most sensitive to temperature change. Extreme heat events may also produce haze that reduces the visual quality of landscapes.
- **Changes in species geographic range and distribution.** A change in vegetation growth and species diversity may reduce the biological values of healthy ecosystems.
- **Increased fire risk.** The increased occurrence and severity of fires can damage or destroy existing crop fields and infrastructure (IPCC 2008). Increased fire damage may also leave landscapes charred and barren, a condition often considered to reduce visual character. Fires could also damage or destroy existing historic resources in the city.
- **Increased atmospheric CO_2 concentrations and acidification.** Increasing acidification of water may alter soil chemistry. It may also affect important soil processes such as organic matter oxidation and reduction. Sensitive cultural artifacts and other resources could also be damaged by water acidification. Also, cultural resources may be damaged by altered soil chemistry arising from water acidification and changes to the pH of rainwater.

GHG reduction measures proposed in the CAP will increase the City's resiliency and ability to adapt to changing climatic conditions. In particular, the CAP includes energy efficiency and renewable energy measures that will reduce fossil fuel consumption and potentially buffer partially the City from future spikes in energy prices and demand. Water conservation measures (included in the CAP) will also reduce the City's reliance on diminishing water supplies influenced by changing precipitation levels and temperature. Land use and transportation measures (including the Transit Plan/Program) that promote alternative vehicles and non-motorized forms of travel may improve local air quality. Likewise, cool roofs and urban forestry practices that may implemented as part of

the Development Review Process may help reduce urban heat island and ambient temperatures within the heavily urbanized portions of the city.

Based on the anticipated resiliency benefits identified above, implementation of the CAP is not expected to increase the severity or intensity of risk associated with climate change. Rather, the project will likely contribute to overall climate preparedness. Although CAP measure Trans-1 would result in additional development of housing in Stockton by buildout, because the CAP would result in more efficient development in the city, the additional new development as well as the city as a whole would be better prepared to face climate change effects than without the CAP. Accordingly, the Proposed Project's impact would be less than significant.

However, because the original GPEIR did not address climate change resiliency for General Plan buildout overall, without further mitigation, development allowed under the General Plan—as well as existing development—could subject to people and property to otherwise avoidable physical harm related to sea level rise, flooding, agriculture, public health, and natural ecosystems. A certain amount of environmental change is inevitable due to current and unavoidable future increases in GHG emissions worldwide. The extent of such change on a local basis to water supplies, flooding, natural ecosystems, and environmental health, and other areas is not fully understood at present, but is expected in the long-term to be substantial and significant. Mitigation Measure CC-1 is recommended for implementation by the City to promote adaptation planning as integral part of advance planning. With implementation of Mitigation Measure CC-1, new development and the city overall will be more resilient to these inevitable changes and would avoid additional physical harm to persons and property resultant from climate change effects. Thus, with mitigation, buildout allowed under the General Plan would not make a considerable contribution to a cumulative impact related to adaptation to climate change effects and impacts would be less than significant.

Mitigation Measure CC-1: Develop and implement a Climate Adaptation Plan for the City of Stockton

Stockton shall prepare and implement a Climate Adaptation Plan to prepare proactively for the impacts of climate change to the City's economy and natural ecosystems and to promote a climate resilient community.

Two useful guides to climate resiliency planning include *Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments* (The Climate Impacts Group and ICLEI—Local Governments for Sustainability 2007) and the *California Adaptation Planning Guide: Planning for Adaptive Communities* (California Emergency Management Agency and California Natural Resources Agency 2012). These documents present the following general steps.

- Scope the climate change impacts to major city sectors, and build and maintain support among stakeholders to prepare for climate change.
- Establish a climate change adaptation team.
- Identify planning areas relevant to climate change impacts.
- Conduct a vulnerability assessment based on climate change projections for the region, the sensitivity of planning areas to climate change impacts, and the ability of communities to adapt to climate change impacts.
- Conduct a risk assessment based on the consequences, magnitude, and probability of climate change impacts, as well as on an evaluation of risk tolerance and community values.

- Establish a vision and guiding principles for climate-resilient communities, and set preparedness goals in priority planning areas based on these guiding principles.
- Develop, select, and prioritize possible preparedness actions.
- Identify a list of important implementation tools.
- Develop an understanding of how to manage risk and uncertainty in the planning effort.
- Develop measures of resilience, and use these to track the results of actions over time.
- Review assumptions and other essential information to ensure that planning remains relevant to the most salient climate change impacts.
- Update plans regularly.

Potential areas of emphasis for preparedness planning in the early phases, which would benefit the city in the more near-term, include assessing the potential for flooding and sea level rise, changes in water supply over time, and preparing for protection of vulnerable population during extreme heat events and days of substantially impaired air quality.

Potential implementation steps could include adopting land use designations that restrict or prohibit development in areas that may be more severely impacted by climate change (e.g., areas that are at high risk of flooding); adoption of programs for the purchase or transfer of development rights in high-risk areas to receiving areas of equal or greater value; and support for agricultural research on locally changing climate conditions.

To be effective, adaptation planning needs to be an ongoing commitment of the City. The first plan will be completed no later than 5 years after the adoption of the CAP will be updated at least every 5 years thereafter, and will be comprehensively reviewed and update during any future comprehensive General Plan update.

Chapter 15
Alternatives

Alternatives Development

The Proposed Project includes the Climate Action Plan and the Transit Plan/Program. As allowed by CEQA, an EIR only needs to analyze alternatives that are feasible, that meet most of the project objectives, and that reduce one or more significant impacts of the Proposed Project. Thus it is important to establish the project objectives and also to profile the significant impacts of the Proposed Project.

Project Objectives

As described in Chapter 2, Project Description, the key objectives for the Climate Action Plan and the Transit Plan/Program include the following:

- Result in GHG reductions that consistent with AB 32.
    - As described in the Draft Climate Action Plan, for Stockton this level has been defined as approximately 10% below 2005 levels by 2020.
    - Fulfill the requirements of General Plan Policy HS-4.20.
- General consistency with the land use policy direction in the adopted General Plan with the exception of the downtown area and accommodation of approximately the same amount of growth as the adopted General Plan.
- Consistency with the Settlement Agreement, including the following:
    - Result in a rate of VMT growth less than the rate of population growth; and
    - Promote increased residential development in the GDSA.
- Allow for economic growth in the City to support improvement in the City's financial picture and economic opportunity for the City's residents and businesses.

The key objectives for the Transit Plan/Program include the following:

- improving the public transit network;
- eliminate potential last mile barriers that keep people from using transit;
- adopting transit-supportive policies; and
- identifying long-term funding solutions to support the existing and future transit system and transit-oriented development.

Project Features

The Climate Action Plan seeks to reduce GHG emissions through the following approaches:

- Building Energy Emissions reduction strategies include:

  - increasing energy efficiency (including lighting) in existing and new development and at the City's wastewater treatment facility; and
  - Increasing use of solar energy.
- Transportation Emissions reduction strategies include:
  - increasing residential development in the GDSA and mixed used development in order to promote reduction in VMT;
  - changing downtown parking policies to incentivize changes in driving behavior;
  - increasing transit use;
  - improving efficiency of goods movement;
  - promoting non-motorized travel;
  - promoting safe routes to school; and
  - transportation demand management.
- Other Emission Sector reduction strategies include:
  - reducing landfill emissions by reducing waste sent to landfills through waste minimization and diversion:
  - reducing water-related emissions promoting efficient water use;
  - planting urban trees to sequester carbon and provide shade to help reduce building energy emissions;
  - reducing high GWP gas emissions through promoting responsible disposal of consumer products containing high GWP gases; and
  - reducing emissions of offroad equipment and vehicles by reducing idling times and promoting alternative fueled vehicles.

The Transit Plan/Program includes the following transportation improvements[1]:

- The transit Improvements will require San Joaquin RTD implementation:
  - Serving outlying Villages with traditional local bus routes that connect to Rapid Bus routes.
  - Arch-Sperry Corridor Project providing roadway connection between the San Joaquin County Hospital Area and the airport will help improve bus routes in this portion of Stockton.
  - West/Airport BRT between Eight Mile Road and Downtown Stockton.
  - Combining Routes 51 and 52 to provide greater frequency along shared alignment and an increase in frequency on Route 55.
- Car Sharing and Information Services:

[1] As described in Chapter 2, Project Description, the Transit Plan/Program also includes preliminary policy recommendations, but these require further development and will be considered separately from this SEIR. The Plan/program also identifies funding sources for the above improvements, but funding would not result in additional environmental impact beyond those of the physical improvements noted above.

- Low-cost peer-to-peer car sharing program to provide a low-cost and convenient way for people to get access to an automobile.
- Working with San Joaquin RTD and SJCOG to Increase transit/transportation information available to potential transit passengers tied in to SJCOG's existing Commute Connection program.

Summary of Impacts of the Proposed Project

The impact analysis is presented in the remainder of this SEIR and summarized in Table ES-1. As discussed therein, the impacts of the CAP and the Transit Plan/Program include the following (impacts increased by the project compared to the adopted GP are noted in **bold**).

- *Land Use*:
  - The project would result in more residents within the area of influence of the Airport Land Use Plan but outside of the most restrictive zones and existing requirements of the airport land use plan applied to any new residential development would avoid any substantial new impacts relative to the airport land use plan.
  - The project would not divide an established community or conflict with the San Joaquin MSCP.
- *Transportation and Circulation:*
  - **The project could result in localized worsened traffic conditions in the downtown area due to increased residential growth in the downtown area.**
  - The project will reduce city-wide and regional traffic by promoting reduced VMT compared to the adopted General Plan.
- *Public Facilities and Services:*
  - Water and Wastewater - The project would result in increased residents in the downtown area which will incrementally increase demand for water and wastewater treatment facilities, but this increase would be offset to some degree by lowered water use due to water measures in the CAP and the increase in buildout would only be 0.2 to 0.6% over that with the current General Plan, and would not represent a significant increase in impacts to water and wastewater.
  - Other Services/Facilities - The increased residential development resultant from the project would also result in a limited increase demands for police, fire, school, and library services, however given the scale of the buildout increase, this is not considered a significant increase in demand for services/facilities compared to that disclosed in the GPEIR.
  - Water Quality - The Proposed Project could change the character of development in the GDSA from industrial to residential which is unlikely to increase the amount of contaminated runoff from stormwater with application of all state water quality requirements.
  - Flooding - The Proposed Project would not substantially change drainage patterns as the new residential development in the GDSA is mostly previously altered already and would have been developed for primarily industrial use in the existing General Plan. The Proposed Project would place more residential development in the GDSA which has some areas within

the existing 100-year flood plain but existing General Plan policies would require floodproofing to avoid any substantial risk to new residents such that the project is not expected to result in increased impacts. **The project would place more residential development in an area subject to flooding due to levee failures.**

- Solid Waste—The project is expected to result in a reduction of waste generation and thus a reduction in demand for landfill capacity.
- Energy Infrastructure—The project is expected to result in a reduction in energy demand and thus result in a reduced demand for energy infrastructure.

- *Recreation and Waterways*: The increased residential development resultant from the project could also increase use and demand for recreational parks and facilities but the incremental demand due to new residents is considered a less than significant increase in park demand and use relative to that disclosed in the GPEIR.
- *Health and Safety*:
  - Noise and Vibration—The project is not expected to result in changes in the level of impacts related to noise and vibration, geology and soils, hazardous materials and waste, emergency response or fire hazards considering implementation of all policies in the General Plan and mitigation measures in the GPEIR.
  - Air Quality—It is likely that any emissions increases associated with downtown infill would be offset by emissions reductions achieved by policies outlined in the CAP. The Proposed Project's encouragement of public transit over personal vehicle use and the concentration of new development proximate to downtown, commercial corridors, and public transit would reduce vehicle trips and air pollutant emissions.
- *Natural and Cultural Resources*
  - **Biological Resources—The project would not increase impacts of development above that for the adopted General Plan except in relation to solar roofs which could increase potential conflicts with local tree preservations policies and ordinance.**
  - **Cultural Resources—The Proposed Project would specifically increase residential development in the downtown area where many historic structures are located. Implementation of General Plan policy provisions would reduce impacts on historic resources, but impacts associated with historic resources could be greater than those disclosed in the GPEIR under the Proposed Project.**
  - Impacts to Farmland—The Proposed Project would not increase impacts to farmland compared to the adopted General Plan.
  - **Visual Aesthetics—Increased residential development in the downtown area could change the visual character in the downtown area due to increased residential and mixed use development and have potential adverse visual effects on historic buildings. In addition, solar installations could also affect visual aesthetics and glare.**
- *Greenhouse Gas Emissions and Climate Change*—The Proposed Project would lower GHG emissions for 2020 consistent with state efforts under AB 32. However, City buildout through 2050 would still result in substantial increases in GHG emissions as the state actions and the CAP are focused on meeting a 2020 goal, which is considered a significant and unavoidable impact at this time (see discussion in Chapter 14, *Greenhouse Gas Emissions and Climate Change*).

The City will be considering potential General Plan amendments separately from the CAP and Transit Plan/program to promote downtown infill; depending on the policies developed, some or many of the secondary impacts may be able to be reduced to a less than significant level by the proposed amendments or alternatives. However, that analysis can only be completed at the time such detailed amendments are proposed.

Alternatives Considered

Alternatives were developed considering the nature of improvements included in the Proposed Project and the identified environmental impacts of the Proposed Project as described below.

- Climate Action Plan Alternatives Development:
  - Building Energy Emissions
    - Energy Efficiency —energy efficiency strategies do not result in significant impacts to the environment as they involve different new building and retrofit strategies that are localized to the building site themselves and self-contained in nature (such as higher efficiency windows, appliances, etc.). As such, they do not give rise to alternatives to lower significant environmental impacts. **However, an alternative including expanded energy efficiency strategies is considered because this approach could be used to replace one or more of the other CAP measures that might have secondary environmental impacts.**
    - Renewable Energy—The CAP measures are focused on solar power on rooftops. As described in this SEIR, solar roofs can result in potential impacts to historic buildings, visual aesthetics, glare, and may conflict with local preservation policies. **Thus, two alternatives were considered with less or no solar energy promotion as a means to lower these potential impacts.**
  - Transportation Emissions:
    - Increasing residential development in the GDSA would result in impacts to localized traffic, placement of residences in flood prone areas, impacts to historic buildings, and aesthetic impacts downtown. Alternative that avoided residential development in the GDSA would avoid the impacts, but would not be consistent with the Settlement Agreement and thus don't meet the fundamental objectives of the project. **However, an alternative that would expand density outside the GDSA is considered in this SEIR as a means to achieve GHG reductions that could avoid the need for one or more of the other CAP measures.**
    - Changing downtown parking policies to incentivize changes in driving behavior does not readily give rise to significant environmental impacts and thus no alternatives are considered.
    - Increasing transit use can result in some secondary impacts due to localized noise and air quality along heavy transit routes, but offset the noise and air quality due to a larger amount of vehicular activity. Impacts were considered in relation to the Transit Plan/Program (see discussion below).

- Improving efficiency of goods movement is a CAP measure that the City is already implementing and thus no alternatives are considered for this measure.
- Promoting non-motorized travel may result in local impacts during construction of bike paths and complete streets. However, this measure represents implementation of the City's existing Bicycle Master Plan and thus no alternatives are considered for this measure.
- Promoting safe routes to school would result in local impacts during construction of pedestrian and bicycle paths, sidewalks, and pedestrian crossings. However, given the limited nature of these impacts, no alternatives were considered for this measure in this SEIR.
- Transportation demand management, which can include commuter travel reduction strategies such as telecommuting, alternative work schedules, and workplace support for transit and non-vehicle commutes would not result in significant environmental impacts and thus no alternatives were considered for this measure in this SEIR.

  - Other emission sector reduction strategies include:
    - Waste reduction could require limited recycling or reuse facilities to allow for collection and transfer of larger amounts of diverted waste. Such facilities are limited in scale and can be readily located in existing industrial or commercial areas and as such, no alternatives were considered for this measure in this SEIR.
    - Reducing water-related emissions promoting efficient water use is part of ongoing City efforts at water conservation and supported by numerous state laws (SB X 7-7, etc.) such that alternatives to not reducing water use would be counterproductive to long-standing City and state policy and are thus not considered in this EIR.
    - Planting urban trees and maintaining existing urban trees is a decades long commitment of the City and results in no significant environmental impacts and thus no alternatives are considered for this measure in this EIR.
    - Reducing high GWP gas emissions through promoting responsible disposal of consumer products containing high GWP gases could require minor facilities for the collection of materials and transport to disposal locations. Given the minor nature of impacts of this measure, no alternatives were considered for this measure in this SEIR.
    - Reducing emissions of offroad equipment and vehicles by reducing idling times and promoting alternative fueled vehicles, although they would incur costs for equipment owners, would not result in significant secondary environmental impacts and thus alternatives were not considered in this SEIR for these measures.

- Transit Plan/Program alternatives development:
  - Serving outlying Villages with traditional local bus routes that connect to Rapid Bus routes would lower overall air quality emissions and lower City traffic congestion and thus no alternatives to this Plan element were considered.
  - The Arch-Sperry Corridor Project was previously approved and is currently in construction and thus no alternatives to this Plan element were considered.

- A West/Airport BRT between Eight Mile Road and Downtown Stockton would lower air quality emissions and lower overall City traffic congestion. As such, an alternative to this BRT route was not evaluated in this SEIR due to environmental impact.
- Combining Routes 51 and 52 to provide greater frequency along shared alignment and an increase in frequency on Route 55 would lower air quality emissions overall as well as City traffic congestion and would not result in any significant environmental impacts and thus no alternatives were considered in this EIR.
- Car Sharing and Information Services would not result in any significant environmental impacts and thus no alternatives were considered in this SEIR.
- **Because the environmental impacts of the proposed Transit Plan/Program are considered less than significant, one alternative was evaluated involving a greater amount of transit service overall to evaluate the potential to replace one or more of the other CAP measures that have some environmental impact.**

In order to disclose potential changes in environmental impacts that might occur, the City developed a reasonable range of feasible alternatives that vary some of the key strategies included in the CAP and the Transit Plan/Program while meeting most of the project objectives. The environmental analysis focuses on key impact issues identified for the Proposed Project: downtown traffic, placing residents within areas subject to flooding from levees, impacts to the cultural integrity of downtown historic buildings, impacts to downtown visual character and impacts related to conflicts with local tree preservation policies. The alternatives were also analyzed for the contributions to GHG emissions as well as effect on overall City traffic, since those are primary objectives of the Climate Action Plan and the Transit Plan/Program as well as other environmental subjects. Alternatives to the CAP or the Transit Plan/Program that were considered but dismissed from further analysis are discussed at the end of this Chapter.

Environmental Analysis of Alternatives

The following analysis emphasizes a comparison of the adverse effects of each alternative to those identified for the Proposed Project in order to make a determination of whether an alternative would avoid or substantially lessen any of the significant effects of the Proposed Project. Because each of the action alternatives would include similar policies and would only focus, enhance, or accelerate certain policy areas, no new significant impact categories, not already identified in the discussion of the Proposed Project, are anticipated.

No Project Alternative

This alternative, which is required to be analyzed under CEQA, assumes that the City would not adopt a local Climate Action Plan or a Transit Plan/Program is implemented. The state measures would remain in effect. New development projects would be required to comply with CEQA concerning GHG emissions and thus would still be required to reduce their emissions by 29% compared to unmitigated levels (see discussion in CAP of measure DRP-1). CAP Measure Trans-4 (Goods Movement improvements) would still be implemented as this is an existing initiative of the City. CAP Measure Water-1 would also still be implemented, since this measure is pursuant to a state regulation (SB X7-7). San Joaquin RTD would continue its current operations, but is not assumed to

implement the transportation improvements described above and thus the transit mode share is not expected to be maintained at its current levels (see discussion in the Transit Plan/Program).

The impacts of this alternative would be essentially those identified in the GPEIR for the adopted general plan. The following is a summary of impacts of this alternative relative to the key areas of comparison to the Proposed Project:

- *Traffic:* This alternative would likely result in less traffic in the downtown area because it would have fewer residences in the GDSA than the Proposed Project. However, traffic in the rest of the City and regionally would likely increase due to the lack of improvements in transit and land use initiatives to help reduce VMT.
- *Flooding:* This alternative would place fewer people in areas subject to riverine flooding or flooding related to levee failure than the Proposed Project.
- *Cultural Resources:* This alternative would likely have less development pressure on historic buildings in the downtown area that the Proposed Project that might result in less impacts to historic structures. Impacts to archaeological and paleontological resources would be similar to that of the Proposed Project.
- *Visual Aesthetics:* This alternative would result in less change in visual character of the downtown area and due to new solar panels in the city than the Proposed Project.
- *Air Quality:* This alternative would result in greater air pollution than the Proposed Project because it would only implement a few of the CAP measures that are already mandated and because it would not promote transportation emissions through implementation of the Transit Plan/program. While not calculated, the GHG emission calculations below are a decent proxy for the likely scale of change in air quality emissions (e.g., approximately 3 percent greater emissions without the project).
- *Greenhouse Gas Emissions:* As shown in Table 14-8 in Chapter 14, without the CAP and with only state reduction measures, GHG emissions in Stockton are estimated to be approximately 2,199,000 $MTC0_2e$ in 2010. By applying a 29% reduction to new development and including CAP Measures Trans-4 and Water-1, local reductions could total approximately 18,000 $MTC0_2e$ and the 2020 No Project Emissions would be estimated as approximately 2,181,000 $MTCO_2e$ which would be about 8% below 2005 emissions. This should be short of the City's goal of 10% below 2005 emission and thus the City could not reduce emissions similar to that required at a state level under AB 32.
- *Other Subject Areas:* As discussed in Chapters 3 through 14 in this SEIR, the Proposed Project will result in similar impacts to those discussed in the GPEIR for the adopted General Plan. As such, the No Project and the Proposed Project will have similar impacts for other subject areas not discussed above.
    - *Land Use*: This alternative would have less impact on land use than the Proposed Project as it would not change the General Plan in any way.
    - *Public Facilities and Services*: This alternative would have less impact on public facilities and services related to the downtown area as it would not result in increased residential growth in the downtown area. This alternative would result in higher energy consumption than the Proposed Project, which may result in greater energy infrastructure needs than the Proposed Project and associated secondary effects. However, this alternative would not

include additional solar installations which would lower associated infrastructure for such solar installations relative to the Proposed Project.

- *Recreation and Waterways*: This alternative would have less impact on parks and waterways as it would not result in increased residential growth in the downtown area.
- *Noise and Vibration*: This alternative would have less impact on noise and vibration downtown as it would not result in increased residential growth and associated traffic noise in the downtown area. However, this alternative would result in more traffic in the City overall which would increase traffic noise overall.
- *Biological Resources*: This alternative would have slightly less impact on biological resources as it would not create new bike or pedestrian paths, recycling facilities, or other facilities promoted by the Draft CAP that may have limited impacts on biological resources and would not promote solar roofs which may in certain instances create conflicts with local tree preservation policies.
- *Impacts to Farmland*: This alternative would have the same impact on farmland as the Proposed Project.

Greater Density (CAP Alternative)

Under this alternative, the City would reduce GHG emissions through promotion of greater changes to existing zoning and land use policies to provide for substantially increased levels of high-density and mixed-use development within the city limits, compared to the Proposed Project.

As with the Proposed Project, additional residential development would be concentrated in the GDSA, but this alternative would also promote additional high density along the City's primary public transportation corridors and would restrict further low density development along the City's edge and away from existing transportation corridors. This alternative would be designed such that the growth potential of the City would not be changed but rather the areas of upzoning (increasing density) would be balanced by an equivalent area of downzoning (decreasing density). This alternative would also include an urban limit line to prevent further City annexations and edge development. The Greater Density Alternative would put a greater emphasis on emissions reductions in the transportation emissions sector through a greater reduction of vehicle miles travelled. The exact amount of GHG emissions reductions that could be achieved by this alternative was not identified.

Assuming the GHG reduction target is the same as the Draft CAP, this alternative assumes that the increased reduction in transportation emissions would allow for elimination of at least the two solar promotion measures (Energy-5 and Energy -6). In order to do that, the increased transportation emission reductions would have to be 16,700 $MTCO_2e$ or more, which is approximately 2.5 times greater than that of CAP Measure Trans-1 (assuming the 3,000 unit goal for the GDSA is met by 2020).

This alternative is considered feasible and would meet most of the project objectives, except the objective about general consistency with the policy direction in the adopted General Plan. Given the large-scale land use policy changes in this alternative, there may be substantial concern and controversy about pursuing such an alternative. This would require a major update to the adopted General Plan and a new public debate about the future of land use in Stockton. There could be major opposition to the Plan from landowners with land proposed for downzoning or that is outside the

proposed urban limit line included in this alternative. Whether that opposition and level of controversy would make this alternative politically infeasible is unknown. For this SEIR, the alternative is considered technically feasible.

- *Land Use Compatibility*: This alternative would have substantial land use impacts as it would change allowable densities throughout the City, specifically along existing transportation corridors and at the Cities edge. Although the existing City General Plan does seek to concentrate some development along these corridors and promote some concentration of development in the Villages, this alternative would be far more aggressive in mandating higher densities and reducing low-density development. Thus, this alternative would have greater land use incompatibilities with the existing City land use form and character over time, which would be a significant and unavoidable impact.
- *Traffic*: Through future land use changes for new development and redevelopment beyond what is currently proposed in the General Plan and the Proposed Project, this alternative would result in a greater reduction in vehicle miles traveled compared to the Proposed Project. Though the total length of trips would be reduced, the higher density development in downtown and along transportation corridors has the potential to more greatly increase traffic volumes on local streets compared to the Proposed Project. Therefore, similar to but greater than the Proposed Project, this alternative would result in an unavoidable significant worsening in localized LOS at the benefit of improved traffic conditions outside of the focused growth areas.
- *Flooding*: Given that this alternative would have a lower buildout than the Proposed Project, this alternative would result in a lower number of people and structures subject to levee failure flooding. Impacts related to riverine flooding would be similar to the Proposed Project and existing General Plan.
- *Cultural Resources*: This project has the same potential to affect downtown historic buildings and districts as the Proposed Project but may have more potential to affect other historic buildings where located along transportation corridors targeted for greater density development.
- *Visual Aesthetics*: As with the Proposed Project, this alternative would alter the visual character within the City by increasing development density beyond the levels proposed in the existing General Plan. It may not be feasible to locate all high-density development, which could have increased heights and increased massing, in areas of compatible land use, especially along existing transportation corridors. Increasing the minimum densities of land uses greater than what would be promoted by the Proposed Project would more greatly limit the types of new residential and commercial development as fewer single-family residential properties would be available and commercial and residential uses would be combined in many new developments. This would also have a greater change on portions of the Planning Area character over time to a more urban nature. While solar roofs may be implemented due to private initiative, the City would have no role in promoting solar roofs under this alternative and thus would not promote potential associated visual impacts. This alternative would result in less development on the edge of the City or in its sphere of influence and thus less visual impacts to open space areas. Overall, this alternative would have some areas of greater aesthetic impacts and some areas of less aesthetic impacts. Given that this alternative would accelerate the urbanization of Stockton overall by comparison, it is considered to have a greater change in the visual character of the existing City compared to the Proposed Project but less impacts to the change in visual character of the edge of the City and sphere of influence.

- *Air Quality:* This alternative would likely result in reduced regional air quality emissions similar the Proposed Project as it would reduce GHG emissions by a similar amount. However, this alternative would have relatively lower vehicular emissions than the Proposed Project. Since vehicular emission directly affect air quality in Stockton, whereas some non-vehicular emission sources occur outside of the City (such as electricity generation plants and landfills), this alternative would likely result in lower air quality emissions within the City compared to the Proposed Project.
- *Greenhouse Gas Emissions:* In concept, this alternative could be designed to also meet the City's reduction target and thus would have the same impact as the Proposed Project.
- *Other Subject Areas:* This alternative will likely have similar impacts to the Proposed Project for other subject areas not discussed above.
    - *Public Facilities and Services*: This alternative would have a lower buildout population than the Proposed Project, which would slightly lower the impacts on public facilities and services. Development within the GDSA would be the same as the Proposed Project and thus localized infrastructure impacts would be the same. This alternative would have the same buildout population as the existing General Plan, but development would be more concentrated than with the existing General Plan. Thus, the demand for services that are related to population would likely be similar to the existing General Plan but there could be less infrastructure needs given the more compact City form. However more development within more urbanized areas could mean that infrastructure development could encounter more contaminated areas for buried water, wastewater, and drainage line installation.
    - *Recreation and Waterways*: This alternative would have a lower buildout population than the Proposed Project, which would result in slightly lower the impacts on park use and demand. Population buildout would be the same as the existing General Plan and thus park use and demand impacts would be similar to that in the GPEIR except that the location of that park use and demand would be more intense in the downtown area and along transportation corridors.
    - *Noise and Vibration* - This alternative would have the same impacts on noise as the Proposed Project in the GDSA, but greater noise impacts along existing transportation corridors due to additional density development, transit operations along these corridors, and additional traffic along these corridors. Noise impacts along the existing transportation corridors would be greater than those for the existing General Plan.
    - *Biological Resources* – This alternative would have similar impacts to biological resources in the GDSA and existing transportation corridors as the Proposed Project given that there are limited biological resources in these areas. This alternative would have lower impacts to trees related to solar roofs. This alternative would have less impact on biological resources than the Proposed Project and the adopted General Plan at the City's periphery, given that this alternative would lower development pressure on the City's edge.
    - *Impacts to Farmland* – This alternative would have similar impacts to farmland as the Proposed Project in the GDSA and along existing transportation corridors given that there are limited farmland areas in these areas. This alternative would have far less impacts on farmland than the Proposed Project and the adopted General Plan, given that this alternative would lower development pressure on the City's edge.

Conclusion

This alternative would have the same land use change in the GDSA as the Proposed Project but would result in greater land use change outside the GDSA it would represent a substantial change in land use patterns compared to the adopted General Plan. This could result in land use incompatibilities between existing low density residential development and new high-density development along transportation corridors. This alternative would likely result in greater traffic, noise, and visual impacts along existing transportation corridors compared to the Proposed Project outside the GDSA and may result in greater impacts to historic buildings. This alternative would likely have better local air quality than the Proposed Project, but similar regional emissions. This alternative would likely have lower impacts to biological resources and farmland than the Proposed Project (and the adopted General Plan).

Greater Energy Efficiency (CAP Alternative)

Under this alternative, the City would reduce GHG emissions through promotion of, and a greater reliance on, efficiency programs for existing development, compared to the Proposed Project. The City would adopt an energy efficiency upgrade ordinance, which would require all buildings more than 10 years old to improve their energy efficiency at the point of sale (the exact amount has not been determined). The City would also increase the ambition of CAP Measures Energy-3 and Energy-4 to seek higher participation rates for efficiency retrofits of existing homes.

Assuming the GHG reduction target is the same as the Draft CAP, this alternative assumes that the increased reduction in building energy (electricity and natural gas) emissions would allow for elimination of at least the two solar promotion measures (Energy-5 and Energy -6). In order to do that, the additional building energy emission reductions beyond the Draft CAP would have to be 16,700 $MTCO_2e$ or more. This alternative is considered feasible; for example a 50% increase in the retrofit rates in Energy-3 (from 15% to 22.5%) and Energy-4 (from 15% to 22.5%) would result in an additional 15,000 $MTCO_2e$ of reductions. Increased penetration rates for retrofits are feasible, but will require greater financing and incentives. A point of sale retrofit ordinance would also increase the amount of reductions.

This alternative is feasible and would meet all of the project objectives.

- *Traffic*: This alternative would not result in different traffic impacts than the Proposed Project as it would only affect building energy measures in the CAP.
- *Flooding*: This alternative would not change potential flood impacts relative to the Proposed Project.
- *Cultural Resources*: This alternative have the same potential impacts as the Proposed Project on historic buildings and districts in the GDSA due to increased residential development downtown, but would have lower potential impacts to historic buildings due to solar roofs since the City would not promote solar improvements.
- *Visual Aesthetics*: This alternative would have the same potential impacts on visual aesthetics as the Proposed Project due to residential development downtown. However, this alternative would have lower potential impacts to aesthetics due to solar roofs since the City would not promote solar improvements. While there may be private solar roofs installed, the City would not be a motivating force for such installations. Without the City's support, it is considered likely that there will be less solar roofs overall and thus less associated aesthetic impacts.

- *Air Quality:* This alternative would likely result in similar air quality emissions as the Proposed Project as it would reduce GHG emissions by a similar amount and it would reduce local vehicular emissions by a similar amount.
- *Greenhouse Gas Emissions:* In concept, this alternative could be designed to also meet the City's reduction target and thus would have the same impact as the Proposed Project.
- *Other Subject Areas:* This alternative will likely have similar impacts to the Proposed Project for other subject areas not discussed above.
    - *Land Use*: This alternative would have the same land use impacts as the Proposed Project.
    - *Public Facilities and Services*: This alternative would have the same impacts on public facilities and services as the Proposed Project as it would promote development in the same locations and at the same scale. This alternative would have slightly less impact on energy infrastructure due to less solar roof connections than the Proposed Project.
    - *Recreation and Waterways*: This alternative would have the same impacts on parks as the Proposed Project as it would promote development in the same locations and at the same scale.
    - *Noise and Vibration* - This alternative would have the same impacts on noise and vibration as the Proposed Project as it would promote development in the same locations and at the same scale.
    - *Biological Resources* – This alternative would have similar impacts on biological resources as the Proposed Project as it would promote development in the same locations and at the same scale but would have lower impacts to trees related to solar roofs.
    - *Impacts to Farmland* – This alternative would have the same impacts on farmland as the Proposed Project as it would promote development in the same locations and at the same scale.

Conclusion

This alternative would lower visual aesthetic and cultural resource impacts related to the elimination of City support for solar improvements. Other impacts would be the same as the Proposed Project.

Community Choice Aggregation (CAP Alternative)

Under this alternative, the City would establish itself as the electricity provider for the City as a whole and would obtain its electricity from generation sources with a substantially lower GHG emissions profile than that provided by PG&E now and in that to be provided in the future.

With the state-mandated RPS requirements, PG&E will obtain 33% of its electricity from qualified renewable energy sources in 2020. However, in addition, PG&E will also be obtaining energy from large hydroelectric and nuclear sources, which nominally do not generate GHG emissions when generating electricity, but are not included in the definition of "qualified renewables" under the RPS requirement. As of 2011, PG&E obtained 40% of their electricity from large hydroelectric (18%) and nuclear sources (22%) (PG&E, no date). Thus, in 2020, if PG&E's large hydroelectric and nuclear sources are the same as in 2011, PG&E could be obtaining electricity from fossil fuel sources for only 27% of their total electricity (large hydroelectric and nuclear would be 40% and qualified

renewables would be 33%). Thus, using these assumptions for a CCA to result in increased GHG reductions, it would need to obtain electricity from non-GHG generating sources for more than 73% of its electricity. In 2020, if the City obtained 100% of its electricity from non-GHG sources, building energy emissions could be reduced by over 400,000 $MTCO_2e$ compared to 2020 BAU conditions. Based on the state and location actions included in the CAP, there would be electricity-related emissions reductions of approximately 180,000 $MTCO_2e$ by comparison.

Depending on the aggressiveness of the CCA, the City could decide to drop some or all of the GHG measures in the CAP other than those necessary for consistency with the Settlement Agreement (Energy-1 and Trans-1), that represent existing projects (Trans-4), or that are necessary to meet other state mandates (Water-1)[2]. For the purpose of this analysis it is assumed that the City would keep the following measures: Energy-1, Trans-1, Trans-4, and Water-1. Collectively, these measures could result in GHG emissions reduction of approximately 18,000 $MTCO_2e$. Since the City's needed local reductions to meet its reduction target are approximately 97,000 $MTC0_2e$, the City would need to obtain an additional 79,000 $MTCO_2e$ from the CCA reductions in 2020. In order to meet or exceed that amount, the CCA would have to have an electricity generation profile that had the equivalent of between 80% and 85% non-GHG energy sources.

While a CCA can be financially viable, the current CCA programs in San Francisco and Marin are resulting in higher electricity costs for participating individuals and businesses. Over time, as the state RPS and cap and trade system takes full effect, investor-owned utility (like PG&E) electricity prices are also likely to rise and thus the differential over time may be reduced. The City would incur startup and operational financial obligations and risks that would have to be managed carefully to avoid incurring net financial burdens to the City's finances.

While this alternative is in concept feasible, the City is currently in bankruptcy, and is not in a favorable financial position to take on new obligations that may require new debt financing. Until the City has emerged from bankruptcy and its credit rating is restored allowing it to take on substantial new burdens, this is not considered a feasible alternative for the City. In addition, there would need to be a feasibility study conducted to determine the timing, costs, and benefits of pursuing a CCA and what kind of energy portfolio could be achieved by the City. Were this alternative to be pursued, the City could benefit from combining with other local jurisdictions in the County to lower administrative costs and increase market buying power.

Although the feasibility of this measure is unknown for Stockton, in particular concerning timing and the City's bankruptcy, for the purposes of this SEIR, this alternative is considered potentially feasible for 2020, which is the horizon year for AB-32 and the City's Draft CAP.

The following is a summary of the potential impacts of this alternative in the City of Stockton. Impacts outside the City of Stockton are discussed separately below.

- *Traffic*: This alternative would have the same effects on downtown traffic as the Proposed Project as it would include CAP Measure Trans-1. Overall, this alternative would have worsened traffic in other parts of the City due to elimination of other CAP transportation measures (other than CAP Measure Trans-4).

[2] In this scenario, the City could also include DRP-1, which requires 29% GHG emissions reductions from new development to be consistent with SJVAPCD recommendations for CEQA, but for the sake of the analysis, this alternative assumes that project-level reductions would not be necessary as the CCA measure would obtain all the remaining reductions needed to achieve the City's reduction goal.

- *Flooding*: This alternative would have the same impacts on flooding as the Proposed Project because it would promote development in the same locations.
- *Cultural Resources*: This alternative have the same potential impacts as the Proposed Project on historic buildings and districts in the GDSA due to increased residential development downtown, but would have lower potential impacts to historic buildings due to solar roofs since the City would not promote solar improvements.
- *Visual Aesthetics*: This alternative would have the same potential impacts on visual aesthetics as the Proposed Project due to residential development downtown. However, this alternative would have lower potential impacts to aesthetics due to solar roofs since the City would not promote solar improvements. While there may be private solar roofs installed, the City would not be a motivating force for such installations. Without the City's support, it is considered likely that there will be less solar roofs overall and thus less associated aesthetic impacts.
- *Air Quality:* This alternative would reduce local vehicular emissions by a lesser amount than the Proposed Project because it would not reduce transportation emissions as much as the Proposed Project. Overall, this alternative would likely reduce air quality emissions similar to the Proposed Project although most of the reductions would be at the locations of existing power plants outside the City using fossil fuels[3] that would otherwise be providing electricity to Stockton.
- *Greenhouse Gas Emissions:* In concept, this alternative could be designed to also meet the City's reduction target and thus would have the same impact as the Proposed Project.
- *Other Subject Areas:* This alternative will likely have similar impacts to the Proposed Project for other subject areas not discussed above.
    - *Land Use*: This alternative would have the same land use impacts as the Proposed Project.
    - *Public Facilities and Services*: This alternative would have the same impacts on public facilities and services as the Proposed Project as it would promote development in the same locations and at the same scale. This alternative would have slightly less impact on energy infrastructure due to less solar roof connections than the Proposed Project.
    - *Recreation and Waterways*: This alternative would have the same impacts on parks as the Proposed Project as it would promote development in the same locations and at the same scale.
    - *Noise and Vibration*: This alternative would have the same impacts on noise and vibration as the Proposed Project as it would promote development in the same locations and at the same scale.
    - *Biological Resources*: This alternative would have similar impacts on biological resources as the Proposed Project as it would promote development in the same locations and at the same scale but would have lower impacts to trees related to solar roofs.

[3] There are two power plants in Stockton. The Port of Stockton's District Energy Facility was a coal-fired facility with a rated capacity of 54 MW which was converted to a 45 MW biomass facility in 2012 and sells their power to PG&E. The Stockton Cogen Co. plant is a coal-fired facility with a rated capacity of 60 MW that was shut down in 2012 and plans to convert to biomass and reopen at some point.

- *Impacts to Farmland*: This alternative would have the same impacts on farmland as the Proposed Project as it would promote development in the same locations and at the same scale.

This alternative would increase the demand for additional non-GHG electricity generation beyond the demand due to the State's RPS. While Stockton's electricity demand is small relative to northern California or California overall, the increased demand would contribute to a cumulative demand for renewable/non-GHG electric generation facilities. These potential additional facilities could include wind, solar, geothermal, small hydroelectric, biomass or other renewable energy facilities. While the CCA might in theory be able to purchase electricity from nuclear or large hydroelectric facilities, these facilities are usually utility-owned meaning they likely won't be willing to sell their capacity directly to a retailer. Even if such sale were feasible, given the size of such facilities and the difficulty to implement new facilities of this type In California, the incremental addition of Stockton's demand is not likely to contribute considerably to the demand for new nuclear or large hydroelectric facilities. The location of these additional facilities is most likely outside the City, but could also be in the City as well, as evidence by the conversion of the Port of Stockton's coal-fired power plant to biomass recently.

The following is a summary of the potential impacts of this alternative inside or outside the City of Stockton due to a cumulative contribution to demand for new renewable energy facilities (abbreviated as REFs below):

- *Traffic*: New REFs would have construction and operational traffic at and near the location of new facilities that may affect local traffic.
- *Flooding*: New REFs will have to comply with all local, state, and federal requirements and thus are not likely to result in significant flood impacts.
- *Cultural Resources*: New REFs may significantly affect on-site cultural resources where present.
- *Visual Aesthetics*: New REFs may significantly affect on-site cultural resources where present.
- *Air Quality:* New solar and wind facilities would not affect air quality, except due to construction (which is short-term) and operational traffic (which is limited). New biomass or geothermal facilities can affect local air quality, but are highly regulated under state and federal law to avoid significant air quality impacts.
- *Greenhouse Gas Emissions:* New REFs would not generate GHG emissions during operations although there will be limited GHG emissions during construction (of a short duration) and operation (which are limited in extent).
- *Other Subject Areas:*
  - *Land Use*: New REFs may or may not be compatible with local land uses or land uses policy depending on location.
  - *Public Facilities and Services*: New REFs will require new energy transmission lines and connections depending on location which could have significant secondary physical environmental effects. There may also be an increased demand for water (for cooling, washing or other site operations) and wastewater as well as police, fire, and emergency services depending on energy plant characteristics.
  - *Recreation and Waterways*: New REFs may parks and waterways depending on location and facility characteristics but in general can be designed to avoid such impacts.

- *Noise and Vibration*: New solar facilities would not affect noise, except due to construction (which is short-term) and operational traffic (which is limited). New wind facilities would result in noise which can affect sensitive receptors that are close by. New biomass or geothermal facilities generally do not result in significant noise impacts except during construction.
- *Biological Resources*: New REFs can affect the biological resources present on the facility site. New utility solar facilities require extensive areas that can result in large-scale impacts on biological resources, depending on location. New wind facilities can have significant impacts on birds. New hydroelectric facilities can significantly affect fish and other aquatic species depending on their design.
- *Impacts to Farmland*: New REFs can affect farmland present on the facility site. New utility solar facilities in particular require extensive areas that can result in large-scale impacts on farmland, depending on location.

Conclusion

This alternative would result in similar impacts in the GDSA related to downtown traffic, historic buildings, flooding and aesthetics. This alternative would have lower aesthetic impacts in Stockton because it would not include City promotion of solar roofs. This alternative would have worsened traffic and air quality in Stockton overall because it would reduce transportation emissions less than the proposed project. This alternative would contribute to a cumulative demand for new renewable energy facilities, which may be located in Stockton, but are more likely to be located outside of Stockton. These new renewable energy facilities, depending on location and character, have the potential to have significant impacts in particular on land use, biological resources, cultural resources, noise, and farmland but may also have temporary or permanent significant impacts on many other resource areas.

Five Percent Transit Mode Share (Transit Plan Alternative)

Under this alternative, the Transit Plan/Program would have a goal of a 5% transit mode split instead of the 3% transit mode split in the Proposed Project. As described in the Transit Plan/Program, achieving a 5% transit mode split would require far greater funding for SJRTD than the Proposed Project (approximately $51 million annually vs. approximately $31 million for the draft Transit Plan/Program) that may be beyond the ability of the San Joaquin RTD. While likely not feasible in the short run, for the sake of analysis in this SEIR, this alternative is considered technically feasible by 2020, presuming sufficient economic recovery in Stockton and San Joaquin County overall. The Transit Plan/Program did not provide a specific description of the transit improvements necessary to achieve a 5% mode split, but this alternative would likely require a substantial increase in transit service throughout the City in order to attract the increased ridership, meaning more frequent service on existing routes and possibly additional service routes beyond that assumed in the Proposed Project.

This alternative would include the Draft CAP as proposed. The impact summary below does not discuss the impacts of the Draft CAP and focuses only on the impacts of this alternative relative to the Proposed Transit Plan/Program.

- *Traffic*: This alternative would likely result in better traffic conditions than the Proposed Project due to additional diversion of individuals from vehicles to transit services.

- *Flooding, Cultural Resources, Visual Aesthetics*: This alternative would have the same impacts as the Proposed Project
- *Air Quality:* This alternative would likely result in better local air quality than the Proposed Project due to an increased use of transit.
- *Greenhouse Gas Emissions:* Since this alternative would include the Draft CAP, it would have the same impacts on GHG emissions as the Proposed Project. The increased transit should result in additional GHG emissions reductions. Although the amount of reduction has not been estimated, this could allow the City to eliminate one or more of the proposed Draft CAP measures, such as the solar measures. The other alternatives above describe the impact of removing the solar measures from the Draft CAP.
- *Other Subject Areas:* This alternative will likely have similar impacts to the Proposed Project for other subject areas not discussed above (land use, public facilities and services, recreation and waterways, noise and vibration, biological resources, and impacts to farmland).

Conclusion

This alternative would result in better traffic conditions and less air quality emissions than the Proposed Project, but is of questionable financial feasibility in the near term.

Environmentally-Superior Alternative

An environmentally superior alternative must be identified in an EIR. To assist with this requirement, the significant impacts of the Proposed Project and the alternatives discussed above are compared in Table 15-1.

Table 15-1. Comparison of Alternatives to the Proposed Project

Key Impact Area	Proposed Project (with GP Buildout)	Greater Density	Greater Efficiency	Community Choice Aggregation	Transit 5 % mode share	No Project
Downtown Traffic	SU (more than GP)	same	same	same	less	less
Citywide Traffic	SU (less than GP)	less	same	more	less	more
Flooding	SU (more than GP)	less	same	same	same	less
Cultural Resources	SU (more than GP)	more	less	less (S)/more (OS)	same	less
Visual Aesthetics	SU (more than GP)	less/more*	less	less (S)/more (OS)	same	less
Air Quality	SU (less than GP)	less	same	more (S)/less (OS)	less	more
Greenhouse Gas Emissions	2020: LTS (less than GP)	same	same	same	same	more
	2050: SU (less than GP)	same	same	same	same	more
Land Use	SU (greater than GP)	more	same	same (S)/more (OS)	same	less
Public Facilities and Services	SU (greater than GP)	less	same	same (S)/more (OS)	same	less
Recreation and Waterways	SU (more than GP)	less	same	same (S)/more (OS)	same	less
Noise and Vibration	SU (same as GP)	less	same	same (S)/more (OS)	same	less (downtown) more (overall)
Biological Resources	SU (greater than GP)	less	less	less (S)/more (OS)	same	less
Farmland	SU (same as GP)	less	same	same (S)/more (OS)	same	same

S = In Stockton

OS= Likely outside of Stockton (see text discussion of the CCA alternative).

Proposed project is compared to the adopted General Plan impacts as profiled in the RPEIR

All other alternatives are compared to the impacts of the Proposed Project as described in this SEIR. Since all alternative presume GP buildout, the impact levels are the same as the Proposed Project (SU, LTS, etc.) but may be relatively less or more.

* See discussion in text. Alternative would have more impact in developed parts of Stockton, but less impact on the edge of the City and less impact due to solar roofs.

The key areas of difference between the alternatives are as follows:

- The No Project Alternative would have the greatest traffic, air quality, and greenhouse gas impacts of all the alternatives but would have the least land use impacts since it would include implementation of the adopted General Plan.
- The Greater Density Alternative would have lower traffic and air quality impacts than the Proposed Project and would have the lowest biological resources and farmland impacts of all alternatives including the No Project Alternative. However, this alternative would result in the largest land use impacts as it would promote a very different land use pattern and a more rapid urbanization of the City. This alternative would represent the largest divergence from the adopted General Plan.
- The Greater Efficiency Alternative would overall have similar impacts to the Proposed Project, but lower cultural resource, tree and visual aesthetic impacts because this alternative would not promote solar roofs.
- The Community Choice Aggregation Alternative would have similar impacts to the Proposed Project in Stockton, but lower cultural resource, tree and visual aesthetic impacts because this alternative would not promote solar roofs. This alternative would contribute to a cumulative demand for new renewable energy facilities, which will likely be located outside of Stockton, and could result in substantial land use, biological resources, cultural resources, noise, and other impacts depending on location and character of the new facilities.
- The Transit 5% Mode Share Alternative would have similar impacts to the Proposed Project but would have lower traffic and air quality impacts.

There are notable tradeoffs between the different alternatives. When considering the full range of potential environmental impacts, the Greater Density Alternative is considered the Environmentally Superior Alternative as it would have substantially lower traffic, air quality, biological resources, and farmland impacts compared to the Proposed Project and substantially lower biological resources and farmland impacts compared to all of the alternatives. These environmental benefits are considered to outweigh the potential adverse impacts of this project related to land use compatibility, cultural resources, and visual aesthetics.

Alternatives Considered, but Dismissed from Further Analysis

The City also considered other alternatives, but dismissed the alternatives from further analysis in this SEIR because they were either determined to not be feasible, to not meet most of the project objectives, or to not reduce one or more significant impacts of the Proposed Project. The reasons for their dismissal are briefly described below.

- *Increased Reliance on Mandatory Measures Alternative:* the Draft CAP includes a mixture of voluntary incentive-based measure, flexible performance based measures, and mandatory measures. Under this alternative, the City would replace all of the voluntary measures (such as Energy-2b, 3, 4, 5, 6; Trans-8b, Water-2, Offroad-1 and 3) and the flexible measures (DRP-1) in the CAP with mandatory measures where the City.
    - There are a variety of examples the City could choose. The City could mandate that all new development be 15% more energy-efficient than state Title 24 requires now and in the future. The City could require private homeowners and commercial building owners to complete energy-efficiency retrofits or solar upgrades prior to resale of existing buildings.

The City could mandate specific measures for new development (such as mandatory energy-efficiency standards, solar improvements, water efficiency, land use design, etc.) instead of using a performance-based flexible approach with the Development Review Process.

- While some parties may prefer a more regulatory approach to forcing GHG reductions than some of the incentive approaches included in the Draft CAP, with the same reduction target, this alternative would not necessarily result in any more GHG emissions reductions than the Proposed Project. To be consistent with the Settlement Agreement, this alternative would this alternative would still include the increased downtown development and associated impacts.
- While this is a feasible alternative and would meet most of the project objectives, it would not clearly reduce environmental impacts of the Proposed Project and as such need not be explored further in this EIR.

- *No Change in Downtown Residential Buildout Potential Alternative.* Under this alternative, the City would not adopt a goal to increase downtown residential units by 2020 but would include all of the other measures in the CAP and would also adopt the Transit Plan/Program. This alternative would not be consistent with the Settlement Agreement and thus would not meet the fundamental objectives of the project. The impacts of not increasing downtown residential growth potential are discussed in the analysis of the No Project Alternative above.
- *Carbon Offset Alternative:* Under this alternative, the City would reduce GHG emissions through the purchase of valid carbon offsets instead of adopting any new policies and measures.
  - Measures Trans-4 (reductions of 767 $MTCO_2e$) and Water-1 (reductions of 9,680 $MTCO_2e$) would still be implemented as they reflect existing City commitments that will happen with or without adoption of a CAP. Measure Trans-1 would still be implemented to be consistent with the Settlement Agreement (reductions of up to 7,019 $MTCO_2e$). New projects would still be required to reduce their emissions by 29%, but the City would require this requirement to be fulfilled through the purchase of GHG offsets for the lifetime of the project.
  - In order to meet the reduction target and replace the other local measures not noted above, the City would need to purchase approximately 80,000 $MTCO_2e$ of offsets in 2020. At present, the cost of offsets and carbon allowances in California can range from less than $1 to over $10 per $MTCO_2e$. Using this range, the 2020 offset purchase could range from about $80,000 to over $800,000 per year. It is difficult to predict the cost of offsets in the future, but one way is by using the range of allowable allowance credit price (floor of $10 to ceiling of $40 per $MTCO_2e$) in the California cap and trade system, which is the largest market in California. Using this range, the 2020 offset purchase could range from about $800,000 to $3.2 million per year. In between 2013 and 2020, the City would also need to purchase offsets to replace the incremental reduction value of the local measures that would have otherwise been achieved over time.
  - The City would need to set up a funding mechanism which would have to be equally apportioned to the emission sources in the City under the City's jurisdiction, which would mean that existing residents and businesses would be subject to some kind of local GHG

assessment or tax.[4] Offset purchases would likely go to offset providers outside of Stockton, possibly outside the San Joaquin Valley, or even outside of California or the United States and thus would provide little to no economic or environmental cobenefits to the City of Stockton. By comparison, as discussed in the CAP, many of the local reduction measures would provide economic returns to residents and businesses in Stockton as well as other cobenefits such as improvement in local air quality or water or energy savings.

  - While this alternative is in concept feasible, and would meet the fundamental objectives of the project, the City has rejected this alternative because it would result in a long-term drain of funds from the City as a whole with no local return in terms of local economic and/or environmental benefits. Also, at this time, given Stockton's financial situation (both municipal finance and community economic condition), it is not considered feasible to propose additional City-wide fees or taxes for this purpose. In addition, this alternative would not avoid the impacts of the Proposed Project relative to downtown infill growth as this component is a fundamental part of consistency with the Settlement Agreement.

- *Growth Moratorium Alternative* – Under this alternative, the City would reduce emissions by placing a moratorium on new growth. A moratorium on new growth (residential, commercial or both), while reducing emissions compared to a BAU scenario, would have substantial adverse effects on the economic welfare of the City. This alternative would not meet the fundamental objective of the project to allow for future economic growth to help the City to recover financially and economically.

- *Downzoning Development Potential on the City Edge:* Under this alternative, the City would downzone development potential on the City Edge while increasing residential infill downtown (by the 3,000 units included in the Settlement Agreement) so that the overall development potential of the existing General Plan would stay the same.

  - This alternative would shift the location of some of the new development (300 to 1,100 units) from the City's edge to the City's downtown. This alternative is feasible, would meet most of the project objectives, but would be inconsistent with land use designations for a portion of the City in the adopted General Plan. This alternative would not result in an overall increase in growth at buildout compared to the adopted General Plan because the growth downtown would be offset the reduction in growth potential on the edge. However, this alternative would not likely result in any change in buildout by 2020 because the City has already entitled substantial amounts of growth on the City edge prior to 2008, much of which remains unbuilt due to economic conditions.

  - Thus, the effects of downzoning unbuilt land on the edge of the City would only change likely buildout conditions in the very long-term. It is unknown whether this alternative would increase the likelihood of increased downtown residential development downtown as downtown high-density infill residential housing is a substantially different housing market product than single-family dwellings in a more suburban edge setting and the buyers of such different products are often very different. The demand for the two different housing products is substantially different and thus if one were to lower the supply of suburban single-family development on the edge, it cannot be simply concluded that the demand will

[4] The City could not just impose GHG fees on new development as constitutional limitations require that they only be assessed for impacts in proportion to their own impact. Since most of the City's emissions are due to existing emissions, a fee structure could only be imposed in proportion to the emissions generated which would mean and equal burden would have to fall on existing residents and businesses as well as new residents and businesses.

shift to the infill sites. Buyers may shift their market preference in Stockton, but could as readily decide to purchase an existing suburban residence in Stockton or a new suburban residence in another City (or County).

  - Because such an alternative would be inconsistent with the prior General Plan, and could also hinder economic recovery in Stockton, without necessarily a demonstrated benefit in incentivizing downtown infill, this alternative was dismissed from further consideration.

- *15% Below 2005 Emissions Target for 2020:* Under this alternative, the City would adopt a more aggressive reduction target to be consistent with the recommended target in the 2008 AB 32 Plan. As discussed in Chapter 2, Project Description, this target is considered in excess of the minimum target necessary to be consistent with AB 32 using more recent state inventory data than was available at the time of preparation of the 2008 AB 32 Scoping Plan. While this alternative would have lower GHG emissions (and likely lower air quality emissions as well), it would require more aggressive reduction measures that may result in an increase in secondary physical effects compared to those for the Proposed Project. This alternative was not analyzed further in this EIR because it is not necessary to meet the project's objectives.
- *80% Below 1990 Levels by 2050:* Under this alternative, the City would adopt a more aggressive reduction target to be consistent with the aspirational target in Executive Order S-03-05 of 80% below 1990 levels by 2050. As discussed in Chapter 14, Greenhouse Gas Emissions and Climate Change, this target is in excess of the minimum target necessary to be consistent with AB 32. This alternative would require substantially more aggressive reduction measures that would likely result in an increase in secondary physical effects compared to those for the Proposed Project. This alternative was not analyzed further in this EIR because it is not necessary to meet the project's objectives. Also, as discussed in Chapter 14, Greenhouse Gas Emissions and Climate Change, the executive order is not binding on local governments or the private sector and the state currently has no legislative mandate for 2050 reductions and has no adopted plan or conceptual plan to achieve reductions to meet a 2050 goal. Finally, as discussed in Chapter 14, while City can influence some emissions, it does not have the jurisdiction that the federal government has over some of the larger sources (like vehicle technology and fuels) necessary to achieve such aggressive goals. Thus, at this time, it is considered infeasible and premature to adopt a Climate Action Plan for 2050 for the City.
- *Increased Light Rail Alternative (Transit Plan/Program Alternative):* Under this alternative, the proposed new BRT line in the Transit Plan/Program along West/Airport between Eight Mile Road and Downtown would instead be replaced with a light rail alternative in roughly the same or parallel alignment. Light-rail can be a favorable transit solution where there is sufficiently high ridership and available right of way to dedicate for railway improvements. As discussed in the Transit Plan/Program, there is insufficient development along West/Airport at present to justify a BRT line, but with future development along the corridor a BRT may be warranted. BRT approaches are lower cost and scalable by comparison to a light-rail approach which is highly capital intensive upfront. As a result in a developing corridor, a light-rail approach is not an appropriate or cost effective approach. Furthermore, a light-rail project would require far more extensive construction (and associated impacts) compared to a BRT approach.

Chapter 16
Additional Statutory Considerations

Introduction

This chapter discusses other CEQA considerations required for EIRs as well as an analysis of alternatives to the Proposed Project. This chapter contains a discussion of growth inducement, cumulative impacts, significant irreversible changes, unavoidable significant effects, and a discussion of the effects on climate change of alternatives to the General Plan and alternatives to the GHG reduction strategies of the Climate Change Element.

Growth-Inducement

The CEQA Guidelines require that this SEIR discuss the ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

The GPEIR discussed the growth-inducing impacts of the General Plan in Chapter 15, *Additional Statutory Considerations*, in the GPEIR. The detailed discussion provided in the GPEIR is fully incorporated into this SEIR by this reference. The GPEIR found that implementation of the General Plan would induce some of the population and housing growth in the city, in part because it increases intensity of uses and densities in future urban centers, close to transportation nodes. The GPEIR determined that while growth would be allowed under the General Plan, the market indicated that growth would occur in the city under the existing General Plan, but without the benefit of new residential areas development under the proposed Village concept, updated polices that reflect current environmental and regulatory trends, and the opportunity for increased economic sustainability. The General Plan provided goals and policies to maintain the character of the city and minimize the environmental impacts of anticipated growth, including discouraging undesirable development in areas with sensitive natural resources, critical habitats and important scenic resources, and encouraging the orderly growth of new development to occur in areas adjacent to existing urban uses and requires developers to provide service extensions.

Therefore, the GPEIR determined that while the General Plan would result in an increase of growth locally, the policies included in the General Plan would reduce the potential for negative impacts associated with directly induced growth. However, because this growth resulting from the General Plan would still significantly affect existing visual resources and result in an overall reduction of existing open space and agricultural lands, the growth inducing impacts of the Proposed Project are also considered significant and unavoidable.

The Proposed Project would not revise the General Plan Planning Area or sphere of influence, and through the year 2035 would not allow additional development compared to the amount disclosed in the GPEIR. While certain project elements would require the construction of solar panel systems, alternative transportation infrastructure, waste management facilities, and retrofitting buildings, these project elements would improve existing resources, and would not create new infrastructure

that could accommodate additional growth. Therefore, through the General Plan horizon of 2035, project impacts would not be greater under the Proposed Project as compared to the severity of growth-inducing impacts disclosed in the GPEIR.

Through buildout of the updated General Plan, which is expected to occur in approximately between 2050 and 2055, additional development would be allowed in the GDSA. This additional development would include as many as 300 to 1,100 additional residential units compared to the potential with the existing General Plan. As discussed in the other chapters in this EIR, the additional residents would result in impacts substantially more severe than disclosed in the GPEIR for certain resource areas, including visual aesthetics, transportation (downtown traffic), historic resources, and flooding risk (due to more residents in levee failure risk areas) Growth-inducement impacts associated with the Proposed Project would remain significant and unavoidable.

Cumulative Impacts

The following section evaluates the potential for the project to contribute significantly to cumulative impacts in the areas of aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, and traffic and transportation issues.

Cumulative Setting

For the purposes of this SEIR, the cumulative setting is based on the cumulative setting of the GPEIR, which is incorporated here in its entirety by reference. Since the publication of the GPEIR, the recession and consequent decline in housing construction has led to many of the growth projections used to develop relevant County planning documents to be too high. Because less growth has occurred than was originally planned for, planning documents considered when developing the cumulative setting for the GPEIR are still applicable to the Proposed Project, as they assume and analyze a greater level of growth that has actually occurred or is projected to occur in the county.

The only major change to relevant planning documents since the publication of the GPEIR was the completion of the City of Lodi's General Plan. While the Lodi General Plan calls for a greater amount of growth in Lodi than considered in the GPEIR, the Lodi General Plan EIR found that the Plan would not significantly contribute to regional or subregional growth-inducing impacts due to a variety of mitigation measures.

Therefore, the cumulative setting in this SEIR uses the same assumptions and two-fold approach as the GPEIR. For some impact issue areas (e.g., air quality, traffic, and water supply), the cumulative setting is defined by specific regional boundaries (e.g., air basin, regional roadway network) or projected regional or area-wide conditions, contributing to cumulative impacts. For the remaining impact issue areas, the cumulative setting is based on development anticipated within the vicinity of the City (surrounding cities within San Joaquin County).

Cumulative Impacts of Proposed Project

Cumulative Impacts Related to Aesthetics

The GPEIR stated that implementation of the General Plan would result in changes to the visual character of the City's proposed SOI from a more agricultural/rural setting to one that is more characterized by suburban or urban uses, with a consequent increase in light and glare sources. The GPEIR concluded that buildout of the General Plan would result in a significant impact to the existing visual identity and character of the city due to the amount of growth allowed, and that development associated with the anticipated regional growth would result in a substantial change to the visual character of the surrounding area of San Joaquin County as well. Therefore, buildout of the General Plan combined with the overall growth trends in San Joaquin County were found to contribute considerably to cumulative aesthetic impacts that would transform the region from its agricultural/rural character to a more suburban setting, thus resulting in a cumulative significant and unavoidable aesthetic impact.

The Proposed Project does not propose any additional residential development outside the GDSA beyond that already allowed for in current General Plan. Additional residential growth in the downtown area could substantially change the visual character of the downtown area. Additional solar roof installations may alter localized aesthetic conditions on individual buildings, but would also only be affected the Proposed Project in Stockton. Thus, the Proposed Project will only affect visual aesthetics in Stockton and would not contribute to additional cumulative issues beyond that disclosed in the GPEIR. The Proposed Project is therefore not anticipated to significantly increase the severity of the cumulative impact identified in the GPEIR related to aesthetics.

Cumulative Impacts Related to Agricultural Resources

The GPEIR stated that with the implementation of the General Plan there would be a loss of the existing agricultural lands within the City's proposed SOI. In addition, the GPEIR found that the loss of agricultural land within the City's proposed SOI as a result of urban development was part of an overall trend within San Joaquin County, which would continue to face development pressure in the foreseeable future. Therefore, because the county was projected to continue to urbanize at a significant rate, the loss of agricultural lands as a result of buildout of the General Plan was found to contribute considerably to a significant and unavoidable cumulative impact to agricultural resources.

As stated above, the Proposed Project does not propose any additional residential development outside the GDSA beyond that already allowed for in current General Plan. The GDSA is already an urban area with no land zoned for agriculture or currently under agricultural production, and additional growth in the GDSA would therefore not convert any agricultural land to nonagricultural uses. The other developments associated with the Proposed Project (retrofits, solar roofs, bicycle and pedestrian lanes, waste management facilities, and water efficiency installations) are limited in nature and would not substantially affect agricultural land. The Proposed Project is therefore not anticipated to significantly increase the severity of the cumulative impact identified in the GPEIR related to agricultural resources.

Cumulative Impacts Related to Air Quality

The GPEIR determined that due to the existing and projected air quality issues in the San Joaquin Valley Air Basin, buildout of the General Plan would contribute considerably to a significant and unavoidable cumulative air quality impact.

As more fully described in Chapter 11 *Health and Safety*, this impact is likely to be less severe with the Proposed Project, although it would be speculative to quantify the precise amount of this change. Cumulative impacts related to air quality would still remain cumulatively considerable under the Proposed Project.

Cumulative Impacts Related to Biological Resources

The GPEIR stated that development associated with implementation of the current General Plan would contribute to the ongoing loss of natural and agricultural lands in San Joaquin County, which provide habitat for a variety of federal and state listed special status species, as well as other wildlife and plant resources. According to the GPEIR, development under the General Plan was to result in the conversion of existing habitats to urban uses. Because the county was projected to continue to urbanize at a steady rate, the GPEIR determined that the loss of open space areas and habitats as a result of buildout of the General Plan would contribute considerably to a significant and unavoidable cumulative impact to biological resources.

As stated in more detail in Chapter 13, *Natural and Cultural Resources*, additional residential growth resulting from the Proposed Project would take place in the GDSA, which is an urban area that does not contain a significant amount of biological resources. The other developments associated with the Proposed Project (such as solar roofs, bicycle and pedestrian lanes, waste management facilities, and water efficiency installations) may have localized effects on biological resource but would not have landscape level effects that would contribute considerably to cumulative impacts.

Therefore, the Proposed Project would not change the contribution of buildout of the General Plan to cumulative impacts on biological resources, which would still be cumulatively considerable.

Cumulative Impacts Related to Cultural Resources

The GPEIR stated that it was possible that, after City decision-makers have approved a development project, grading activities in an area identified for development may reveal an archaeological resource that meets the definition of an historical resource. It would also be possible that such a previously unknown historical resource could not be preserved or avoided without substantial redesign of the development at significant cost, so the City could not be sure that impacts on all such historical resources could be mitigated to less than significant levels. Therefore, the GPEIR stated that while implementation of General Plan policies and mitigation would reduce the potential cumulative impact to a less-than-significant level with respect to human remains and archaeological resources that do not qualify as historical resources, buildout of the General Plan could harm historical resources for which no mitigation may be available to replace the resource. Therefore, the GPEIR determined that buildout of the General Plan had the potential to contribute considerably to a significant and unavoidable cumulative impact to historic resources.

As described in Chapter 13, the Proposed Project proposes additional development in the GDSA not previously considered in the GPEIR and could result in additional impacts on cultural resources, including historic and archaeological resources. The other developments associated with the

Proposed Project (retrofits, solar roofs, bicycle and pedestrian lanes, waste management facilities, and water efficiency installations) are more limited in nature, but also could affect cultural resources. Therefore, the Proposed Project will result in General Plan implementation having a greater contribution to the significant and unavoidable cumulative impacts on cultural resources.

Cumulative Impacts Related to Geology and Soils

The GPEIR stated that development associated with buildout of the General Plan and development in other communities in San Joaquin County would be required to conform with adopted California building codes and other measures to protect people and structures from geologic hazards, which would reduce impacts related to geology and soils to a less-than-significant level. Therefore, the General Plan's incremental contribution to these impacts was found to be less than cumulatively considerable.

Because any additional development associated with the Proposed Project would also be required to conform to adopted California building codes and related measures, the Proposed Project's incremental contribution would be less than cumulatively considerable. This impact would not be more severe or substantially different under the Proposed Project than disclosed in the GPEIR.

Cumulative Impacts Related to Hazards and Hazardous Materials

The GPEIR found that buildout of the General Plan would result in the increased use of hazardous household, commercial and industrial materials and an increase in population that would be exposed to potential wildland fires and hazards associated with aircraft operation. Similarly, as growth occurs in San Joaquin County, additional people would be exposed risks associated with hazardous materials, wastes, wildland fires and airport operations. However, the GPEIR stated that City, regional, state, and federal regulations would apply to development countywide, thereby reducing the potential for cumulative impacts associated with hazards and hazardous materials to a less-than-significant level. The General Plan's incremental contribution to these impacts was therefore found to be less than cumulatively considerable.

The Proposed Project would allow additional development of residential uses beyond that analyzed in the GPEIR, thereby increasing the transport, use, and disposal of hazardous materials and the potential for construction occurring on hazardous sites. However, it is reasonable to assume that implementation of mitigation identified in the GPEIR (including Mitigation Measure HS-5.9, Hazardous Materials Studies), implementation of General Plan policies related to hazardous materials, compliance with federal and state regulations, and future site-specific environmental review would continue to ensure a reasonable level of safety for workers and residents through the identification and mitigation of health hazards. Therefore, the Proposed Project's incremental contribution to impacts related to hazards and hazardous materials would remain less than cumulatively considerable.

Cumulative Impacts Related to Hydrology and Water Quality

The GPEIR stated that buildout of the General Plan would expose additional population to the risk of flooding and increase the amount of impervious surfaces, which could affect local hydrologic resources. In addition, the GPEIR found that new development within San Joaquin County may locate additional population and structures within areas subject to flooding and increase the amount of impervious surfaces and result in increased impacts to water quality. Although development

would also be required to comply with regional, state and federal regulations designed to address flooding issues, the GPEIR determined that the General Plan had the potential to contribute considerably to a significant and unavoidable cumulative flooding impact.

The Proposed Project would promote additional housing in the GDSA which mostly outside the 100-year flood. However, the GDSA is also subject to flooding from dam or levee failure and therefore the Proposed Project could expose more people and habitable structures to potential flooding from dam or levee failure than disclosed in the GPEIR.

Regarding water quality, new residential development in the GDSA would mostly occur within areas that are already largely impermeable, but could result in additional stormwater runoff that could affect water quality. Similarly, some of other developments associated with the Proposed Project (bicycle and pedestrian lanes, waste management facilities) could also affect water quality. However, with the application of General Plan policies and mitigation in the GPEIR, development promoted by the Proposed Project is not expected to substantially increase City buildout contributions to cumulative water quality impacts beyond that disclosed in the GPEIR.

Cumulative Impacts to Land Use and Planning

As described in Chapter 3, *Land Use*, the Proposed Project could contribute to an increase in housing near the airport, because CAP Measure Trans-1 would promote additional growth in the GDSA, a portion of which overlaps with the airport's area of influence. The policies of the adopted General Plan covering development within the areas of influence of the Stockton Metropolitan Airport would apply to development associated with the project and would reduce the impact. Thus, impacts associated with the Proposed Project involving conflicts with an airport land use plan would be similar to those analyzed in the GPEIR and the Proposed Project would therefore not substantially increase the City's buildout contribution to this cumulative impact beyond that disclosed in the GPEIR.

Cumulative Impacts to Mineral Resources

The GPEIR stated that the General Plan includes specific policies that are in compliance with State laws that require local jurisdictions to take into consideration the continued availability of important mineral resources in land use decisions. As a result, the GPEIR stated that buildout of the General Plan would not add considerably to any significant cumulative impact on mineral resources in San Joaquin County.

The Proposed Project would not promote additional residential development in areas surrounding the French Camp Gas Field, which is located on the southern edge of Stockton. The GDSA is designated as MRZ-1, with no significant mineral resources mined within its boundaries. The Proposed Project would not add considerably to any significant cumulative impact on mineral resources in San Joaquin County.

Cumulative Impacts to Noise

The GPEIR stated that traffic associated with new roadways facilitated by buildout of the General Plan would result in an overall significant and unavoidable noise impact at the project-level and cumulative level.

The Proposed Project does not proposed additional roadways beyond those analyzed in the General Plan. The Proposed Project would, as discussed in detail in Chapter 11 *Health and Safety*, increase location-specific noise levels due to increases in downtown traffic associated with additional growth, increases in levels of noise associated with construction of additional residential units; and increases in groundborne vibration and groundborne noise levels associated with construction of new residential buildings. The Proposed Project would reduce traffic levels overall due to the transportation measures included in the CAP and in the Transit Plan/Program.

Construction impacts would be temporary and would limited to a localized area within the City and would not contribute to cumulative impacts combined with development outside the City. It is possible that development outside of Stockton may also contribute to downtown traffic; if so, the proposed project would contribute to cumulative impacts greater than that disclosed in the GPEIR. Overall, the Proposed Project is expected to reduce vehicle travel and thus would likely decrease the contribution of the General Plan buildout to significant cumulative traffic impacts. However, the reduction in vehicle travel is not sufficient to lower the City's buildout contribution to a less than significant level.

Cumulative Impacts to Public Services and Utilities

The following provides a cumulative analysis broken down by each category of service or utility.

Solid Waste

The GPEIR stated that growth within San Joaquin County would contribute to the need for adequate solid waste disposal facilities. The GPEIR also stated that the Foothill landfill would have sufficient capacity to meet this need, and that cumulative population growth within the county was considered when evaluating the lifespan of the facility and planning for future expansions. Therefore, the GPEIR concluded that a significant cumulative impact would not occur.

While the Proposed Project would allow for additional growth in the GDSA not considered in the GPEIR, the Proposed Project also includes a variety of new measures that would significant reduce the City's output of solid waste. As discussed in detail in Chapter 9, *Public Facilities and Services*, while it is reasonable to assume that impacts associated with exceedance of landfill capacity would be less severe under the Proposed Project, the precise decrease in severity cannot be quantified at this time. The decrease would be incremental in nature, and would not alter the GPEIR's conclusion that the Proposed Project would not add considerably to any significant impact.

Fire Protection and Emergency Medical Services

The GPEIR stated that future regional growth would result in increased demand for fire services throughout San Joaquin County, but that only growth within the Stockton Fire Department service area would result in the need for the Stockton Fire Department to construct additional facilities. The GPEIR found that because the City would implement a variety of policies designed to address the adequate provision of a variety of public services, the project would not contribute considerably to a significant cumulative impact associated with fire protection services.

The Proposed Project could cause the need for additional fire protection services and emergency medical services due to increases in residential development in the GDSA, and a consequent increase in residents in the area. However, as described above, only growth within the Stockton Fire Department service area would result in the need for the Stockton Fire Department to construct

additional facilities, and the Proposed Project would not result in a significant cumulative impact associated with fire protection or emergency services.

Law Enforcement Service

While the Proposed Project would increase growth in the GDSA above the amount analyzed in the GPEIR, potentially creating a consequent increase in demand for law enforcement services, City policies to ensure adequate provision of public services would remain in place. Therefore, the Proposed Project would not add considerably to any significant impact associated with law enforcement.

Schools

The GPEIR stated that future regional growth would result in increased demand for schools throughout the County, and that as specific school facility expansion or improvement projects are identified, additional project-specific, second-tier environmental analysis would be completed. Additionally, the GPEIR stated that payment of school impacts fees was deemed as a matter of law to help mitigate these potential impacts to school facilities. Therefore, the GPEIR determined that buildout of the General Plan would not contribute considerably to a significant cumulative impact associated with schools.

While the Proposed Project would increase growth in the GDSA above the amount analyzed in the GPEIR, potentially creating a consequent increase in demand for schools, required school impact fee and project-specific environmental analysis requirements would remain in place. Therefore, the Proposed Project would not add considerably to any significant impact associated with schools.

Parks and Recreational Facilities

The GPEIR stated that given the parkland requirements of the City and neighboring communities which will ensure that new development provides adequate parkland for new residents to the extent allowed by State law, buildout of the General Plan would not contribute considerably to a significant cumulative impact associated with the demand for new parkland in the City or in neighboring areas.

The Proposed Project would increase growth in the GDSA above the amount analyzed in the GPEIR, potentially creating an increase in demand for parks recreational facilities, especially in the Downtown area. However, overall, the increased residential growth would not substantially change the use and demand of parks in the City overall. Therefore while the Proposed Project would increase demand on existing parks and recreational facilities, it would not substantially change the level of contribution to cumulative park and recreational impacts.

Water Supply and Delivery

The GPEIR stated that new development throughout the County would be subject to SB 610 and SB 221, which require adequate water supplies be identified prior to approval of the project; therefore, there would not be a cumulative impact associated with water supplies. In addition, the GPEIR stated that due to several General Plan policies related to the City or project applicants being required to demonstrate the availability of a long-term, reliable water supply for all authorized development, buildout of the General Plan would not contribute considerably to a significant cumulative impact associated with development and an adequate water supply. The GPEIR did state,

however, that construction and/or operation of this infrastructure to ensure an adequate water supply for the City could contribute considerably to a cumulatively significant environmental impact (i.e., biological resource, noise, aesthetic, etc.).

The Proposed Project would allow for more growth than previously analyzed in the GPEIR, thereby causing additional residential development that could create additional demand for water. As detailed in Chapter 9, "Public Facilities and Services," while GHG Reduction Measures associated with the Proposed Project would offset this additional water demand to some extent, it would be speculative to quantify the extent of this offset for buildout after 2050. Given that the Proposed Project would only represent a six month to one year extension in overall City buildout, it is reasonable to assume that under the Proposed Project, cumulative impacts associated with construction or/operation of water supply infrastructure would remain cumulatively significant, but that the Proposed Project would not substantially increase the severity of the cumulative impact.

Wastewater

Similar to water supply, the GPEIR found that future regional growth would result in increased demand for wastewater services throughout San Joaquin County, and that the construction and/or operation of this new infrastructure may contribute considerably to a cumulatively significant environmental impact.

The Proposed Project would allow for more growth than previously analyzed in the GPEIR, thereby causing additional residential development that could create additional demand for wastewater treatment. As detailed in Chapter 9, "Public Facilities and Services," while GHG Reduction Measures associated with the Proposed Project would reduce water demand and use to some extent (which could also reduce wastewater generation), it would be speculative to quantify the extent of this offset for buildout after 2050. Given that the Proposed Project would only represent a six month to one year extension in overall City buildout, it is reasonable to assume that under the Proposed Project, cumulative impacts associated with construction or/operation of wastewater infrastructure would remain cumulatively significant, but that the Proposed Project would not substantially increase the severity of the cumulative impact.

Stormwater

The GPEIR stated that as development proceeded within the City's SOI, impervious surfaces would increase, as would the amount of pollutants in runoff, thereby increasing stormwater drainage rates and potentially impacting surface and groundwater quality. New development within the county would also result in an increase in runoff. The GPEIR noted that Five Mile Slough, Mosher Slough, the Stockton Deep Water Channel, and the San Joaquin River are "water quality impaired", and that it could not be possible to reduce all pollutants from flowing into an impaired water body. Consequently, the GPEIR stated that buildout of the General Plan had the potential to contribute considerably to a significant and unavoidable cumulative impact associated with stormwater runoff that may affect surface water quality. In addition, the GPEIR determined that the construction and/or operation of new stormwater infrastructure built to accommodate local and regional growth could contribute considerably to a cumulatively significant environmental impact (e.g., biological resource, noise, aesthetic). However, the GPEIR stated that buildout of the General Plan would create an incremental contribution to these impacts that would be less than cumulatively considerable.

The Proposed Project would not likely substantially increase the amount of impervious surfaces as compared to the amount analyzed in the GPEIR through additional residential development in the GDSA, or construction of new transportation infrastructure (bike paths, etc.), wastewater management facilities, or other improvements. Compared to the overall growth included in the General Plan as a whole, the additional impervious surfaces and pollutant sources associated with the Proposed Project are limited in scale and the Proposed Project would not significantly increase the severity of this impact. Thus, the Proposed Project would not significantly increase the City's buildout contribution to impacts associated with construction and/or operation of stormwater infrastructure, and the impact would remain less than cumulatively considerable.

Cumulative Impacts to Traffic and Transportation

The GPEIR stated that the transportation analysis of the 2035 Stockton General Plan is inherently cumulative in nature, in that the implementation of the General Plan would take place over many years and would occur in conjunction with other growth and development throughout the region. The GPEIR stated buildout of the General Plan would result in higher traffic volumes and worsened levels of service on a number of roadway facilities throughout the city as compared to a "No Project" alternative. Buildout of the General Plan would be expected to generate substantially more public transit and bicycle/pedestrian activity and would change the accessibility between the city and the major goods movement facilities such as the Port of Stockton, the railroad terminals, and the Stockton Metropolitan Airport. The GPEIR determined these cumulative effects to be significant and unavoidable, and the General Plan's incremental contribution to these impacts to be cumulatively considerable.

As detailed in Chapter 8, *Transportation and Circulation*, city-wide and regionally beneficial impacts would result due to project implementation in terms of reduced vehicle travel through implementation of CAP measures and the Transit Plan/Program. Although the Proposed Project directs additional development to the downtown area which might increase downtown traffic, overall vehicle travel is expected to be reduced. The cumulative impact would remain significant and unavoidable, and General Plan's contribution to these impacts cumulatively considerable, but the impact would not be significantly greater under the Proposed Project and would likely be less.

Cumulative Impacts Related to Climate Change and GHGs

The GPEIR concluded that buildout of the General Plan would result in a cumulatively considerable net increase of GHG emissions. As discussed in Chapter 14, climate change is a global problem caused by the accumulation of GHG emissions generated by numerous and diverse sources. Under "Business As Usual" (BAU) conditions, Stockton's GHG emissions will growth over the next decade and a half (2005 to 2020) by approximately 13%, from approximately 2.4 million to 2.7 million metric tons of CO_2e. This increase will occur primarily because of changes in VMT, building energy, water use, and wastewater generation. As the population and employment in Stockton grow, transportation activity and energy consumption increase. Likewise, water consumption and wastewater generation will increase due to higher demand.

The Draft CAP includes existing state and local measures that would result in GHG emissions reductions within the community. With consideration of currently adopted statewide programs (e.g., AB 32, SB 1078/SB 107) the city's transportation and indirect electricity emissions would be reduced compared to BAU conditions. In addition, many of the policies identified in the existing

General Plan for land use, circulation, and open space and conservation, and public services will help reduce GHG emissions.

To supplement existing initiatives, the Proposed Project includes a series of voluntary, performance-based, and mandatory reduction measures to further reduce community GHG emissions. When combined with existing efforts and state measure, the GHG reduction measures described in the CAP would enable the reduction of city community GHG emissions by an estimated 565,000 to 571,000 MT CO_2e, or by approximately 10% below 2005 levels. It is important to note local effects of the state's cap-and-trade program will also likely contribute to additional reductions.

As discussed in Chapter 14, *Greenhouse Gas Emissions and Climate Change,* AB 32 defines a statewide reduction target of 1990 emissions level by 2020, or as outlined in the AB 32 Scoping Plan, the functional equivalent of 15% below "current" (2005—2008) levels by 2020. Since adoption of the AB 32, additional state inventories for 2005 to 2008 have been completed to help define "current" levels. Based on these most recent inventories, attainment of statewide 1990 emissions levels (433.29 million $MTCO_2e$) is approximately equivalent to 10% below 2005 levels (482.09 million $MTCO_2e$).

GHG reductions achieved by the Proposed Project would slightly exceed the AB 32 emissions reduction target. Because the project would reduce community GHG emissions in a manner that is consistent with the AB 32, it would not result in a cumulatively considerable GHG emissions impact through 2020.

As discussed in Chapter 14, the draft CAP commits the City to continuing climate action planning for the years after 2020, including to 2050. Thus, it is possible that federal, state, and local action combined may actually be able to feasibly reduce GHG emissions by 2050 to levels sufficient to match the global effort needed to achieve climate stabilization goals. However, this cannot be known at this time for the reasons noted in Chapter 14, and primarily due to the lack of any actual State or federal plan to meet post-2020 and 2050 goals. Furthermore, it is premature and speculative to impose additional mitigation on Stockton residents and businesses for post-2020 impacts given the impossibility of being able to adequately determine Stockton's fair-share emissions reduction burden and thus to determine fair-share mitigation levels. As such, buildout of the Stockton General Plan through 2050 would have a significant and unavoidable contribution to global greenhouse gas emissions and associated climate change.

Significant Irreversible Changes

As required by CEQA, the GPEIR identified the significant irreversible changes that could result from implementation of the General Plan. This discussion is included in the GPEIR and is fully incorporated into this SEIR by this reference. The GPEIR identified potential irreversible changes in two categories: changes in land use which would commit future generations and commitment of non-renewable resources.

Potential changes noted in the GPEIR included the conversion of vacant and agricultural/open space lands to industrial, commercial and residential uses, and the intensification of underutilized areas. The GPEIR also stated that development allowed under the Proposed Project would irreversibly commit nonrenewable resources to the construction and maintenance of buildings, infrastructure and roadways. These nonrenewable resources include mining resources such as sand, gravel, steel, lead, copper and other metals. Finally, the GPEIR stated that build-out of the General Plan also

represents a long-term commitment to the consumption of fossil fuels, natural gas and gasoline, and that increased energy demands would be used for construction, lighting, heating and cooling of residences, and transportation of people within, to and from the city.

Implementation of the Proposed Project would not substantially modify or add to the significant irreversible changes already identified in the GPEIR. The Proposed Project would allow additional development in the GDSA through buildout of the General Plan, with a corresponding increase in irreversible impacts related to building construction and energy use/demand. Existing mitigation measures and policies detailed in the GPEIR would continue to reduce the effects of irreversible changes, and policies in the Proposed Project (particular the GHG Reduction Strategies in the CAP) would further reduce these changes, in some cases to less-than-significant levels; however, the irreversible changes identified in the GPEIR would still occur.

Unavoidable Significant Effects

The GPEIR identified the unavoidable significant effects caused by implementation of the General Plan in the GPEIR. The detailed discussion provided in the GPEIR is fully incorporated into this SEIR by this reference. The GPEIR identified significant unavoidable impacts related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services (including recreation), utilities, and traffic/transportation.

As discussed in Chapter 3 through 14, development under the General Plan, as modified by the Proposed Project, would not result in any new significant and unavoidable impacts beyond those disclosed in the GPEIR with one exception:

- Impact CC-2: Development under the General Plan, as modified by the Proposed Project, would result in cumulatively considerably greenhouse gas emissions beyond 2020. This impact was not analyzed in the GPEIR and thus this is a new significant and unavoidable impact. While the Climate Action Plan will help to reduce GHG emissions through 2020 and beyond, overall development would still contribute ongoing and increasing GHG emissions by 2050 that would be inconsistent with long-term reduction goals. The Proposed Project analyzed in this SEIR would include additional residential development in the downtown area, but would offset associated emissions through the implementation of the CAP. However the Proposed Project would not sufficiently address city emissions overall to match 2050 reduction goals.

As discussed in Chapter 3 through 14 and as shown in Table ES-1, the Proposed Project would substantially increase the severity of the following significant and unavoidable impacts beyond the level disclosed in the GPEIR:

- Impact TC-1: Increased vehicular traffic in the downtown area
- Impact TC-4: Increase vehicular traffic in the downtown area affecting railroad crossings.
- Impact PFS-12: Increased residents subject to flooding due to dam or levee failure.
- Impact NCR-7: Increased impact on historic buildings
- Impact NCR-14: Increased impact on visual aesthetics

Chapter 17
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Chapter 18
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Appendix A

Notice Of Preparation/Initial Study

CITY OF STOCKTON
ENVIRONMENTAL DOCUMENT TRANSMITTAL LETTER

April 26, 2012

TO: (See Attached List)

FROM: Lead Agency
City of Stockton
c/o Community Development Dept.
Planning Division
345 North El Dorado Street
Stockton, CA 95202

SUBJECT: **PUBLIC REVIEW OF THE NOTICE OF PREPARATION OF A SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE CLIMATE ACTION PLAN/RELATED ACTIONS AND OTHER GENERAL PLAN AMENDMENTS**

Enclosed is a copy of the Notice of Preparation (NOP) and Notice of Completion (NOC) for the above-named environmental document. Also, a copy of the environmental document, with applicable attachments, is also being transmitted to each "Responsible", "Trustee", and other public agency included on the attached list, as applicable. State agencies, however, should obtain the environmental document, with attachments, directly from the State Clearinghouse.

The remaining agencies, organizations and individuals on the attached list are receiving only this transmittal letter and the NOP/NOC. Public agencies may obtain a free copy of the above-named environmental document at the above-noted Lead Agency address. Private individuals, organizations, and corporations may purchase a copy of the environmental document for a fee of $15.00. If mailing is requested, please remit an additional fee of $5.00 for postage and handling. Checks should be made payable to the City of Stockton and any written orders must identify the project title and document identification number, as noted above.

Any written comments regarding the above-named environmental document must be received at the Lead Agency address no later than May 29, 2012 by 5:00 p.m. If no comments are received by the date indicated, it will be assumed that the document is acceptable. Further information may be obtained by contacting David Stagnaro, AICP, Planning Manager of the Community Development Department, Planning Division at (209) 937-8598.

MICHAEL E. LOCKE,
DEPUTY CITY MANAGER / INTERIM DIRECTOR
COMMUNITY DEVELOPMENT DEPARTMENT

By _____ Date April 25, 2012
David Stagnaro, AICP, Planning Manager

DJS

Enclosures
::ODMA\GRPWISE\COS.CDD.CDD_Library:94593.1

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Climate Action Plan (CAP) / Related Actions and Other General Plan Amendments

Lead Agency: City of Stockton | Contact Person: David Stagnaro, AICP
Mailing Address: 425 N. El Dorado Street | Phone: (209) 937-8598
City: Stockton, CA | Zip: 95202 | County: San Joaquin

Project Location: County: San Joaquin | City/Nearest Community: Stockton
Cross Streets: City wide | Zip Code: ____
Longitude/Latitude (degrees, minutes and seconds): ____° ____′ ____″ N / ____° ____′ ____″ W Total Acres: ____
Assessor's Parcel No.: ____ Section: ____ Twp.: ____ Range: ____ Base: ____
Within 2 Miles: State Hwy #: ____ Waterways: ____
Airports: ____ Railways: ____ Schools: ____

Document Type:

CEQA: ☒ NOP ☐ Draft EIR | NEPA: ☐ NOI | Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) ____ ☐ Draft EIS ☐ Other: ____
☐ Mit Neg Dec Other: ____ ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☒ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☒ Other: CAP, et al

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____ ☐ Transportation: Type ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____ ☐ Mining: Mineral ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____ ☐ Power: Type ____ MW ____
☐ Educational: ____ ☐ Waste Treatment: Type ____ MGD ____
☐ Recreational: ____ ☐ Hazardous Waste: Type ____
☐ Water Facilities: Type ____ MGD ____ ☐ Other: ____

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☒ Fiscal ☒ Recreation/Parks ☐ Vegetation
☐ Agricultural Land ☒ Flood Plain/Flooding ☐ Schools/Universities ☒ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater
☒ Archeological/Historical ☐ Geologic/Seismic ☐ Sewer Capacity ☐ Wetland/Riparian
☒ Biological Resources ☐ Minerals ☐ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☒ Land Use
☐ Drainage/Absorption ☒ Population/Housing Balance ☒ Toxic/Hazardous ☐ Cumulative Effects
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☒ Other: Signif. Findings

Present Land Use/Zoning/General Plan Designation:

City wide

Project Description: *(please use a separate page if necessary)*

Climate Action Plan (CAP) to reduce greenhouse gas emissions (GHG) to levels 10% below 2005 levels by 2020; General Plan amendments including goals and policies promoting a balance of infill and outfill growth, a new Climate Change Element, and potential amendments ensuring consistency with and enabling actions and strategies included in the Climate Action Plan; Transit Plan/Program to promote transit in Stockton; Settlement Agreement Fee Program to fund Settlement Agreement actions; General Plan amendments related to Assembly Bill (AB) 162 (2007) concerning floodplain management; General Plan amendments related to AB 170 (2003) concerning air quality; and revised and new water conservation ordinances.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

_____ Air Resources Board
_____ Boating & Waterways, Department of
_____ California Emergency Management Agency
_____ California Highway Patrol
_____ Caltrans District #_____
_____ Caltrans Division of Aeronautics
_____ Caltrans Planning
_____ Central Valley Flood Protection Board
_____ Coachella Valley Mtns. Conservancy
_____ Coastal Commission
_____ Colorado River Board
_____ Conservation, Department of
_____ Corrections, Department of
_____ Delta Protection Commission
_____ Education, Department of
_____ Energy Commission
_____ Fish & Game Region #_____
_____ Food & Agriculture, Department of
_____ Forestry and Fire Protection, Department of
_____ General Services, Department of
_____ Health Services, Department of
_____ Housing & Community Development
_____ Native American Heritage Commission
_____ Office of Historic Preservation
_____ Office of Public School Construction
_____ Parks & Recreation, Department of
_____ Pesticide Regulation, Department of
_____ Public Utilities Commission
_____ Regional WQCB #_____
_____ Resources Agency
_____ Resources Recycling and Recovery, Department of
_____ S.F. Bay Conservation & Development Comm.
_____ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____ San Joaquin River Conservancy
_____ Santa Monica Mtns. Conservancy
_____ State Lands Commission
_____ SWRCB: Clean Water Grants
_____ SWRCB: Water Quality
_____ SWRCB: Water Rights
_____ Tahoe Regional Planning Agency
_____ Toxic Substances Control, Department of
_____ Water Resources, Department of
_____ Other: _____
_____ Other: _____

Local Public Review Period (to be filled in by lead agency)

Starting Date April 26, 2012 Ending Date May 29, 2012

Lead Agency (Complete if applicable):

Consulting Firm: ICF/Jones and Stokes
Address: 630 K Street, Suite 400
City/State/Zip: Sacramento, CA 95814
Contact: Rich Walter
Phone: (510) 290-1860

Applicant: City of Stockton
Address: 345 N. El Dorado Street
City/State/Zip: Stockton, CA 95202
Phone: (209) 937-8266

Signature of Lead Agency Representative: _____ **Date:** 4-25-12

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

CITY OF STOCKTON
NOTICE OF PREPARATION

April 26, 2012

To: (See attached list)

City of Stockton
c/o Community Development Dept.
Planning and Engineering Services Division
425 North El Dorado Street
Stockton, CA 95202-1997

SUBJECT: **NOTICE OF PREPARATION OF A DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF STOCKTON CLIMATE ACTION PLAN/RELATED ACTIONS AND OTHER GENERAL PLAN AMENDMENTS (P12-063)**

The City of Stockton will be the Lead Agency and will prepare a Notice of Preparation (NOP) of a Draft Subsequent Environmental Impact Report (SEIR) for the project identified below pursuant to CEQA Guidelines Section 15162. This SEIR will tier from the final certified EIR for the Stockton 2035 General Plan (SCH 2004082066) available for review at: http://www.stocktongov.com/government/departments/communityDevelop/cdPlanGen.html or at the City of Stockton Community Development Department, Planning and Engineering Services Division, 345 N. El Dorado Street, Stockton, CA 95202-1997. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project.

The project description, location and the probable environmental effects are contained in the NOP. A copy of the Initial Study is ☒ is not ☐ attached to this document.
PROJECT TITLE: **City of Stockton Climate Action Plan/Related Actions and Other General Plan Amendments**

UNIVERSAL FILE #: P12-163 APPLICANT: City of Stockton

PROJECT DESCRIPTION/LOCATION: Climate Action Plan (CAP) to reduce greenhouse gas emissions (GHG) to levels 10% below 2005 levels by 2020; General Plan amendments including goals and policies promoting a balance of infill and outfill growth, a new Climate Change Element, and potential amendments ensuring consistency with and enabling actions and strategies included in the Climate Action Plan; Transit Plan/Program to promote transit in Stockton; Settlement Agreement Fee Program to fund Settlement Agreement actions; General Plan amendments related to Assembly Bill (AB) 162 (2007) concerning floodplain management; General Plan amendments related to AB 170 (2003) concerning air quality; and revised and new water conservation ordinances. Supportive policies and programs to facilitate an increased amount of housing in the Greater Downtown area as well as new energy, transit, recycling, water conservation, wastewater emissions control, urban forestry, or other infrastructure to support reduction of GHG emissions, downtown infill growth, increase in transit and alternative transportation, reduction in flooding, and improvement of air quality and water conservation.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. We respectfully request that you return your comments to the above-noted Lead Agency address no later than **May 29, 2012 by 5:00 p.m.** If no comments are received by the date indicated, it will be assumed that the document is acceptable. The NOP is available on the City's website: www.stocktongov.com or Community Development Department at the above-noted address. Please send your response to David Stagnaro, AICP Planning Manager, at the address shown above or at david.stagnaro@stocktongov.com. If you have any questions regarding this matter, please contact Planning Manager David Stagnaro, AICP @ (209) 937-8266.

MICHAEL E. LOCKE, DEPUTY CITY MANAGER/
INTERIM COMMUNITY DEVELOPMENT DIRECTOR

By _____ Date: April 25, 2012
David Stagnaro, AICP

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EDOC 2012 - Climate Action Plan NOP

Selected EDOC List

GROUP	*Agency*	*Representative:*	*EnvD*	*NOA*	*NOI*	*NOP*	*Tech*
_MAJOR	Campaign for Common Ground	c/o Trevor Atkinson	☐	☐	☐	☑	☐
_MAJOR	Central Valley Farmland Trust	c/o Bill Martin	☐	☐	☐	☑	☐
_MAJOR	Morada Area Association PMD 123		☐	☐	☐	☑	☐
_MAJOR	Morada Municipal Advisory Council	P.O. Box 94	☐	☐	☐	☑	☐
_MAJOR	Sierra Club - Delta Sierra Group	P.O. Box 9258	☐	☐	☐	☑	☐
_PRA-REQ	Adams Broadwell Joseph & Cardozo	Casey J. Sondgeroth	☐	☐	☐	☑	☐
COS	Cesar Chavez Library	Attn: Reference Dept.	☐	☐	☐	☑	☐
COS	Cesar Chavez Library (2)	Wong/Yamashita	☐	☐	☐	☑	☐
COS	City Attorney	Attn: Guy Petzold	☐	☐	☐	☑	☐
COS	City Clerk (1 copy if CC)		☐	☐	☐	☑	☐
COS	City Council (11 copies)	*** HOLD FOR LATER DISTRIB	☐	☐	☐	☑	☐
COS	City Manager	Attn: Bob Deis	☐	☐	☐	☑	☐
COS	Community Dev. Dept.	Engineering Services: McDowell	☐	☐	☐	☑	☐
COS	Community Dev. Dept.	Administration Division	☐	☐	☐	☑	☐
COS	Community Dev. Dept.	Planning Division	☐	☐	☐	☑	☐
COS	Community Dev. Dept.	Building Division	☐	☐	☐	☑	☐
COS	M.K. Troke Library		☐	☐	☐	☑	☐
COS	Maya Angelou SE Library		☐	☐	☐	☑	☐
COS	Municipal Utilities Dept.	Ann Okubo	☐	☐	☐	☑	☐
COS	Municipal Utilities Dept.	Mel Lytle	☐	☐	☐	☑	☐
COS	Planning Commission (10)		☐	☐	☐	☑	☐

GROUP	Agency	Representative:	EnvD	NOA	NOI	NOP	Tech
COS	Police Dept	Attn: Erin Mettler	☐	☐	☐	☑	☐
COS	Public Works	S.J. Area Flood Control	☐	☐	☐	☑	☐
COS	Public Works Dept	CIP Delivery	☐	☐	☐	☑	☐
COS	Public Works Dept	Traffic-Engineering	☐	☐	☐	☑	☐
COS	Public Works Dept	Admin/Engin. Attn: Murdoch	☐	☐	☐	☑	☐
COS	Public Works Dept	Solid Waste	☐	☐	☐	☑	☐
COS	Public Works Dept. Landscape Arch.	Attn: Victor Machado	☐	☐	☐	☑	☐
COS	Weston Ranch Library	Reference Dept.	☐	☐	☐	☑	☐
FED	David H. Sulouff, Commander (oan-br-n)	11th Coast Guard District (IS)	☐	☐	☐	☑	☐
FED	Honorable Barbara Boxer	United States Senate	☐	☐	☐	☑	☐
FED	Honorable Dianne Feinstein	United States Senate	☐	☐	☐	☑	☐
FED	U.S. Army Corp of Engineers	Regulatory & Environmental Divi	☐	☐	☐	☑	☐
FED	U.S. Bureau of Rec. Mid Pacific Reg.	Planning Division	☐	☐	☐	☑	☐
FED	U.S. EPA, Region 9		☐	☐	☐	☑	☐
FED	U.S. Fish & Wildlife Service	Ecological Service Office	☐	☐	☐	☑	☐
FED	U.S. Fish & Wildlife Service	Regional Director	☐	☐	☐	☑	☐
OTHERS	BIA of the Delta	Kevin Sharrar	☐	☐	☐	☑	☐
OTHERS	Campaign for Common Ground	c/o Trevor Atkinson	☐	☐	☐	☑	☐
OTHERS	Downtown Stockton Alliance	Tim Kerr	☐	☐	☐	☑	☐
OTHERS	Farm Bureau Federation	Land Use & Environmental Affair	☐	☐	☐	☑	☐
OTHERS	French Camp	Municipal Advisory council	☐	☐	☐	☑	☐
OTHERS	Land Utilization Alliance		☐	☐	☐	☑	☐
OTHERS	Morada Area Association	PMD 123	☐	☐	☐	☑	☐
OTHERS	Northern California Carpenters Regional C	Alex Lantsberg, Research Depar	☐	☐	☐	☑	☐

GROUP	Agency	Representative:	EnvD	NOA	NOI	NOP	Tech
OTHERS	San Joaquin Audobon Society		☐	☐	☐	☑	☐
OTHERS	San Joaquin Business Council	Ron Addington	☐	☐	☐	☑	☐
OTHERS	San Joaquin Farm Bureau	Katie Patterson	☐	☐	☐	☑	☐
OTHERS	San Joaquin Partnership	Mike Amman	☐	☐	☐	☑	☐
OTHERS	Shute, Mihaly & Weinberger LLP (Concern	Brian Johnson	☐	☐	☐	☑	☐
OTHERS	Sierra Club	Delta Sierra Group	☐	☐	☐	☑	☐
OTHERS	Stockton Bicycle Club		☐	☐	☐	☑	☐
OTHERS	Stockton Chamber of Commerce	Frank Ferral	☐	☐	☐	☑	☐
OTHERS	The Record		☐	☐	☐	☑	☐
OTHERS	Woodbridge Irrigation District	Andy Christensen, Manager	☐	☐	☐	☑	☐
PUBLIC	Cal Water Service Company		☐	☐	☐	☑	☐
PUBLIC	Central Delta Water Agency		☐	☐	☐	☑	☐
PUBLIC	City of Lathrop	Planning Department	☐	☐	☐	☑	☐
PUBLIC	City of Lodi	Planning Department	☐	☐	☐	☑	☐
PUBLIC	City of Manteca	Planning Department	☐	☐	☐	☑	☐
PUBLIC	EBMUD	Aqueduct Section	☐	☐	☐	☑	☐
PUBLIC	LAFCo	Jim Glaser	☐	☐	☐	☑	☐
PUBLIC	Port of Stockton	Richard Acheris	☐	☐	☐	☑	☐
PUBLIC	San Joaquin Regional Transit District (SJ	Planning Division	☐	☐	☐	☑	☐
PUBLIC	Stockton East Water District	Kevin Kauffman	☐	☐	☐	☑	☐
SJCO	Administrator	Manuel Lopez	☐	☐	☐	☑	☐
SJCO	County Clerk	Patricia Paulson	☐	☐	☐	☑	☐
SJCO	County Counsel		☐	☐	☐	☑	☐
SJCO	San Joaquin County Board of Supervisors		☐	☐	☐	☑	☐

GROUP	Agency	Representative:	EnvD	NOA	NOI	NOP	Tech
SJCO	SJ Flood Control		☐	☐	☐	☑	☐
SJCO	SJCO Community Development Departme	Planning Division	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 1614 / Smith Tract	Kjeldsen-Sinnock, Neudeck	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 17	Kjeldsen-Sinnock, Neudeck	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 2042	Kjeldsen-Sinnock, Neudeck	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 2074	James Yost	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 2114	District Office	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 2115	Dante Nomelini	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 2119	Dante Nomelini	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 2126	Steve Malcoun	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 404	Dante John Nomellini, Jr.	☐	☐	☐	☑	☐
SPECIAL	Reclamation District 828	Tom Rosten	☐	☐	☐	☑	☐
SPECIAL	San Joaquin Valley Air Pollution Control Di	CEQA ISR	☐	☐	☐	☑	☐
STATE	Air Resources Board	Project Review Section	☐	☐	☐	☑	☐
STATE	Caltrans	District 10	☐	☐	☐	☑	☐
STATE	CDF&G Bay - Delta Office	Frank Wernett	☐	☐	☐	☑	☐
STATE	Clearinghouse (15)	Office of Planning & Research	☐	☐	☐	☑	☐
STATE	Deparment of Fish & Game	Region 2, Environmental Service	☐	☐	☐	☑	☐
STATE	Department of Boating & Waterways	Suzie Betzler	☐	☐	☐	☑	☐
STATE	Energy Commission	Environmental Document Revie	☐	☐	☐	☑	☐
STATE	Regional Water Quality Control Board	Central Valley , Region 5	☐	☐	☐	☑	☐
STATE	Water Resources Control Board	Arthur G. Baggett Jr.	☐	☐	☐	☑	☐
UTILITY	PG&E-Stockton Division	Theresa English-Soto	☐	☐	☐	☑	☐

Introduction

The project to be analyzed in the Subsequent Environmental Impact Report (SEIR) under the California Environmental Quality Act (CEQA) includes the implementation of certain actions associated with the Settlement Agreement entered into by the City of Stockton (City), with the Attorney General of the State of California and the Sierra Club on October 14, 2008 as well as several unrelated planning actions not specifically required by the Settlement Agreement. This chapter provides background information about the previously certified 2035 General Plan, the Settlement Agreement, and actions under the Settlement Agreement and the other proposed planning actions that are subject to review under CEQA.

In summary, the Proposed Project includes the following components:

- Settlement Agreement Related Actions
  - Climate Action Plan
  - General Plan Amendments including goals and policies promoting a balance of infill and outfill growth, a new Climate Change Element, and potential amendments ensuring consistency with and enabling actions and strategies included in the Climate Action Plan.
  - Transit Plan / Program
  - Settlement Agreement Fee Program
- Non-Settlement Agreement Actions / Items
  - Potential General Plan Amendments related to Assembly Bill (AB) 162 (2007) concerning floodplain management
  - Potential General Plan Amendments related to AB 170 (2003) concerning air quality
  - Revised and New Water Conservation Ordinances (complying with AB 1881 [2006] and achieving additional purposes)
  - Economic Competitiveness Analysis of the Climate Action Plan

Project Location

Regional

Stockton is the County seat and is located in the center of San Joaquin County, California (Project Area). San Joaquin County is located at the northern end of the San Joaquin Valley. The Primary Zone of the Sacramento/San Joaquin Delta (Delta) is located to the west of the City. Much of the western most part of the City is located within the secondary zone of the Delta. The City is located in the San Joaquin Valley Air Basin (SJVAB).

Project Area

For purposes of this document and the analysis herein, the boundaries of the Project Area is consistent with the City Study Area boundaries defined in the 2007 General Plan EIR. The Project Area comprises 84,950 acres, and encompasses the land within the City Limits, the existing sphere of influence (SOI) area, and the urban services boundary (USB). The Project Area boundaries extend to Armstrong Road and Live Oak Road on the north; portions of State Route 99, the Stockton Diverting Canal, and Jack Tone Road to the east; Bowman and Roth Roads on the south, and the San Joaquin River to the west.

Background

2035 General Plan

In December 2006, in accordance with the requirements of CEQA, the City prepared and circulated a Draft EIR for the 2035 General Plan. Comments were received on the EIR, and the City prepared responses to these comments and certified the EIR in December 2007.

On December 11, 2007, the City of Stockton approved the 2035 General Plan, Infrastructure Studies Project, and Bicycle Master Plan, certified the Final Environmental Impact Report (SCH# 2004082066) (2007 EIR), and adopted Findings of Fact and a Statement of Overriding Considerations for the EIR.

Settlement Agreement Related Actions Background

On January 10, 2008, the Sierra Club filed a Petition for Writ of Mandate in San Joaquin County Superior Court (Case No. CV 034405, hereinafter Sierra Club Action), alleging that the City had violated CEQA in its approval of the 2035 General Plan. In this case, the Sierra Club asked the Court, among other things, to issue a writ directing the City to vacate its approval of the 2035 General Plan and its certification of the EIR, and to award petitioners' attorney's fees and costs.

The Attorney General also raised concerns about the adequacy of the EIR under CEQA, including but not limited to the EIR's failure to incorporate enforceable measures to mitigate the greenhouse gas (GHG) emission impacts that would result from the General Plan.

In order to allow the Stockton General Plan to go forward while still addressing the concerns of the Attorney General and the Sierra Club, the Parties (i.e., the City, the Attorney General, and the Sierra Club) agreed to resolve their dispute by agreement, without the need for judicial resolution. On October 14, 2008, the City of Stockton entered into a Memorandum of Agreement (Agreement) with the Attorney General of the State of California and the Sierra Club.

Since entering into the Agreement, the City has begun certain tasks as required by the Agreement. The Project Description contained in this chapter, and analyzed in this CEQA document, describes the tasks necessary to comply with the Agreement entered into by the City, with the Attorney General of the State of California and the Sierra Club on October 14, 2008 (Attachment1). The project components are described in more detail under *Project Description* below.

Non Settlement Agreement Actions Background

Assembly Bill 162 (2007)—Floodplain Management

In 2007, the state enacted a package of bills (including AB 162) that are intended to improve long-term flood protection by gathering new information on the Central Valley's levees, mapping the valley's 200-year floodplains, identifying the levee protection zones, and adopting a Central Valley Flood Protection Plan (CVFPP) to establish a policy basis for investment in improvements and avoidance of flood hazards. In addition, this legislation mandates that cities and counties amend their general plans to reflect the new floodplain information and eventually to work in concert with the regional flood management plan. The primary focus of this effort is the Central Valley, where miles of federal and state levees protect urban areas from flooding.

As part of the statutory requirements applicable to all cities and counties in the state, the City is now required to take the following actions related to its General Plan (Government Code Section 65302(g)):

- Identify and annually review those areas that are subject to flooding and reflect that hazard in the land use element.
- Identify in the conservation element those areas that may accommodate flood water for groundwater recharge and stormwater management.
- Identify flood hazard information, establish goals, policies, objectives, and implementation measures to protect the community from an unreasonable risk from flooding.

In addition to these requirements, the City may choose to adopt a local hazard mitigation plan as part of the General Plan's Health and Safety Element.

AB 162 presumed that maps of the 200-year floodplain would be available to support local flood management plan. As of late March, 2012, no comprehensive 200-year flood maps have been developed for the City of Stockton.

This project includes General Plan amendments concerning flooding in compliance with AB 162 with the exception of consistency with the CVFPP, which will reportedly not be completed until later in 2012. Following completion of the CVFPP, cities and counties in the Sacramento-San Joaquin Valley will be required to undertake land use planning and zoning actions consistent with the CVFPP.

Given that 200-year flood maps are not currently available and that the CVFPP will be reportedly released in summer 2012, the City may choose to amend the General Plan to comply with AB 162 in a separate later CEQA process when both the 200 year flood maps are available and the CVFPP has been adopted.

Assembly Bill 170 (2003)—Air Quality and Land Use

Assembly Bill 170, Reyes (AB 170), was adopted by state lawmakers in 2003 creating Government Code Section 65302.1 which requires cities and counties in the San Joaquin Valley to amend their general plans to include data and analysis, comprehensive goals, policies and feasible implementation strategies designed to improve air quality.

The City's review of the existing General Plan indicates that it is generally in compliance with AB 170. The City is presently consulting with the San Joaquin Air Pollution Control District (SJVAPCD) to determine if the District concurs with the City's review of AB 170 compliance. Depending on SJVAPCD review, there may be the need for minor amendments to the General Plan to bring it fully in compliance with AB 170. If so,, this project would also include potential General Plan amendments concerning air quality in compliance with AB 170.

Assembly Bill 1881 (2006)—Water Conservation

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires the Department of Water Resources (DWR), not later than January 1, 2009, by regulation, to update the model water efficient landscape ordinance (MWELO) in accordance with specified requirements, reflecting the provisions of AB 2717. AB 1881 requires local agencies to adopt the updated MWELO or equivalent or it will be automatically adopted by statute. This project includes a revised water efficient landscape ordinance in compliance with AB 1881. This project also includes supporting ordinances including a revised landscape design ordinance, a revised tree ordinance, a revised stormwater management and discharge control ordinance and a new low impact development ordinance. These ordinances address storm water management and storm water quality control practices and establish Low Impact Development (LID) standards and implementation guidance for residential, commercial, and industrial projects.

Project Purposes and Objectives

Settlement Agreement Related Actions

The underlying purposes of the Settlement Agreement are as follows:

> The parties want to ensure that the General Plan and the City's implementing actions address GHG reduction in a meaningful and constructive manner. The parties recognize that development on the urban fringe of the City must be carefully balanced with accompanying infill development to be consistent with the state mandate of reducing GHG emissions, since unbalanced development will cause increased driving and increased motor vehicle GHG emissions. Therefore, the parties want to promote balanced development, including adequate infill development, downtown vitalization, affordable housing, and public transportation. In addition, the parties want to ensure that development on the urban fringe is as revenue-neutral to the City as to infrastructure development and the provision of services as possible.

The components of the Proposed Project related to the Settlement Agreement are intended to meet the purposes outlined above and support the reduction of GHG emissions, as well as the to meet the following objectives.

- Carry out those provisions of the General Plan, including the adoption of new policies, as required by General Plan Policy HS-4.20. Specifically, General Plan Policy HS-4.20 requires the City to "adopt new policies, in the form of a new ordinance, resolution, or other type of policy document, that will require new development to reduce its greenhouse gas emissions to the extent feasible in a manner consistent with state legislative policy as set forth in Assembly Bill (AB) 32 (Health & Saf. Code, § 38500 et seq.) and with specific mitigation strategies developed by the California Air Resources Board (CARB) pursuant to AB 32[.]"

- Develop and implement goals and policies that would result in reductions of GHG emissions, including, those that would increase and support: infill development, transit, smart growth, affordable housing, and downtown revitalization.
- Allow the City to "go forward while still addressing the concerns of the Attorney General and the Sierra Club." (p. 2, Settlement Agreement)

The overall objectives are further described in the Settlement Agreement (Appendix X[1]).

Non Settlement Agreement Actions

The specific purposes of the other actions included in the project analyzed in this document are as follows:

- AB-162 General Plan Amendments—Amendments to bring the General Plan in compliance with AB-162 concerning floodplain management to promote flood safety.
- AB-170 General Plan Amendments—Potential amendments to bring the General Plan in compliance with AB-170 (as necessary) concerning air quality to reduce air quality emissions and promote public health.
- Water Conservation Ordinances—Adoption of ordinances to promote water conservation and to protect water quality through better management of stormwater runoff.

Project Description

The various components of the Proposed Project are described in the following sections in this order:

- Settlement Agreement-Related Actions
  - Climate Action Plan
  - General Plan Amendments
  - Transit Plan/Program
  - Settlement Agreement Fee Program
- Non Settlement Agreement Actions
  - AB-162 General Plan Amendments Concerning Floodplain Management
  - AB-170 General Plan Amendments Concerning Air Quality
  - AB-1881 Water Conservation Ordinances

[1] Settlement Agreement to be appended to CEQA Document.

Settlement Agreement Related Actions

Climate Action Plan

Development of the Climate Action Plan

The City is currently preparing a comprehensive Climate Action Plan (CAP) for reducing its GHG emissions to 1990 levels by the year 2020. The City has prepared a Draft CAP in February, 2012 in consultation with the Climate Action Planning Advisory Committee (CAPAC), which is a stakeholder group appointed by the City Council to represent various stakeholders and advise the city on implementation of the Settlement Agreement including preparation of the CAP. The February 2012 Draft CAP will be revised in response to City, CAPAC, and public input.

The CAP is generally organized as follows:

1. Executive Summary: Summary of the key findings of the document.
2. Introduction: Summary of the Settlement Agreement, relevant regulatory information (AB 32 etc.), and the science concerning climate change.
3. GHG Emissions Inventory and Forecast Summary: Summary of the latest emissions inventory and forecasts.
4. GHG Reduction Strategies and Measures and Cost-Benefit Analysis: This section includes the analysis and conclusions from the quantification of GHG reduction measures and cost/benefit Analysis and addresses include the following sectors.
    a. Building Energy Use
    b. Transportation
    c. Waste Generation
    d. Water Consumption
    e. Wastewater Treatment
    f. Urban Forestry
    g. High Global Warming Potential GHGs
    h. Off-Road Vehicles
5. Implementation Strategies: This section identifies key implementation tasks to be pursued in full by the City at the time of implementation as well as the financing options for different measures.

The City compiled a list of candidate GHG reduction measures for quantification and potential inclusion in the CAP, based on existing City documents and other focused studies. An extensive list of potential GHG reduction measures was developed and submitted to the CAPAC for technical review. Based on feedback provided by the CAPAC, the City selected candidate measures to analyze in greater detail. The amount of GHG emissions that could be avoided in 2020 by each measure was calculated. Costs associated with each measure were also quantified, as feasible, to help identify the financial and economic impact of the measures. Other benefits, such as reduction in air pollution, were also identified for all measures. The City also evaluated the methods of implementing different measures, including whether each measure should be implemented through incentive-based

voluntary approaches, flexible performance-based measures, or through new local mandates.

Based on consideration of the GHG reduction effectiveness, financial and economic costs of measures, and benefits, the City identified a list of voluntary and mandatory measures for inclusion in the CAP.

For the purpose of development of the CAP, the City has selected a planning target of 10% less than 2005 emissions levels (City baseline) which is consistent with the California Air Resources Board's 2011 analysis that the state as a whole will need to reduce statewide emissions by approximately 10% below 2005 levels to meet the goal of AB 32. In light of this updated data, the City proposes 10% below 2005 levels as its GHG reduction goal, which is consistent with the statewide reductions needed, relevant to the statewide 2005 levels, to meet the overall AB 32 reduction target.

The measures described in the CAP would, if fully implemented, result in 2020 emissions slightly more than 10 percent below 2005 levels.

General Plan Amendments

The City proposes a set of amendments to 2035 General Plan that will incorporate the goals and policies necessary to carry out the Agreement. The General Plan amendments will include new and amended policies and implementation actions to support the CAP, as well as policies related to timing and conditioning of development to allow implementation of CAP policies. General Plan Amendments will not result in fundamental design changes to the General Plan overall, but will include new zoning designations and details relative to development in the Greater Downtown Stockton Area.

Infill Support

In order to support infill growth in the greater downtown area and other areas in the city, general plan amendments will be proposed incorporate policy considerations into the General Plan Goals and Policies document including but not limited to the following.

- The Settlement Agreement requires Stockton to locate at least 4,400 new housing units in the Greater Downtown Stockton Area (defined as land generally bordered by Harding Way, Charter Way (MLK), Perhsing Avenue and Wilson Way), with 3,000 units approved by 2020. However, the Settlement Agreement was drafted prior to the economic downturn. Growth in the City has slowed dramatically and it is anticipated that only 3,900 new units will be constructed citywide between 2012 and 2020. In addition, residential unit development downtown in the last decade has been extremely limited. The General Plan Amendments will include strategies and policies to help incentivize residential development to address these challenges.
- General Plan amendments to increase incentives for the development of housing in the Greater Downtown Area beyond the level of development forecast in the General Plan to meet these goals. General Plan amendments would include changes in density and allowed housing uses in zoning districts in the Greater Downtown Area as well as other changes in policies to encourage reuse of existing underused structures in the Greater Downtown Area for housing.
- Promotion of greater land use diversity in Stockton by requiring a balance of jobs and housing in all new village areas and throughout the City as part of new development in accordance with

General Plan policies (including ED-2.7, which emphasizes maintaining a jobs-to-housing ratio of greater than 1).

- Require at least an additional 14,000 of Stockton's new housing units to be locate within the City limites as they exist on the Effective Date of the Settlement Agreement (October 2008).
- In compliance with the Settlement Agreement, the City is considering potential amendments to the 2035 General Plan that would identify goals and policies to balance of infill and outfill development. These potential amendments will include performance standards that can be used to determine consistency of outfill growth with City goals and policies, and processes by which balancing can be evaluated and promoted. These amendments could include:
  - Minimum levels of transportation efficiency, transit availability, and Level of Service as they relate to the timing and suitability of outfill development.
  - Capacity to provide City services: Performance measures for all urban services, with consideration of the preference for and incentives related to infill development in Greater Downtown Stockton and within the City limits.
  - Milestones for assuring that specified levels of infill development, jobs/housing balance goals, and GHG and VMT reductions goals are met before new entitlements are granted on the City's periphery. These will relate to the goals for infill development set out in the Settlement Agreement.
  - Impact fees or alternative financing mechanisms on new development outside the City limits as of the date of the Settlement Agreement, to ensure that the services are provided in a revenue neutral manner.

Climate Change Element and Consistency Amendments

A new Climate Change Element will include the necessary policy framework to implement the actions and strategies included in the CAP.

The consistency amendments will be designed to eliminate redundancies and ensure that the goals and policies proposed in conjunction with the new Climate Change Element do not lead to internal inconsistencies within the Goals and Policies document of the General Plan as a whole

Transit Plan / Program

The Transit Plan / Program recognizes that transit will play a part in meeting the GHG reduction targets set in the CAP and has been developed in consultation with the San Joaquin Regional Transit District (SJRTD). The City Transit Plan / Program identifies service improvements and enhancements that could be implemented to increase ridership. Strategies outlined in the plan include provision of additional bus rapid transit routes, realignment of existing and planned routes, and improved transit service. Funding strategies are included.

Settlement Agreement Funding Program

The City is considering a funding program to offset the costs related to compliance with the Settlement Agreement, including the following items.

- Implementing the existing green building ordinance, including inspections.
- Implementing the proposed Transit Plan/Program.
- Implementing proposed energy efficiency, transportation, waste reduction, water conservation ordinance, and other measures including requirements for new development.
- Monitoring and reporting on CAP implementation over time.

The funding program will incorporate a program (cost) budget and financing strategy that recommends the diverse funding sources available and needed to pay the costs of implementing the Settlement Agreement. The local funding sources included in the Financing Plan may include a development impact fee and utility rates or surcharges or other financing mechanisms.

The funding program also will serve as a nexus report to support any development impact fee proposed. The funding program will also include an action plan that outlines the steps necessary to implement each funding source recommended.

Non Settlement Agreement Actions

AB 162 General Plan Amendments Concerning Floodplain Management

In the short term, the current General Plan 2035 must address the statewide statutory provisions and those applicable to the Sacramento–San Joaquin Drainage District in AB 162.

Key policy issues include:

- Mapping flood hazards in the Land Use Element or Safety Element to reflect the best available maps and levee protection zones identified by the California Department of Water Resources (DWR). The requirements of Government Code Section 65302(g) are not limited to the mapped FEMA 100-year floodplains.
- Identifying those areas that may accommodate flood water for groundwater recharge and stormwater management.
- Establishing goals, policies, objectives, and implementation measures to protect the community from an unreasonable risk from flooding. These should include policies that will avoid land use actions that could expose the City to a future liability claim under CWC Section 8307.
- Using Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities (DWR 2010) as a reference while developing goals, policies, objectives, and implementation measures.
- Consulting with the reclamation districts and other agencies responsible for flood control in the City.

The General Plan currently contains extensive policies concerning flood management. However, it is considered probable that additional policies concerning flood management and updated flood mapping may be required to meet the requirements of AB 170. These additional policies and mapping will be included in the project to be analyzed in the SEIR.

In the longer term, because the CVFPP is not expected to be adopted until mid to late 2012, any necessary amendments to General Plan 2035 to conform to the CVFPP will be addressed after that time and are not included in the project being analyzed in the SEIR.

As noted above, due the lack of available 200-year floodplain mapping and the later completion of the CVFPP, the City may decide to complete General Plan amendments relative to AB 162 at a later date.

AB-170 General Plan Amendments Concerning Air Quality

As noted above, a preliminary review of the existing General Plan indicates that it is generally in compliance with AB 170. However, there may be the need for minor amendments to the General Plan to bring it fully in compliance with AB 170. Thus, this project also includes potential General Plan amendments concerning air quality in compliance with AB 170.

Water Conservation Ordinances

The Proposed Project also includes an update to City ordinances relating to water consumption and use in the landscape. The proposed revisions and additions are focused on ordinances related to irrigation/water use, tree protection and shade requirements, storm water management/storm water quality, and LID.

The new and revised ordinances will include:

- Revised Water Efficient Landscape Ordinance—This revised ordinance would require that irrigated areas be maintained to ensure water efficiency, avoid runoff, and promote conservation. Revisions will tailor the MWELO mandate from the state, to Stockton, and incorporate some legacy pieces of the old Stockton language and update it to comply with MWELO.
- Revised Landscape Design Ordinance—This ordinance would build on the current landscape design guidelines and provides additional guidance on designing outdoor spaces that conserve water, protect other resources, and promote sustainable design practices for an improved quality of life, economy, and health for Stockton residents. The revisions will be reframed to make them compliant with MWELO and more sustainable (less resource intensive) in general.
- Revised Tree Ordinance—The Stockton Municipal Code's tree ordinance is proposed to be revised to require more comprehensive protection of tree resources within the city.
- Revised Stormwater Management and Discharge Control Ordinance—The Stockton Municipal Code's stormwater management and discharge control ordinance is proposed to be revised to clearly define stormwater terms and state the authority instilled in the City by the Central Valley Regional Water Quality Control Board (RWQCB) for meeting the requirements of the existing National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit (CAAS083470), and further codify discharge regulations and requirements.
- Low Impact Development (LID) Ordinance. The new LID ordinance is proposed to clearly define stormwater terms, state the authority instilled in the City by the Central Valley RWQCB for meeting the requirements of the NPDES permit; to develop, administer, implement, and enforce a Planning and Land Development Program to reduce pollutants in runoff from new development and redevelopment to the maximum extent practicable.

Competitiveness Analysis

The proposed project includes a competitiveness analysis to identify the potential net economic effects of CAP policies, programs, and financing measures on competitiveness of business in Stockton. The results of the competitiveness analysis will be incorporated into the Final CAP and will be available prior to consideration of the CAP for approval by the City Council. The competitiveness analysis will not have any effect on the environment as it is merely an analytical study. Thus, the EIR will not analyze environmental effects of the competitiveness analysis.

Environmental Checklist

1.	**Project Title:**	City of Stockton Climate Action Plan/Related Actions and other General Plan Amendments
2.	**Lead Agency Name and Address:**	City of Stockton Community Development Dept. Planning Division 345 North El Dorado Street Stockton, CA 95202
3.	**Contact Person and Phone Number:**	David Stagnaro, AICP Planning Manager (209) 937-8266
4.	**Project Location:**	Stockton, CA (City-wide)
5.	**Project Sponsor's Name and Address:**	City of Stockton
6.	**General Plan Designation:**	N/A
7.	**Zoning:**	N/A

8. **Description of Project:**

Climate Action Plan (CAP) to reduce greenhouse gas emissions (GHG) to levels 10% below 2005 levels by 2020; General Plan amendments including goals and policies promoting a balance of infill and outfill growth, a new Climate Change Element, and potential amendments ensuring consistency with and enabling actions and strategies included in the Climate Action Plan; Transit Plan/Programto promote transit in Stockton; Settlement Agreement Fee Program to fund Settlement Agreement actions; General Plan amendments related to Assembly Bill (AB) 162 (2007) concerning floodplain management; General Plan amendments related to AB 170 (2003) concerning air quality; and revised and new water conservation ordinances. Supportive policies and programs to facilitate an increased amount of housing in the Greater Downtown area as well as new energy, transit, recycling, water conservation, wastewater emissions control, urban forestry, or other infrastructure to support reduction of GHG emissions, downtown infill growth, increase in transit and alternative transportation, reduction in flooding, improvement of air quality and water conservation.

9. **Surrounding Land Uses and Setting:**

N/A

10. **Other Public Agencies Whose Approval is Required:**

None

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agricultural and Forestry	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology/Soils

☐ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials	☒ Hydrology/Water Quality
☒ Land Use/Planning	☐ Mineral Resources	☒ Noise
☒ Population/Housing	☐ Public Services	☒ Recreation
☒ Transportation/Traffic	☐ Utilities/Service Systems	☒ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☒ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

DPS — 4-25-12

Signature — Date

DAVID STAGNARO

Printed Name — For

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained if it is based on project-specific

factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from a "Potentially Significant Impact" to a "Less-than-Significant Impact". The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level. (Mitigation measures from Section XVII, "Earlier Analyses", may be cross-referenced.)
5. Earlier analyses may be used if, pursuant to tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 15063(c)(3)(D)]. In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where earlier analyses are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

I. Aesthetics	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☒	☐	☐	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☒	☐	☐	☐

Discussion of Impacts

a-b. The EIR for the 2035 General Plan (General Plan) concluded that the General Plan was designed to enhance Aesthetic values, and was not found to have substantial adverse effects on scenic vistas, or substantially damage scenic resources. In General, the Proposed Project would not result in substantial changes beyond those proposed in the General Plan affecting these resources and therefore will not result in additional impacts. However, the Climate Action Plan may recommend additional wind or solar energy facilities that may affect views from scenic vistas or highways. This issue will be addressed in the EIR.

c. The Proposed Project may result in significantly more intense development in areas with historical resources. For this reason, the Proposed Project has the potential to substantially degrade the existing visual character or quality of the project area and its surroundings. This issue will be addressed in the Subsequent EIR (SEIR).

d. Use of solar panels and high albedo building materials on buildings as proposed in the Climate Action Plan may increase glare in project area. Potential windmill installations may be aesthetically intrusive in certain locations. This issue will be addressed in the SEIR.

II. Agricultural and Forestry Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion of Impacts

a. The Proposed Project would not result in substantial changes beyond those proposed in the General Plan affecting Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, and therefore will not result in additional impacts relative to those identified in the General Plan EIR.

b. The Proposed Project would not result in substantial changes beyond those proposed in the General Plan affecting existing zoning for agricultural use or a Williamson Act contract and therefore will not result in additional impacts.

c. There is no forest land, timberland, or timberland zoned Timberland Production within the project site. Therefore, the Proposed Project would not result in any significant impacts.

d. There is no forest land, timberland, or timberland zoned Timberland Production within the project site. Therefore, the Proposed Project would not result in any significant impacts.

e. The Proposed Project would not result in any other substantial changes beyond those proposed in the General Plan affecting conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use and therefore will not result in additional impacts.

III. Air Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

Discussion of Impacts

a. The Proposed Project would not result in an overall level of growth substantially above that proposed in the General Plan and analyzed in the General Plan EIR, and therefore will not result in additional impacts affecting implementation of the applicable air quality plan. As documented in the Climate Action Plan, the expected level of growth by 2020 is expected to be substantially less than originally anticipated in the EIR for the General Plan.

b. The Proposed Project would not result in an overall level of growth substantially above that proposed in the General Plan and analyzed in the General Plan EIR, and therefore will not result in additional impacts affecting any air quality standard or any existing or projected air quality violation and therefore will not result in additional impacts.

c. The Proposed Project would not result in an overall level of growth substantially above that proposed in the General Plan and analyzed in the General Plan EIR, and therefore will not result increasing the severity of the cumulatively considerable net increase of criteria pollutants for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard, as identified in the General Plan EIR.

d. The Proposed Project could result in an increase in the exposure of sensitive receptors to substantial pollutant concentrations resulting from an increase in housing and associated traffic within the greater downtown area and other infill areas, and therefore could contribute to an increase in the severity of this impact, which was found in the General Plan EIR to be significant and unavoidable. The project may also increase transit facilities which would lower emissions overall but might have localized emissions around transit centers. This issue will be addressed in the SEIR.

e. The Proposed Project would, in general, not result in substantial changes beyond those proposed in the General Plan affecting objectionable odors affecting a substantial number of people, an impact identified in the in the General Plan EIR as less than significant, and therefore is unlikely to result in additional impacts. However, the Climate Action Plan calls for increased recycling and possible composting facilities to collect recycling or composting could have associated odor impacts. This issue will be addressed in the SEIR.

IV. Biological Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion of Impacts

a-f. In general, the Proposed Project would not result in substantial changes in the conversion of undeveloped land to urban uses beyond those proposed in the General Plan and analyzed in the General Plan EIR affecting biological resources and therefore will not result in additional impacts.

However, the Climate Action Plan calls for new renewable energy, transit recycling, composting, water infrastructure and other facilities. Depending on location, such facilities could affect biological resources. Although unlikely, the

CAP might also call for new windmills as an alternative energy source. If proposed, windmills could affect migratory and other birds. The General Plan Amendments for compliance with AB 162 may facilitate or call for additional flood control improvements which could affect biological resources. These issues, as appropriate, will be reviewed in the EIR.

V. Cultural Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☒	☐	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion of Impacts

a. The Proposed Project may result in specific effects to historical buildings in the greater downtown area. The overall impact of development on historical resources was considered in the General Plan EIR and was found to be a significant and unavoidable impact. The Proposed Project could result in an increase in the severity of this impact due to a focus on infill growth. This issue will be addressed in the SEIR at a programmatic level.

b-c. The Proposed Project would not result in substantial changes in areas planned for development beyond those proposed in the General Plan. However, the project may facilitate new renewable energy, transit, or other facilities that may result in additional impacts affecting archaeological resources or disturbing human remains. While impacts are likely mitigable, this issue will be addressed in the SEIR.

VI. Geology and Soils	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
2. Strong seismic ground shaking?	☐	☐	☒	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
4. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Discussion of Impacts

a. The project area is located in a region of California that is characterized by low seismic activity. The project area is not subject to significant seismic hazards associated with active faults. The site is flat and has no potential for landslides. Project activities would cause no change in current conditions with respect to surface rupture or faulting hazards. The General Plan EIR identified these impacts as less than significant. Although the project would result in more residential housing in the greater downtown area, the project will not result in a

greater overall amount of residents or development, and thus the Proposed Project would not result in substantial changes beyond those proposed in the General Plan and analyzed in the General Plan EIR affecting seismic risks and therefore will not result in additional impacts.

b-f. The Proposed Project would not result in substantial changes beyond those proposed in the General Plan and analyzed in the General Plan EIR affecting soils and geological resources and therefore will not result in additional impacts.

VII. Greenhouse Gas Emissions	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion of Impacts

a, b. The Proposed Project would not result in the wasteful, inefficient or unnecessary consumption of energy by residential, commercial, industrial or public uses. The City of Stockton would implement policies designed to encourage the conservation and efficient use of existing energy supplies and the continued provision of public utilities.

The Proposed Project may require the construction or expansion of additional facilities for transit, energy, or conservation, the construction of which would result in GHG emissions. However, the Climate Action Plan overall would result in net reductions in emissions to below 2005 levels.

Because the Proposed Project is designed to reduce the GHG emissions impacts of the 2035 General Plan, would not result in substantial changes beyond those proposed in the General Plan affecting GHG emissions and therefore will not result in additional impacts.

This issue will nonetheless be addressed in the SEIR as it is the focal subject of the Climate Action Plan.

VIII. Hazards and Hazardous Materials	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion of Impacts

a-d, h. The City of Stockton would implement policies designed to reduce hazards. This issue was identified as less than significant in the General Plan EIR, and the project would not involve activities outside of those covered by the General Plan EIR relative to hazardous materials. Although the project may facilitate new

energy, transit, water, wastewater, urban forestry or other facilities and would result in more residents in the greater downtown area, such development in general was anticipated in the General Plan EIR. Downtown development may result in more rehabilitation or reuse of existing older buildings which may require abatement of lead-based paint and asbestos-containing materials. However, state and federal law fully regulated the remediation of such building materials, such that significant exposure of the public to these materials would not occur. . This issue will be discussed in the EIR, but the impact conclusion is expected to be that the impacts would be less than significant.

e.-f. The General Plan EIR identified significant and unavoidable impacts in this area. The Proposed Project however is unlikely to contribute to housing or employment near the Airport, since the focus of General Plan Amendments would be on increasing housing in the greater downtown area. However, the Climate Action Plan may propose or promote new solar facilities which could be a safety issue in proximity to airports. This issue will be addressed in that EIR.

g. The City of Stockton would implement policies designed to ensure implementation of emergency plans. This issue was identified as a significant and unavoidable impact in the General Plan EIR. The Proposed Project would not involve activities or areas of development outside of those covered by the General Plan EIR and new facilities that may be facilitated by the project (solar and wind energy, transit, water conservation, recycling, urban forestry) are not facilities that would engender new emergencies or risk not already disclose in the General Plan EIR. Therefore, the Proposed Project would not result in an increase in the severity of this impact.

h. The Proposed Project would not result in greater development at the urban-wildland interface than that disclosed in the General Plan and thus would not result in an increase in the severity of this impact.

IX. Hydrology and Water Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☐	☒	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☐	☒	☐	☐
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☒	☐	☐	☐
h. Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	☒	☐	☐	☐
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☒	☐	☐	☐
j. Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion of Impacts

a. The General Plan EIR found that development under the General Plan would have a less than significant effect on water quality. The Proposed Project could result in new energy, transit, recycling, water conservation, wastewater emissions control, and flood control projects which may affect water quality. The proposed water conservation ordinances relating to storm water management/ storm water quality are designed to improve water quality. This issue will be addressed in the SEIR but impacts are expected to be mitigable to a less than significant level through application of General Plan policies and the new water conservation ordinances.

b. The General Plan EIR found that development under the General Plan would have a less than significant effect on the depletion of groundwater supplies. The Proposed Project could result in new energy, transit, recycling, flood control or other projects which may have limited new water demands, which are expected to be less than significant. The proposed water conservation ordinances are designed to improve groundwater infiltration and the net effect of the project is expected to have no change in the level of this impact relative to the General Plan EIR.

c-d. The General Plan EIR found that development under the General Plan would have a less than significant effect on drainage patterns. The Proposed Project could result in new facilities which may affect local drainage patterns, depending on location. Drainage issues will be addressed in the SEIR but are expected to be less than significant with mitigation.

e-f. The Proposed Project could result in stormwater runoff from new facilities. However with implementation of the new water conservation ordinances, these impacts are expected to be less than significant.

g-i. The Proposed Project would conform with the General Plan policies relative to flooding. The General Plan EIR determined that with implementation of these policies, the impacts of General Plan buildout would be less than significant. The Proposed Project would include more residential development in the greater downtown area, part of which is in the 100-year flood plain. In addition, the project includes identification of areas of flooding using information that became available after the General Plan EIR, which may identify areas of flooding greater than that disclosed in the prior EIR. However, policies relative to flood management will be revisited in the addition of policies to meet AB 162 which may address flooding impacts. At this time, the significance of the flood analysis is not known, but will be addressed in the EIR.

j. The site is located far from the Pacific Ocean and other large water bodies and has not been historically affected by tsunamis. In addition, the topography is flat, and mudflows are an unlikely scenario. The Proposed Project would not result in substantial changes beyond those proposed in the General Plan affecting the potential for seiche, tsunami or mudflows and therefore will not result in additional impacts.

X. Land Use and Planning	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion of Impacts

a. The Proposed Project is not expected to facilitate new development or facilities that would divide an established community and therefore will not result in additional impacts.

b. The Proposed Project may conflict with an adopted applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigation an environmental effect. General Plan Amendments will include policies to promote more housing in the greater downtown area and to balance infill and outfill development that may result in changes to the existing land use plan. New transit and other facilities may also have conflicts with the existing land use plan. This issue will be addressed in the SEIR.

c. The Proposed Project would not result in substantial changes beyond those proposed in the General Plan and analyzed in the General Plan EIR affecting any applicable habitat conservation plan or natural community conservation plan, and therefore will not result in impacts not identified in the General Plan EIR.

XI. Mineral Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local General Plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion of Impacts

a-b. The Proposed Project would not result in substantial changes in areas converted from undeveloped to developed beyond those proposed in the General Plan and analyzed in the General Plan EIR and affecting mineral resources. The General Plan EIR identified this as a less than significant impact. The Proposed Project, therefore, will not result in additional impacts.

XII. Noise	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose persons to or generate noise levels in excess of standards established in a local General Plan or noise ordinance or applicable standards of other agencies?	☒	☐	☐	☐
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion of Impacts

a-d. The Proposed Project may result in substantial changes beyond those proposed in the General Plan and analyzed in the General Plan EIR affecting noise due to the increase in housing in the greater downtown area and the increase in transit services. This issue will be addressed in the SEIR.

e-f. Although the General Plan EIR identified significant and unavoidable impacts in this area, the Proposed Project would not likely facilitate residential or commercial development near airports as it is focused on facilitating more development in the greater downtown area.

XIII. Population and Housing	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☒	☐	☐	☐
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion of Impacts

a. The Proposed Project may induce substantial population growth in the greater downtown area beyond that which would occur with the current General Plan. This issue will be addressed in the SEIR.

b-c. The Proposed Project would not displace a substantial number of existing housing units, or displace a substantial number of people, necessitating the construction of replacement housing elsewhere. It is expected that increases in housing beyond that proposed in the General Plan and as a result of the Proposed Project will affect existing non-residential or vacant land uses and therefore not result in displacement of existing residents from existing housing.

XIV. Public Services	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☒	☐	☐
Schools?	☐	☒	☐	☐
Parks?	☐	☒	☐	☐
Other public facilities?	☐	☒	☐	☐

Discussion of Impacts

a. The Proposed Project would not result in a substantial adverse physical impact to the continued provision of law enforcement, fire protection, school, and library services in the study area. The City of Stockton would implement policies designed to continue provision of law enforcement, fire protection, school, and library services and emergency response planning. The Proposed Project would not result in substantial changes beyond those proposed in the General Plan and analyzed in the General Plan EIR affecting these resources and therefore will not result in additional impacts.

The Proposed Project will facilitate more residents in the greater downtown area which could create a new for additional law enforcement and fire protection facilities which could have an adverse physical effect on the environment. The City of Stockton would implement policies designed to minimize this impact through the development of new facilities that address public safety and environmental concerns. These issues will be addressed in the SEIR.

Similarly, the Proposed Project could result in an increased demand for school, library, park or other facilities in the greater downtown area which could have an adverse physical effect on the environment due to the construction of new facilities. The City of Stockton would implement policies designed to minimize this impact through the development of new facilities that address public safety and environmental concerns. These issues will be addressed in the SEIR.

XV. Recreation	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☒	☐	☐	☐

Discussion of Impacts

a. The Proposed Project would facilitate more residents in the greater downtown area which could increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. This issue will be addressed in the SEIR.

b. The Proposed Project would facilitate more residents in the greater downtown area which could result in a demand for new recreational facilities that might have an adverse physical effect on the environment. This issue will be addressed in the SEIR.

XVI. Transportation/Traffic	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e. Result in inadequate emergency access?	☐	☐	☐	☒
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Discussion of Impacts

a-b, f. The Proposed Project may result in an increase in vehicular traffic, public transit usage, bicycle and pedestrian activity relative to that analyzed in the General Plan EIR due to increased residential density in the greater downtown area. The project would include a Transit Plan/Program component which include improvements to the public transit network, and a car sharing program and other transit supportive policies which would help to reduce traffic. The net effect of increased downtown traffic and increased transit on traffic levels of service and transportation planning will be addressed in the SEIR.

c. The Proposed Project is not anticipated to result in an increase in air traffic levels or a change in air traffic patterns that would result in substantial safety risks because the project does not include the introduction of land uses to the area that would by themselves generate a substantial amount of air traffic. Therefore, there would be no impact and no mitigation is required.

d. The Proposed Project would not substantially increase hazards because of a design feature. The project will increase transit service which may result in incompatible use of roadways and/or increase risk of hazards due to increased transit. While this is unlikely to be a ignificant impact, it will be reviewed in the SEIR.

e. The Proposed Project would not result in inadequate emergency access. Therefore, there would be no impact and no mitigation is required.

XVII. Utilities and Service Systems	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☐	☒
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a. The Proposed Project would not result in an overall development level beyond those proposed in the General Plan and analyzed in the General Plan EIR affecting wastewater treatment requirements of the Central Valley Regional Water Quality Control Board and therefore will not result in additional impacts.

b. The Proposed Project may require or result in the construction of new water and wastewater treatment facilities or expansion of existing facilities to promote reduction of GHG emissions and/or water conservation, the construction of which could cause significant environmental effects but are likely mitigable.

The City of Stockton would implement policies designed to minimize this impact through the early identification of required infrastructure and the orderly

construction and rehabilitation of the facilities needed to serve existing and planned urban areas. The project also includes water conservation ordinances designed to reduce stormwater runoff which would reduce wastewater treatment requirements. The net effects on the need for new water and wastewater treatment facilities will be addressed in the SEIR.

c. The Proposed Project may require or result in the construction of new stormwater drainage facilities or expansion of existing facilities to meet the proposed water conservation ordinances, the construction of which could cause significant environmental effects but are likely mitigable. This issue will be addressed in the SEIR.

d. The Proposed Project would not result in an increase in water demand relative to that disclosed in the General Plan EIR because it would not result in a greater amount of overall development. The Proposed Project includes water conservation ordinances designed to reduce water consumption and thus the project is likely to reduce rather than increase water demands.

e. The Proposed Project would not result in an increase in wastewater relative to that disclosed in the General Plan EIR because it would not result in a greater amount of overall development. The Proposed Project includes water conservation ordinances designed to reduce and treat stormwater runoff and thus the project is likely to reduce rather than increase wastewater treatment demands.

f. The Proposed Project would not result in an increase in waste generation relative to that disclosed in the General Plan EIR because it would not result in a greater amount of overall development. The Climate Action Plan is likely to include additional policies designed to divert a greater amount of waste from deposition in landfills and thus the project is likely to reduce rather than increase demand for landfill space.

g. The Proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. The City of Stockton would implement policies designed to provide for continued solid waste services and recycling activities. This issue was identified as less than significant in the General Plan EIR. The Proposed Project could increase the need for additional waste diversion, recycling or composting facilities as part of the effort to reduce indirect landfill emissions, but any facilities supported by the project would be required to comply with all relevant waste facility requirements. Therefore the impact would be less than significant.

XVIII. Mandatory Findings of Significance	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b. Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Discussion of Impacts

a. The Proposed Project could result in substantial changes beyond those identified in the General Plan EIR related to historical or biological resources. This will be addressed in the SEIR.

b. The Proposed Project could potentially contribute to an increase in the severity of cumulative impacts identified in the General Plan EIR, for example, related to traffic or cultural resources in the greater downtown Area, and in other resource areas . This will be addressed in the SEIR.

c. In many area, the Proposed Project is likely to reduce the level of adverse effects on human beings. For example, project would likely reduce air quality emissions (as a cobenefit of reducing GHG emissions and any policies added per AB 170) overall, would promote transit, and would help to protect areas from flooding. However, it is possible that the project could contribute to other significant impacts, such as traffic in the greater downtown area. This will be addressed in the SEIR.

XIX. Earlier Analysis

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a discussion should identify the following on attached sheets.

a. **Earlier analyses used.** Identify earlier analyses and state where they are available for review. *The EIR for the General Plan is available at the City of Stockton Community Development Department.*

b. **Impact adequately addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in the earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis. *References to the EIR for the General Plan were noted where applicable above.*

c. **Mitigation measures.** For effects that are "potentially significant unless mitigated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project. *Mitigation measures, as appropriate, would be identified in the EIR.*

Authority: Public Resources Code Sections 21083 and 21083.05.

Reference: Section 65088.4, Government Code; Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino* (1988), 202 Cal. App. 3d 296; *Leonoff v. Monterey Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

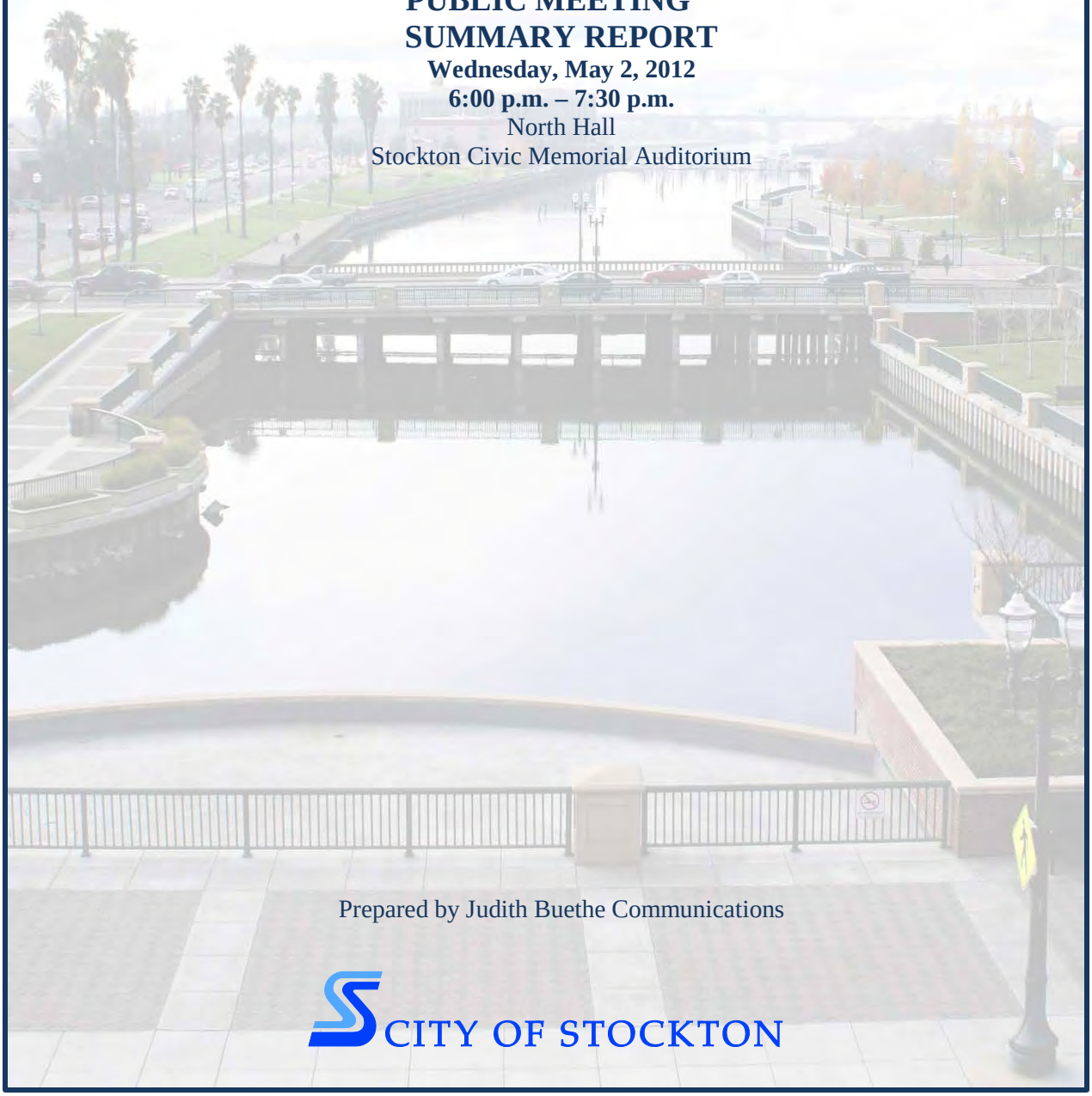
Appendix B

Scoping Meeting Summary

Climate Action Plan City of Stockton

PUBLIC MEETING SUMMARY REPORT

Wednesday, May 2, 2012
6:00 p.m. – 7:30 p.m.
North Hall
Stockton Civic Memorial Auditorium



Prepared by Judith Buethe Communications

CITY OF STOCKTON

General Information about This Document

What is in this document?
This document is a summary report of the Public Meeting held on Wednesday, May 2, 2012, to discuss the City of Stockton Climate Action Plan.

What should you do?

- *Please read this summary report.*
- *If you have any concerns about the summary report, please contact Judith Buethe, Judith Buethe Communications, (209) 464-8707, Ext. 101, or send email to judith@buethecommunications.com.*
- *If you have questions about the process or the project in general, please contact David Stagnaro, AICP, Planning Manager, City of Stockton, (209) 937-8266, or send email to David.Stagnaro@stocktongov.com.*

Table of Contents

Appendices

EXECUTIVE SUMMARY

The City of Stockton held a Public Meeting in Stockton, California, on Wednesday, May 2, 2012.

The City of Stockton must reduce its greenhouse gas emissions to 10% below 2005 levels by the year 2020. A Settlement Agreement with the Attorney General of California and the Sierra Club requires the City to develop a plan to reduce emissions. A Citizens Committee established by the City has guided development of a Climate Action Plan that was presented at the public meeting.

The Public Meeting provided members of the public and other interested parties with an opportunity to provide comments or concerns.

The Public Meeting was publicized through a flyer sent in an envelope by first-class U.S. mail, a public notice (advertisement) in English published in *The Record*, a news release to print and broadcast media that serve Stockton, the Stockton website, and cards on SJRTD bus interiors. Also, the Central Valley Association of Realtors sent the announcement to its members.

Ten members of the public signed in at the Public Meeting. The meeting was conducted an as open house with exhibits and maps from 6:00 p.m. – 6:30 p.m., followed by a presentation with members of the project team available to receive comments and answer questions.

Informational display boards and exhibits were available. Attendees were also provided with a print agenda and a comment sheet.

Personnel from the City of Stockton and from the consultant team staffed the information stations.

Two comment sheets were received. Also, a public stenographer recorded the question-and-comment portion of the meeting. Oral comments and suggestions were also gathered by personnel staffing the meeting.

Chapter 1: Introduction

1.1 A Public Meeting Was Held

The City of Stockton held a Public Meeting from 6:00 p.m. – 7:30 p.m. on Wednesday, May 2, 2012, in Stockton, California.

1.2 Announcement of the Public Meeting

The Public Meeting was publicized by a flyer in an envelope sent by first-class U.S. Mail on April 23, 2012, to approximately 385 individuals, public agencies, transit agencies, civic and community groups, business groups, chambers of commerce, environmental groups, and other interested parties.

An e-mail noticed the meeting to a list of approximately 210 persons who had previously shown an interest in the project or had been added to an e-mail list maintained by the City of Stockton.

A public notice (advertisement) in English was placed in *The Record* on Friday, April 27, 2012. [See Appendix A for a copy of the public notice.]

A news release was sent on April 25, 2012, to print and broadcast media (mainstream and alternative) that serve the Stockton area. [See Appendix A for a copy of the news release.] Following the distribution of the news release, an article announcing the meeting was published in *The Record* on April 29, 2012.

Also, the Central Valley Association of Realtors sent the announcement to its members.

1.3 Purpose and Goals of the Public Meeting

The City of Stockton must reduce its greenhouse gas emissions to 10% below 2005 levels by the year 2020. A Settlement Agreement with the Attorney General of California and the Sierra Club requires the City to develop a plan to reduce emissions. A Citizens Committee established by the City has guided development of a Climate Action Plan that was presented at the public meeting. The purpose of the meeting was to provide a progress update on the project to members of the public and to receive public comment.

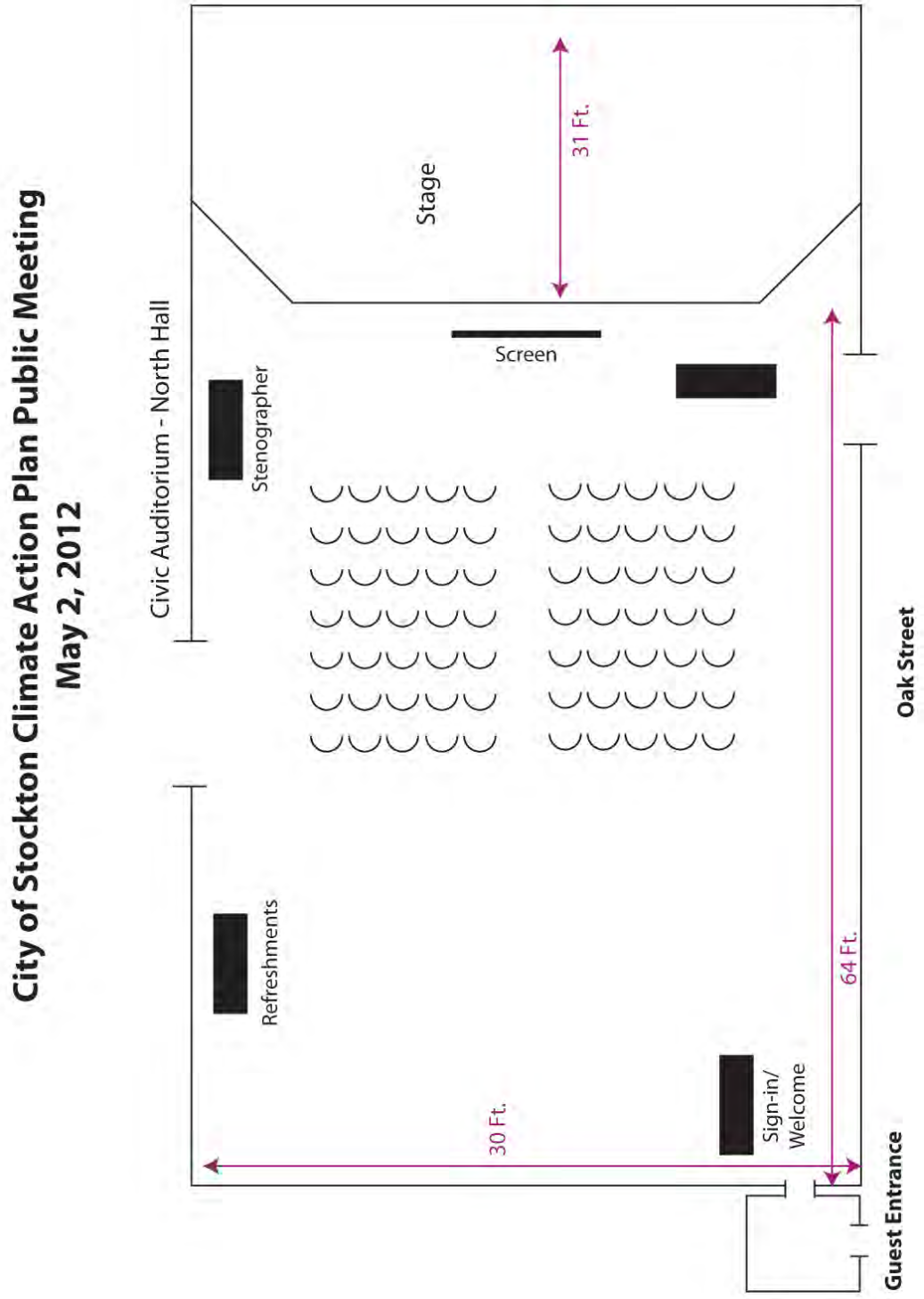
1.4 Format of the Public Meeting

Ten members of the public signed in at the Public Meeting. The meeting was conducted as an open house with exhibits and maps, followed by a presentation. Attendees were also encouraged to submit written comments on comment sheets that were supplied. Four project team members and a Spanish-language translator were available throughout the evening to answer questions and receive public input.

Chapter 2: Public Meeting Proceedings

2.1 Room Layout

Following is the room layout for the Public Meeting. The layout encouraged attendees to move about the room and through the various stations.



2.2 Displays and Exhibits

The informational display boards and exhibits at the Public Meeting are explained below. (Reduced copies of the informational display boards and graphics are included in Appendix A.)

Station 1: Welcome Board and Sign-in Table

A welcome board greeted attendees as they entered the North Hall of the Stockton Civic Memorial Auditorium where the Public Meeting was held. Attendees were asked to sign in to maintain an attendance record and to ensure that all interested parties could be added to the project mailing list. [See Appendix F for the sign-in list of attendees at the Public Meeting.] The Public Outreach Coordinator staff members (one of whom was a Spanish-language translator) encouraged attendees to view the displays, ask questions, and provide their thoughts about the project. The Public Outreach staff also gave each attendee five handouts: a print program, a comment sheet, a list of Frequently Asked Questions about the Stockton Draft Climate Action Plan and Subsequent Environmental Impact Report, a Notice of Preparation of the Subsequent Draft Environmental Impact Report, and a copy of the slides to be presented. The print program welcomed members of the public to the Public Meeting, stated the night's agenda, and provided project background, an agenda, and project contact information. Comment sheets provided space for comments and/or concerns. [See Appendix C for copies of the handouts.]

The Public Outreach Coordinator staff members also explained the overall format and encouraged people to ask questions of and provide comments to the project team members who were present. Attendees were also informed of the availability of a public stenographer and encouraged to dictate any comments to the stenographer.

Station 2: Process and Information

The three display boards at this station provided information on the following subjects:

2.1. 2005 Greenhouse Gas Inventory/2020 Greenhouse Gas Forecast
2.2. Greenhouse Gas Reduction Measures included in the Draft Climate Action Plan (State and Local)
2.3. Timeline for Draft Climate Action Plan and Environmental Impact Report Review and Consideration

Station 3: Comment Station

Comment sheets, pens, and a box for comment sheets were available at this station. Two comment sheets were received. The public stenographer was also available to take dictated comments.

2.3 Staff and Elected Officials at the Meeting

Staff

The following personnel organized and conducted the workshop and were available to answer questions from the public.

2.3.1 City of Stockton

David Stagnaro, Project Manager

2.3.2 Consultants

ICF: Jones & Stokes
Tony Held, Principal
Rich Walter, Principal

Judith Buethe Communications
Judith Buethe, Public Outreach Manager
Daniela Ayala, Spanish-language Translator

2.3.3 Elected Officials and Representatives of Elected Officials

None

2.4 Attendance

Attendance at the Public Meeting included the following numbers of individuals and who or what kind of organization each represented, if any:

Individual Persons	Businesses	Civic Organizations	Government	Staff	Media	Total
3	2	4	1	4	0	14

Chapter 3: Presentation and Public Input

3.1 Presentation

After Judith Buethe, Public Outreach Coordinator, welcomed the audience and introduced the members of the project team, David Stagnaro, City of Stockton Planning Manager, described the background and reasons for the project. Mr. Stagnaro's comments were followed by Rich Walter's presentation on the project. Mr. Walters is a Principal, ICF International. A copy of the PowerPoint presentation he used can be found in Appendix A.

A full transcription of the question-and-answer session that followed the PowerPoint presentation can be found in Appendix F. An informal listing of concerns expressed or questions asked during the session follows:

Table #1

CONCERNS AND QUESTIONS
1. Request for today's statistics to compare to the 2020 populations projections.
2. Why must we wait until 2030 to learn of our success or lack of success in meeting the goals of the CAP?
3. How is the inventory of greenhouse gasses done? It seems to be calculated in derived numbers.
4. Insurance representatives are asking for mileage on new cars. Is mileage going to be measured on all cars?
5. Concern about data being collected at smog shops.
6. Sensors are already being built into the roads that monitor individual VIN numbers.
7. Problems in trying to take into consideration interstate transport—the gross polluters.
8. Transshipping goods from Stockton to other parts of the Central Valley—and the country.
9. Will there be a comment period on the General Plan amendments? When?
10. Purpose of today's workshop?
11. Do our questions/comments provide input for the EIR?
12. Appreciation for the meeting and the information.
13. Reference to indirect-source rule and its effect, if any, on developers.
14. Effects on the San Joaquin Air Pollution Control District?
15. Is the Port of Stockton's new marine highway being considered as part of the greenhouse gases?
16. The City should care for the existing trees before planting more.
17. How is the City going to pay for the results of the Climate Action Plan?
18. Will one EIR cover both the Climate Action Plan and the General Plan amendments? With just one CEQA process covering both administrative ends?
19. This meeting should be recorded.[1]
20. Should the City of Stockton curtail receiving Oakland's waste?
21. Is the project factoring in the values of private energy conversions? Reviewing building permits? Talking to wholesalers of heaters, air conditioners, etc.?
22. Inability to get a rebate for Energy Star efforts due to timing.
23. Anxiety that vehicles and home equipment may be prohibited with resulting economic loss to private property owners.
24. Disappointment with the meeting was expressed, because so few members of the public were present.
25. Concern that the numbers of private energy saving initiatives are not being tracked and/or that the City is not being given proper credit for those initiatives.
26. Couldn't measurements be skewed by aberrant weather patterns?
27. The recent economic forecast from University of the Pacific for jobs was encouraging.
28. Is the project taking into consideration the concept that jobs are more important than controlling a little bit of air pollution? The project needs to be thorough in its analysis.

[1] The meeting was recorded by a public stenographer

3.2 Written Comments Received

Two comment sheets were received at the Public Meeting Following is a transcript of the comment sheets. Scanned copies of the original comment sheets can be found in Appendix C.

Comment Sheets Submitted May 2, 2012

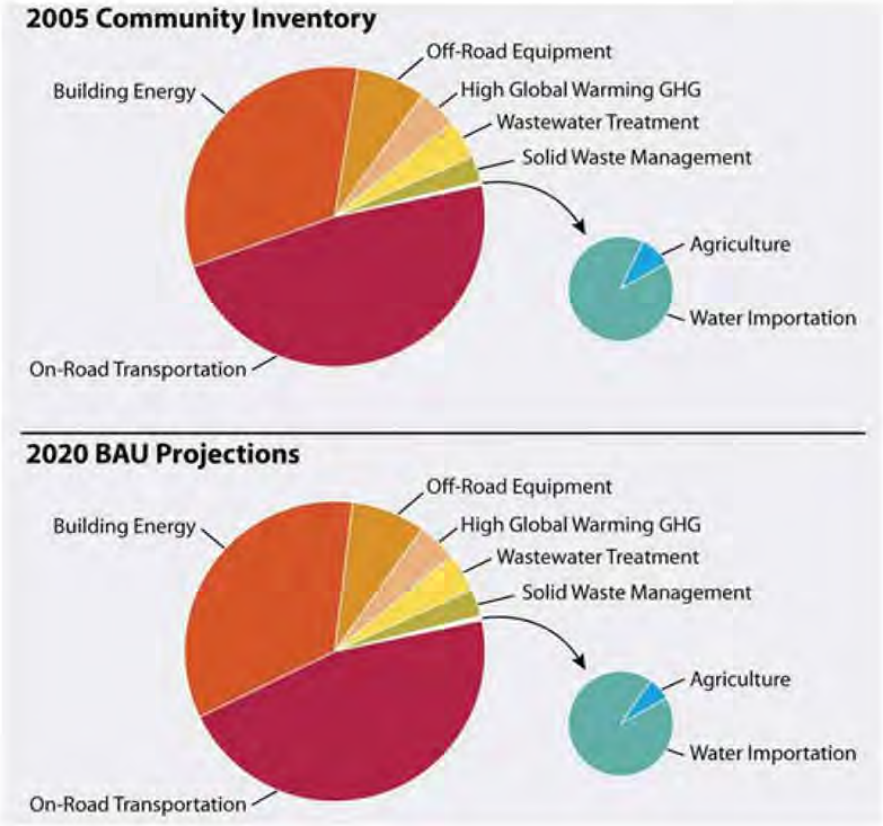
Bob Prickett
625 N. Madison Street
Stockton, CA 95202
Shorten presentation to give more Q & A time.

Betsy Reifsnider
1106 N. El Dorado Street
Stockton, CA 95202
Does the Climate Action Pan take any "carbon sequestration" projects into account? If so, would cap-and-trade funds benefit the City of Stockton? Thank you for an informative and thorough public meeting tonight. Much appreciated.

APPENDICES

Appendix A: Exhibits

Stockton 2005 Greenhouse Gas Inventory
2020 Greenhouse Gas Forecast



City of Stockton 2005 Greenhouse Gas Emissions Inventory and 2020 Forecast

	2005		2020	
Emissions Sector	MT CO_2e	% of Total	MT CO_2e	% of Total
Agriculture	928	0.04%	928	0.03%
Building Energy	776,186	32.9%	911,272	34.1%
High Global Warming GHG	100,931	4.3%	112,478	4.2%
Off-Road Equipment	176,431	7.5%	213,300	8.0%
On-Road Transportation	1,132,265	48.0%	1,232,663	46.1%
Solid Waste Management	65,720	2.8%	78,347	2.9%
Wastewater Treatment	99,777	4.2%	111,191	4.2%
Water Importation	8,694	0.4%	12,340	0.5%
Total Emissions	**2,360,932**	**100%**	**2,672,519**	**100%**

CITY OF STOCKTON

Climate Action Plan City of Stockton

Greenhouse Gas Reduction Measures included in the City of Stockton Draft Climate Action Plan (State & Local)

State Measures and GHG Reductions Achieved

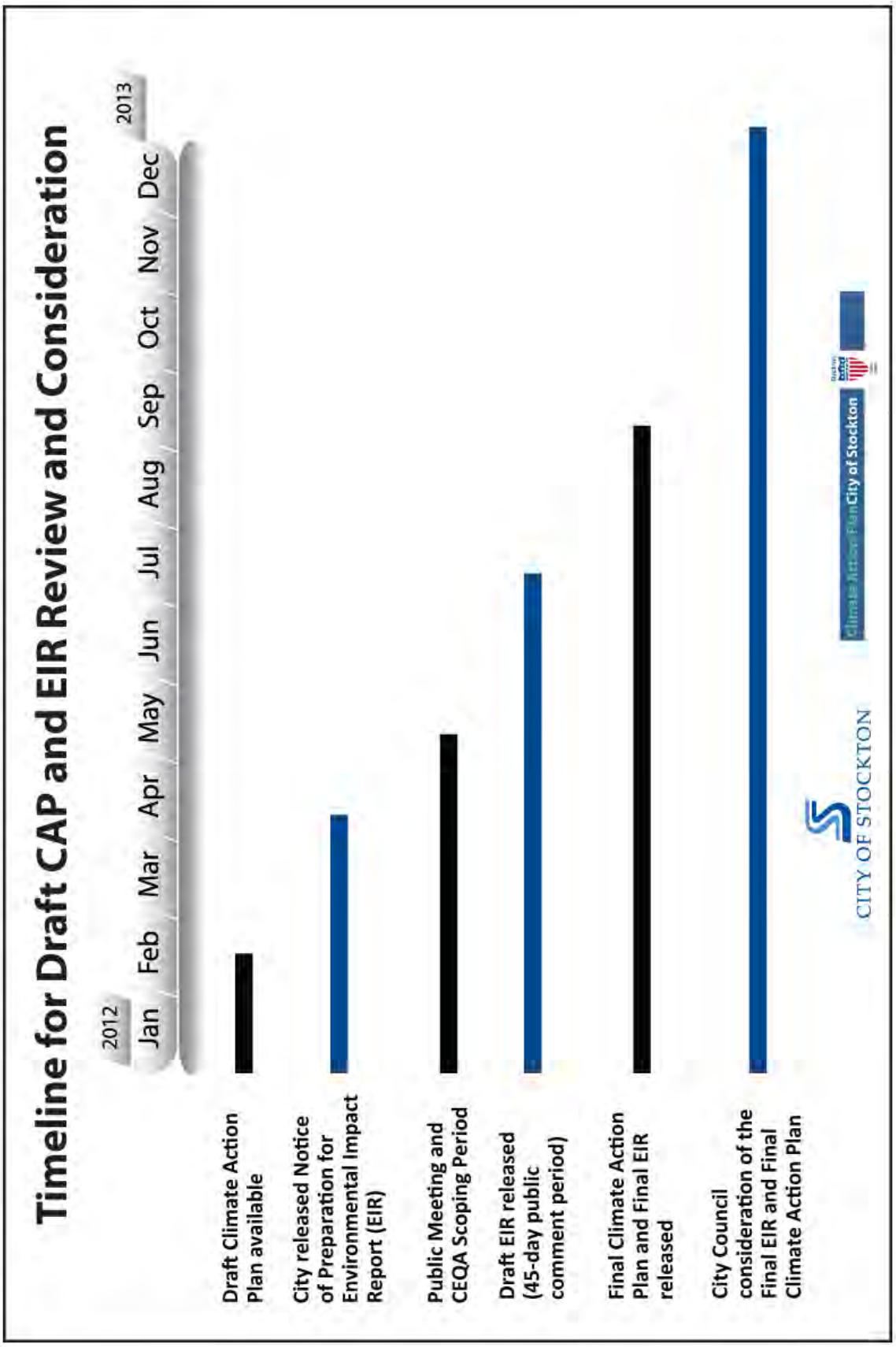
State Actions to Reduce GHG Emissions	MT CO_2e Reduced
State-1: Senate Bills 1078/107/X1-2 (Renewable Portfolio Standard)	101,208
State-2: Title 24 Standards for Non-Residential and Residential Buildings	22,753
State-3: AB 1109 (Huffman) Lighting Efficiency and Toxics Reduction Act	23,394
State-4: AB 32 Solar Water Heaters	886
State-5: AB 1493 Vehicle Emissions (Pavley I)	115,713
State-6: Advanced Clean Cars (Vehicle Emissions)	16,847
State-7: Executive Order S-1-07 (Low Carbon Fuel Standard)	113,471
State-8: AB 32 Transportation Reduction Strategies (Vehicle Efficiency)	23,458
State-9: AB 32 High Global Warming Potential GHG Reduction Strategies	18,697
State-10: AB 32 Landfill Methane Program	34,135
Total Reductions from State Programs	**470,561**

Local Measures and GHG Reductions Achieved

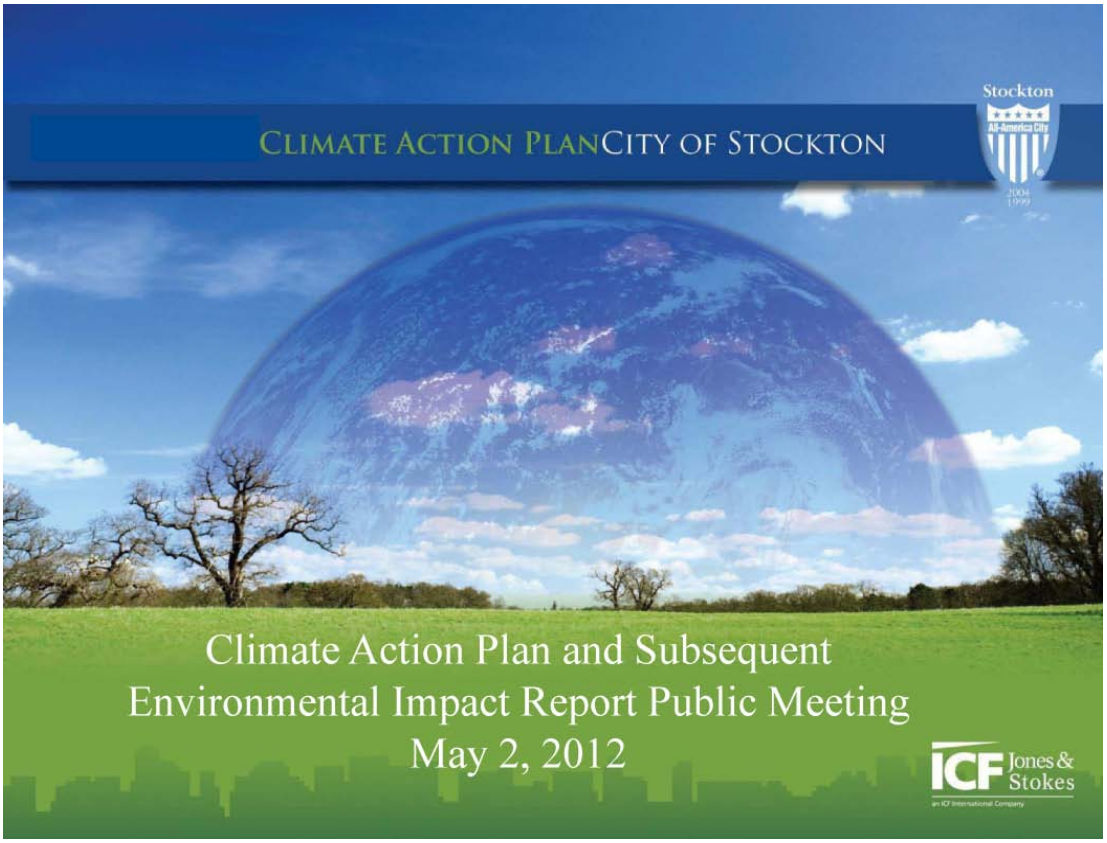
Measure Number	Measure Description	MT CO_2e Reduced
Multi-Sectoral		**6,332**
DRP-1	Development Review Process—29% reduction for discretionary projects [M]	6,332
Building Energy		**49,767**
Energy-1	Existing Green Building Ordinance [M]	439
Energy-2a	Outdoor Lighting Municipal Upgrades [CITY]	496
Energy-2b	Outdoor Lighting Private Upgrades [V]	1,702
Energy-3	Energy Efficiency Programs to Promote Retrofits for Existing Residential Buildings [V]	20,182
Energy-4	Energy Efficiency Programs to Promote Retrofits for Existing Non-Residential Buildings [V]	10,227
Energy-5	Solar-Powered Parking [V]	1,643
Energy-6	Residential and Non-Residential Rooftop Solar [V]	15,078
Land Use and Transportation		**13,619**
Trans-1	Land Use/Transportation System Design Integration [CITY]	1,440 - 7,019
Trans-2	Parking Polices [M]	1,557
Trans-3	Transit System Support [CITY]	1,272
Trans-4	Efficient Goods Movement [CITY]	767
Trans-5	Reduce Barriers for Non-Motorized Travel [CITY]	1,459
Trans-6	Transit System Improvements [CITY]	--
Trans-7	Safe Routes to School [CITY]	1,986
Trans-8a	Additional Safe Routes to School [CITY]	1,986

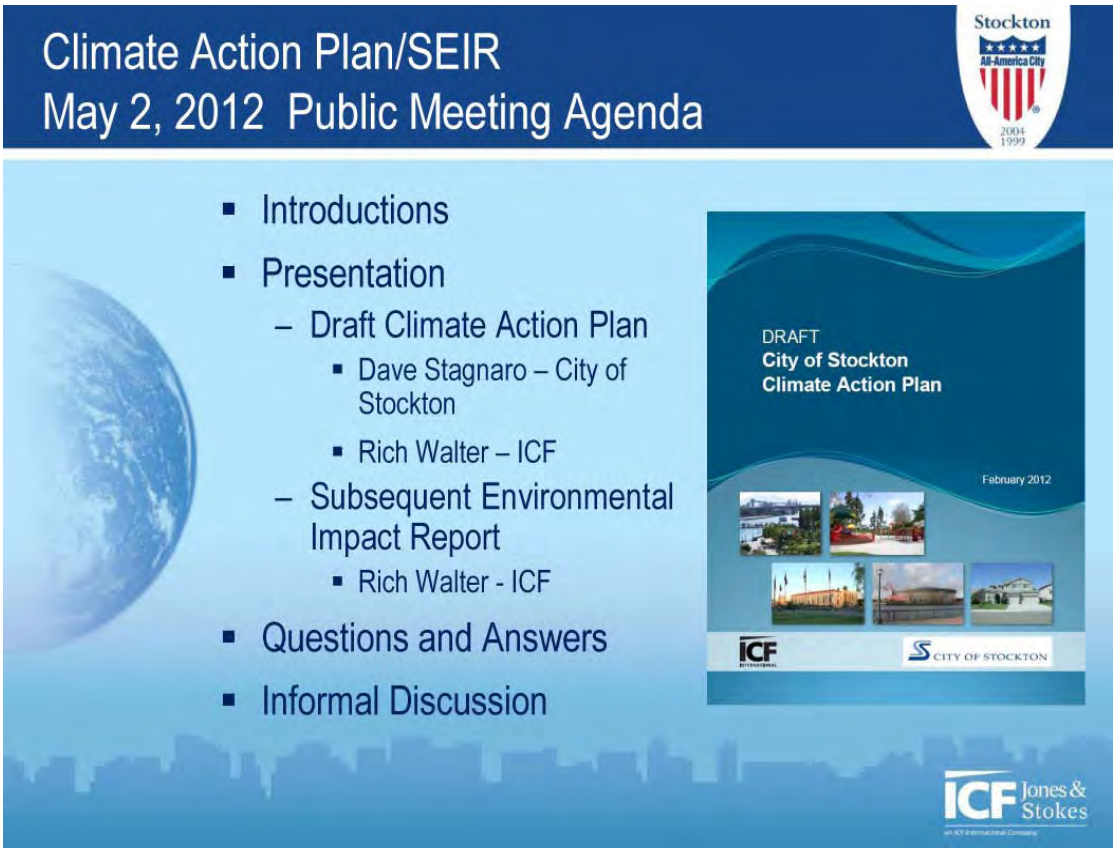
CITY OF STOCKTON

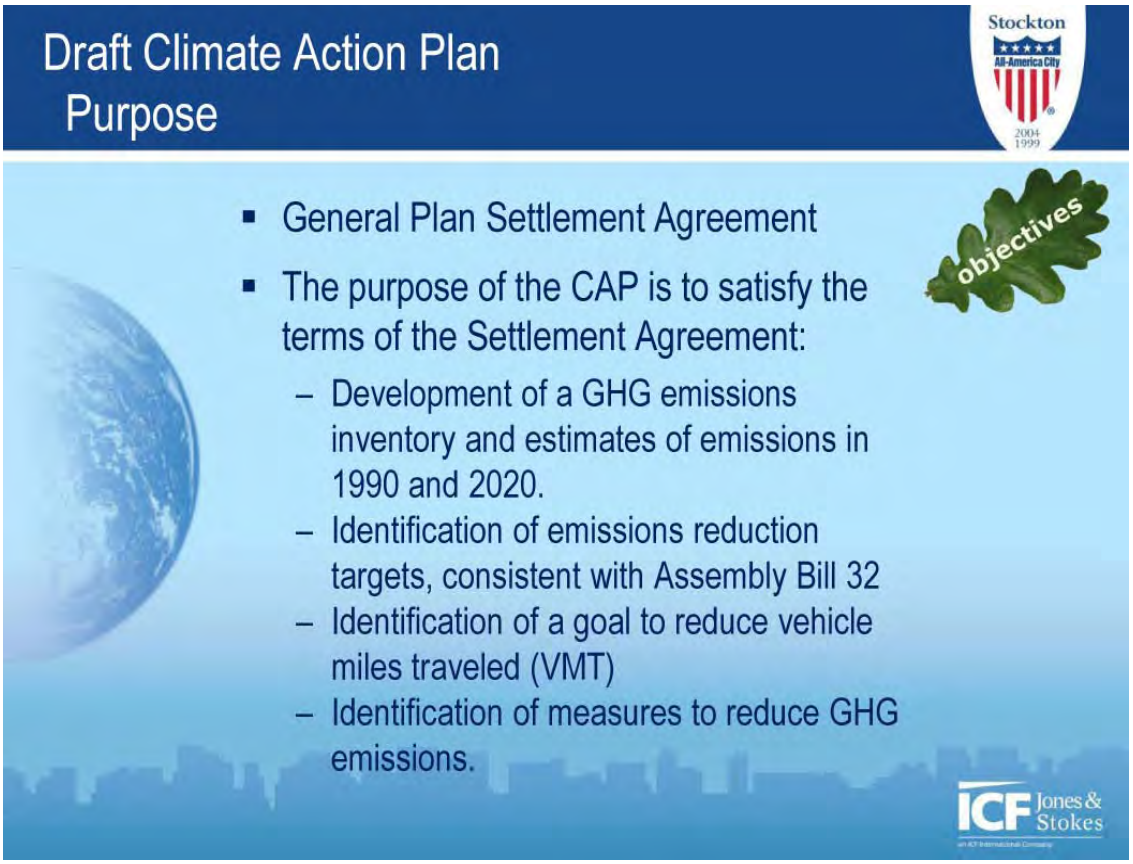
Climate Action Plan City of Stockton

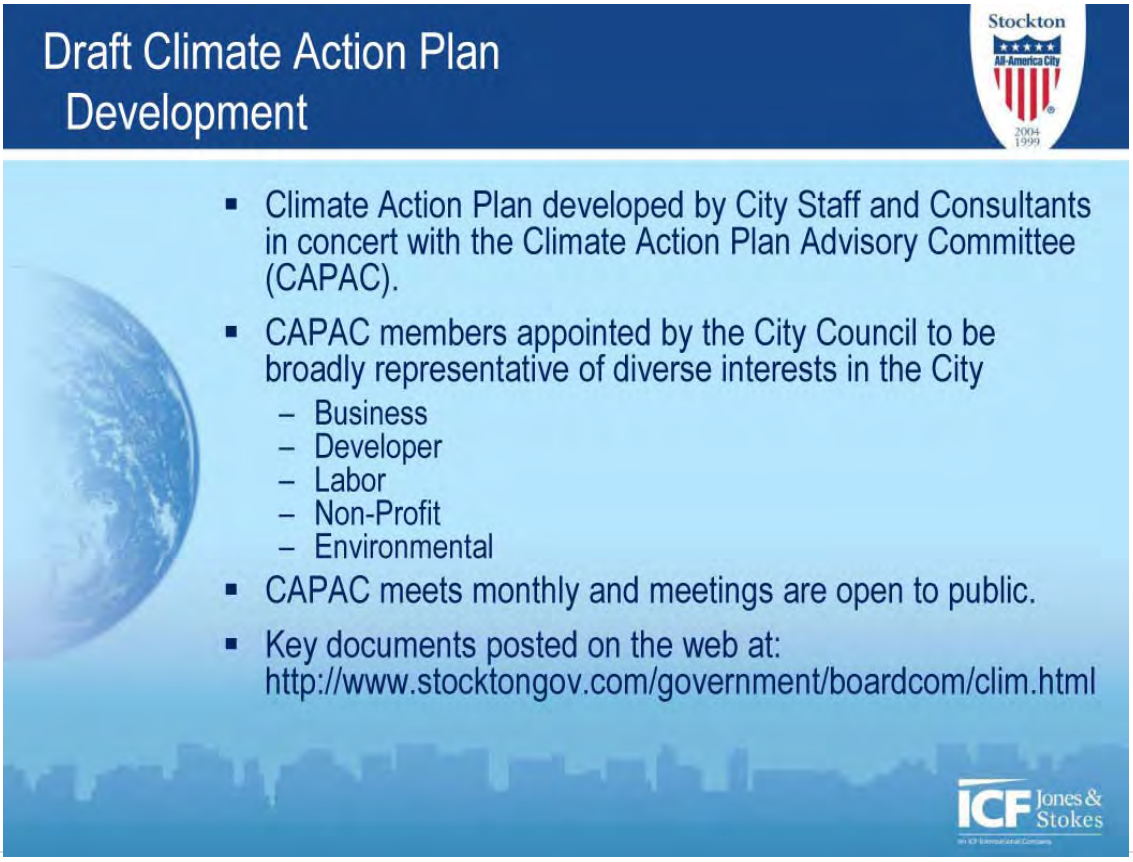

Timeline for Draft CAP and EIR Review and Consideration
2012
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2013
Draft Climate Action Plan available
City released Notice of Preparation for Environmental Impact Report (EIR)
Public Meeting and CEQA Scoping Period
Draft EIR released (45-day public comment period)
Final Climate Action Plan and Final EIR released
City Council consideration of the Final EIR and Final Climate Action Plan
CITY OF STOCKTON
Climate Action Plan City of Stockton


Comment
Station
Climate Action PlanCity of Stockton
CITY OF STOCKTON


CLIMATE ACTION PLANCITY OF STOCKTON
Stockton
All-America City
2004
1999
Climate Action Plan and Subsequent
Environmental Impact Report Public Meeting
May 2, 2012
ICF Jones & Stokes


Climate Action Plan/SEIR
May 2, 2012 Public Meeting Agenda
Stockton
All-America City
2004
1999
Introductions
Presentation
Draft Climate Action Plan
Dave Stagnaro – City of Stockton
Rich Walter – ICF
Subsequent Environmental Impact Report
Rich Walter - ICF
Questions and Answers
Informal Discussion
DRAFT
City of Stockton
Climate Action Plan
February 2012
ICF
CITY OF STOCKTON
ICF Jones & Stokes


Draft Climate Action Plan
Purpose
Stockton
All-America City
2004
1999
objectives
General Plan Settlement Agreement
The purpose of the CAP is to satisfy the terms of the Settlement Agreement:
– Development of a GHG emissions inventory and estimates of emissions in 1990 and 2020.
– Identification of emissions reduction targets, consistent with Assembly Bill 32
– Identification of a goal to reduce vehicle miles traveled (VMT)
– Identification of measures to reduce GHG emissions.
ICF Jones & Stokes

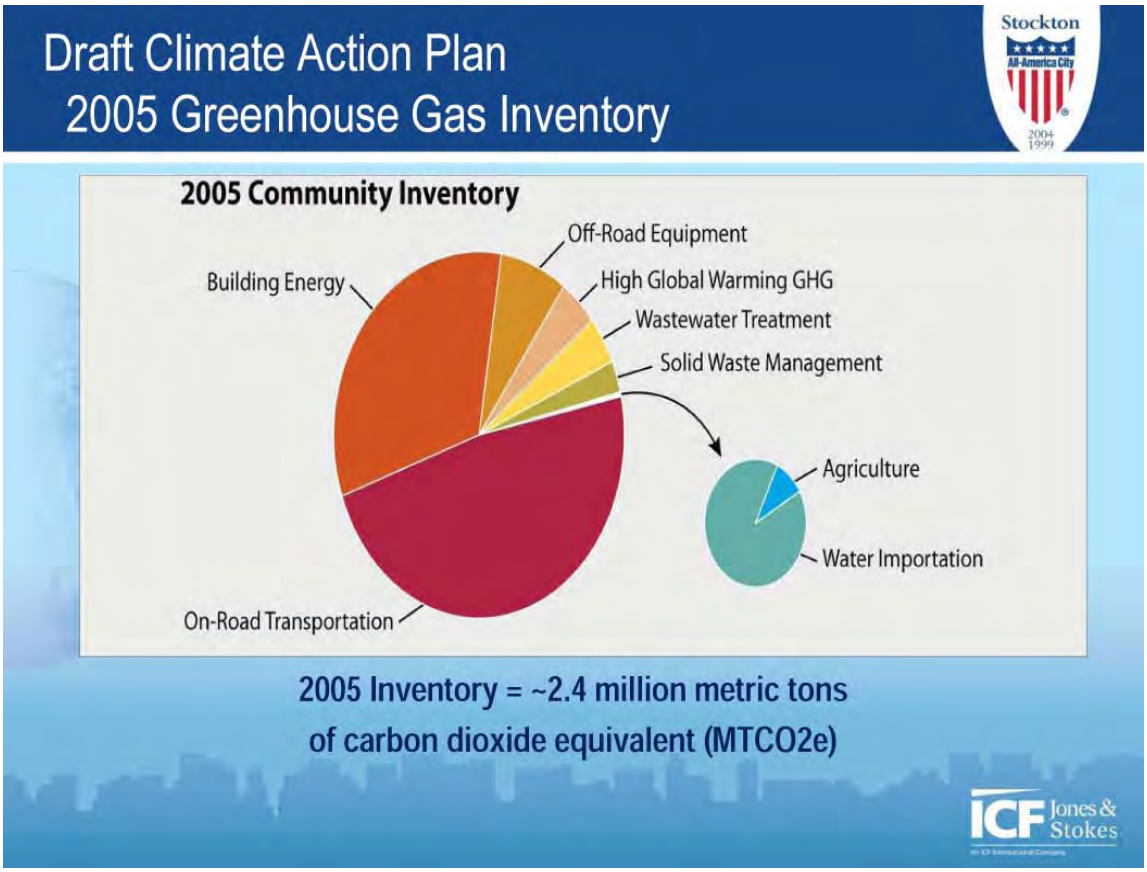

Draft Climate Action Plan
Development
Stockton
All-America City
2004
1999
Climate Action Plan developed by City Staff and Consultants in concert with the Climate Action Plan Advisory Committee (CAPAC).
CAPAC members appointed by the City Council to be broadly representative of diverse interests in the City
– Business
– Developer
– Labor
– Non-Profit
– Environmental
CAPAC meets monthly and meetings are open to public.
Key documents posted on the web at: http://www.stocktongov.com/government/boardcom/clim.html
ICF Jones & Stokes

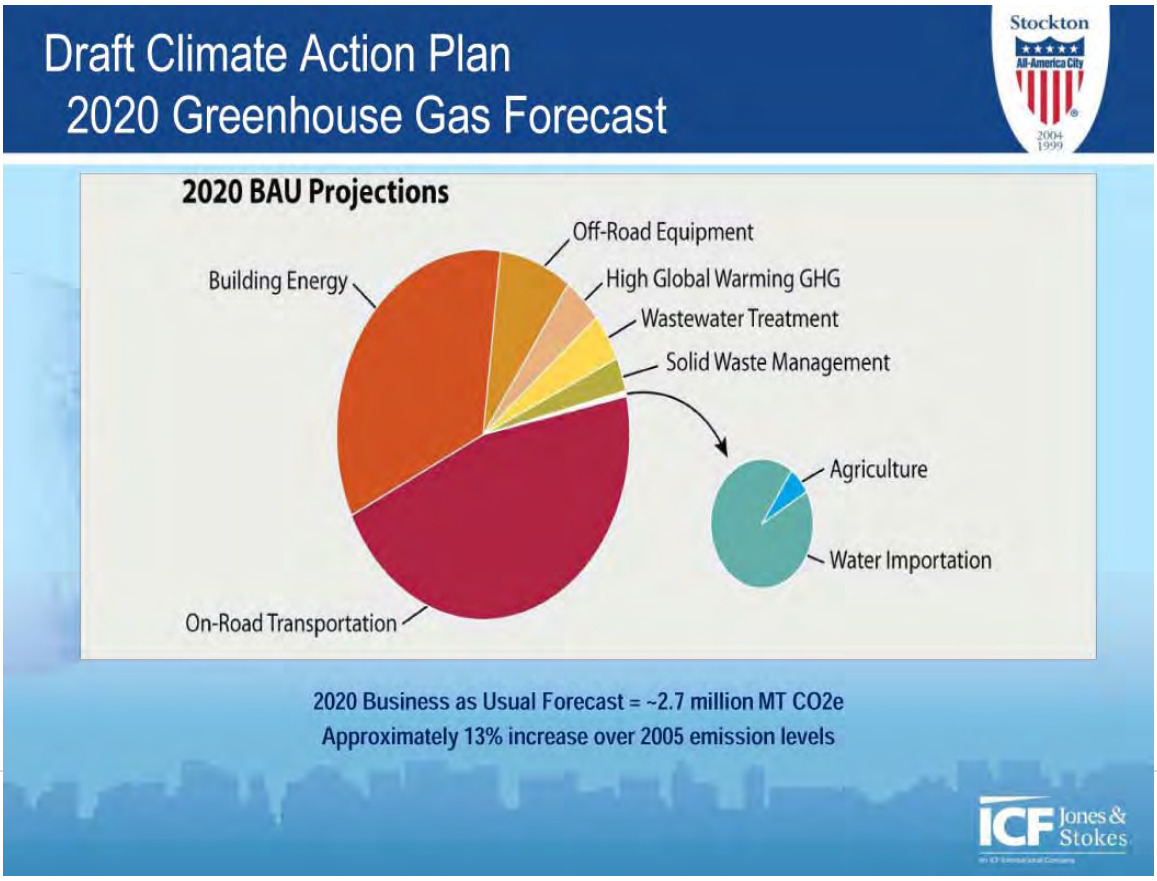
Draft Climate Action Plan Contents

- Executive Summary
- Introduction
- City of Stockton's Greenhouse Gas Emissions Inventory and Forecast
- Emissions Reduction Measures and Cost/Benefit Analysis
- Implementation Strategies
- Appendices

Draft Climate Action Plan Greenhouse Gas Inventory and Forecast

- Inventory of 2005 GHG emissions
- Forecasted 2020 GHG emissions
- GHG emissions from "community activities"
  - Energy consumed in houses and businesses
  - Emissions from vehicles (onroad/offroad)
  - Landfill emissions from waste generated in the City
  - Emissions associated with transporting water to City
  - Emissions associated with wastewater treatment
  - Several minor sector (chemical product use, agriculture)


Draft Climate Action Plan
2005 Greenhouse Gas Inventory
Stockton
All-America City
2004
1999
2005 Community Inventory
Off-Road Equipment
Building Energy
High Global Warming GHG
Wastewater Treatment
Solid Waste Management
Agriculture
Water Importation
On-Road Transportation
2005 Inventory = ~2.4 million metric tons
of carbon dioxide equivalent (MTCO2e)
ICF Jones & Stokes


Draft Climate Action Plan
2020 Greenhouse Gas Forecast
Stockton
All-America City
2004
1999
2020 BAU Projections
Off-Road Equipment
Building Energy
High Global Warming GHG
Wastewater Treatment
Solid Waste Management
Agriculture
Water Importation
On-Road Transportation
2020 Business as Usual Forecast = ~2.7 million MT CO2e
Approximately 13% increase over 2005 emission levels
ICF Jones & Stokes

Draft Climate Action Plan
Greenhouse Gas Emission Reduction Target

- Settlement Agreement requires the City to adopt a GHG reduction goal…
  - *"in accordance with reduction targets in AB 32, other state laws, or applicable local or regional enactments addressing GHG emissions, and with Air Resources Board regulations and strategies adopted to carry out AB32…"*
- CAP identifies a reduction target that is feasible given current economic conditions.
  - 10% below 2005 levels.
  - Consistent with required statewide reductions.
  - Equates to a reduction of ~560,000 metric tons.

Draft Climate Action Plan
Vehicle Miles Travelled Reduction Goal

- **Vehicle Miles Travelled Reduction Goal**
  - Settlement Agreement requires the growth in VMT be no more than the growth in population
  - 11% growth in City population between 2005 and 2020
  - Implementation of the CAP limits citywide VMT growth to 9% (2% below population growth)

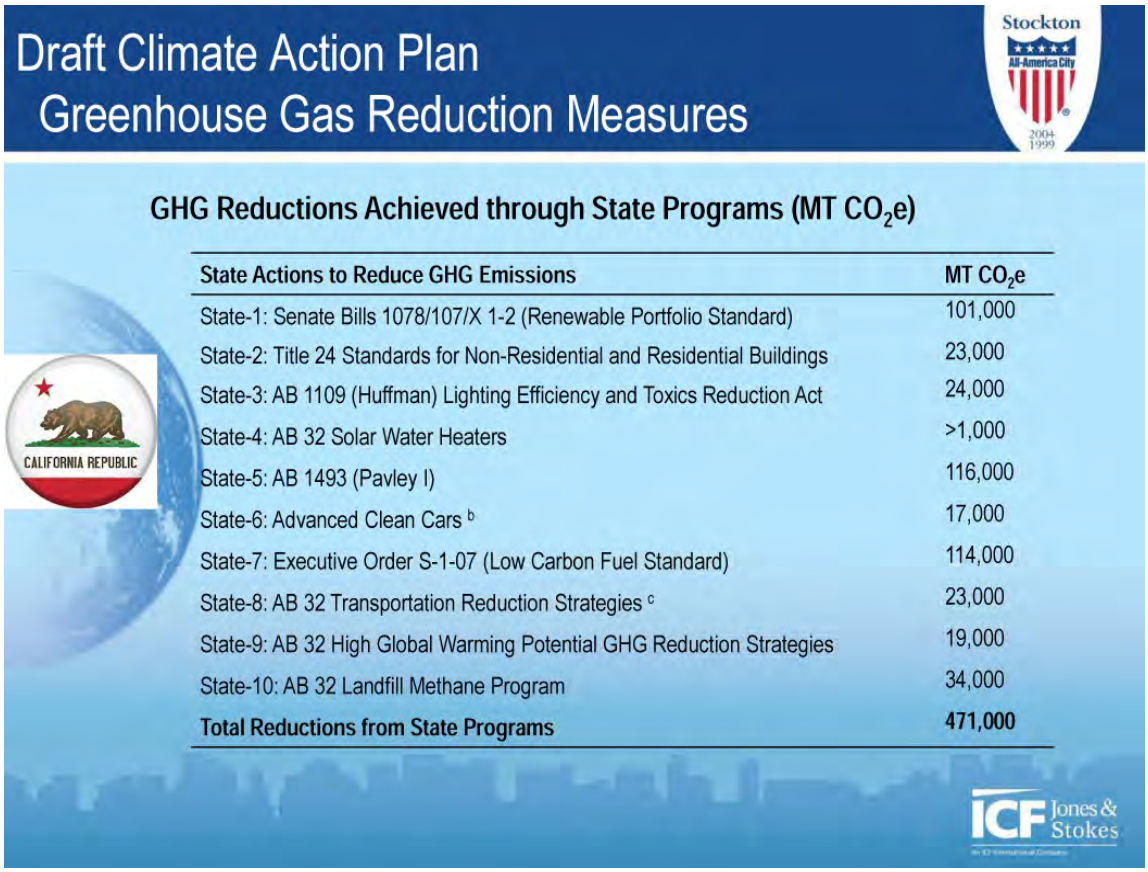
Draft Climate Action Plan
Greenhouse Gas Reduction Measures

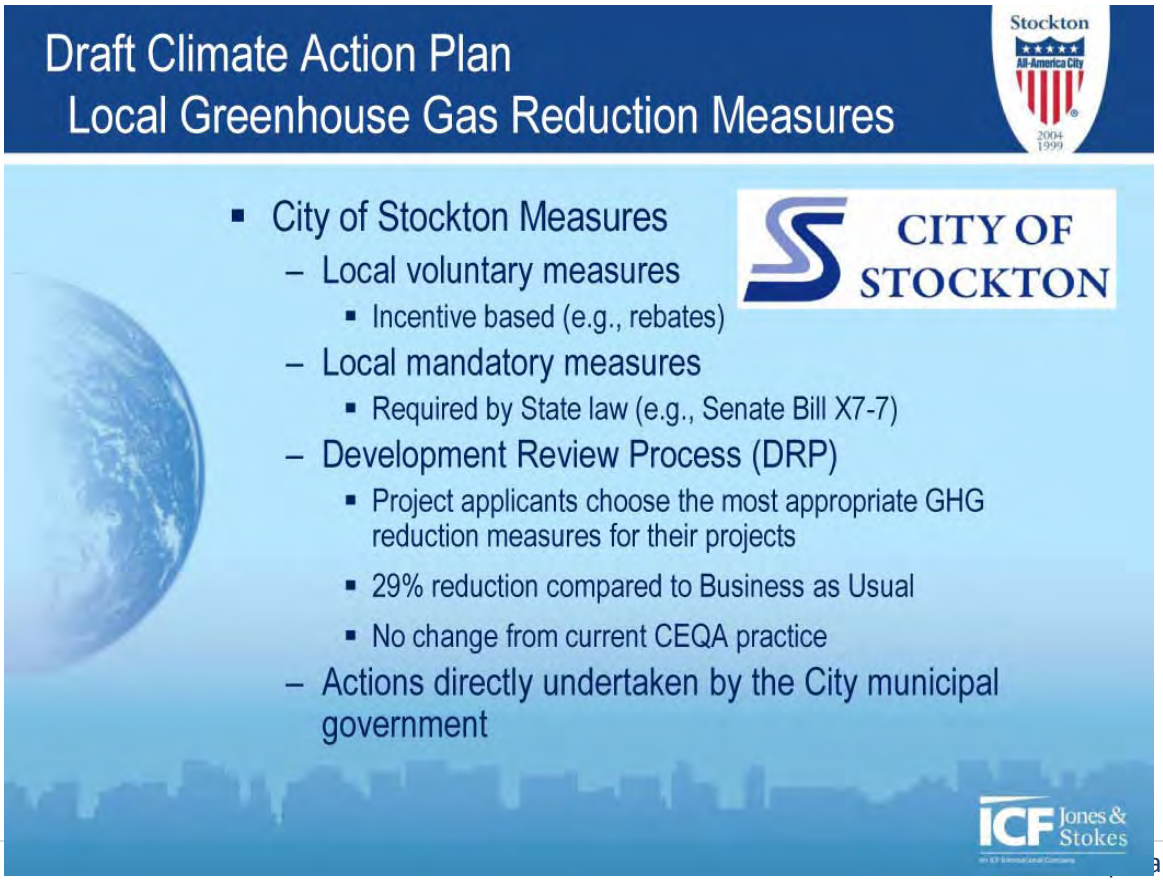
- Broad list of potential measures to reduce greenhouse gas emissions
- Measures consider technical, economic, financial, and institutional feasibility
- Measures and programs apply to existing building and new development



Draft Climate Action Plan
Reduction Emission Sectors

- CAP addresses eight primary emissions sectors
  - Building Energy Use
  - Transportation and Land Use
  - Waste Generation
  - Water Consumption
  - Wastewater Treatment
  - Urban Forestry
  - High Global Warming Potential GHGs
  - Off-Road Vehicle Use


Draft Climate Action Plan
Greenhouse Gas Reduction Measures
Stockton
All-America City
2004
1999
GHG Reductions Achieved through State Programs (MT CO_2e)
State Actions to Reduce GHG Emissions
MT CO_2e
State-1: Senate Bills 1078/107/X 1-2 (Renewable Portfolio Standard) 101,000
State-2: Title 24 Standards for Non-Residential and Residential Buildings 23,000
State-3: AB 1109 (Huffman) Lighting Efficiency and Toxics Reduction Act 24,000
State-4: AB 32 Solar Water Heaters >1,000
State-5: AB 1493 (Pavley I) 116,000
State-6: Advanced Clean Cars b 17,000
State-7: Executive Order S-1-07 (Low Carbon Fuel Standard) 114,000
State-8: AB 32 Transportation Reduction Strategies c 23,000
State-9: AB 32 High Global Warming Potential GHG Reduction Strategies 19,000
State-10: AB 32 Landfill Methane Program 34,000
Total Reductions from State Programs 471,000
CALIFORNIA REPUBLIC
ICF Jones & Stokes


Draft Climate Action Plan
Local Greenhouse Gas Reduction Measures
Stockton
All-America City
2004
1999
City of Stockton Measures
– Local voluntary measures
▪ Incentive based (e.g., rebates)
– Local mandatory measures
▪ Required by State law (e.g., Senate Bill X7-7)
– Development Review Process (DRP)
▪ Project applicants choose the most appropriate GHG reduction measures for their projects
▪ 29% reduction compared to Business as Usual
▪ No change from current CEQA practice
– Actions directly undertaken by the City municipal government
CITY OF STOCKTON
ICF Jones & Stokes

Draft Climate Action Plan
Local Reduction Measures

- Energy Sector Measures
  - Increasing energy efficiency
  - Increasing use of renewable energy
  - Improving City lighting energy efficiency
  - All private sector measures are voluntary
  - Measures in this sector would result in
    - Long-term net savings to the City government
    - Long-term net savings for participating residences and businesses.

ICF Jones & Stokes

Draft Climate Action Plan
Local Reduction Measures

- Transportation Sector Measures
  - Supporting downtown residential growth
  - Supporting other infill along transportation corridors
  - Maintaining transit use in the City
  - Expanding bike and pedestrian paths
  - Improving good government
  - Measures in this section fulfill multiple purposes of mobility, balanced growth, air pollution reduction.
  - Cost-effectiveness varies by measure

ICF Jones & Stokes

Draft Climate Action Plan
Local Reduction Measures

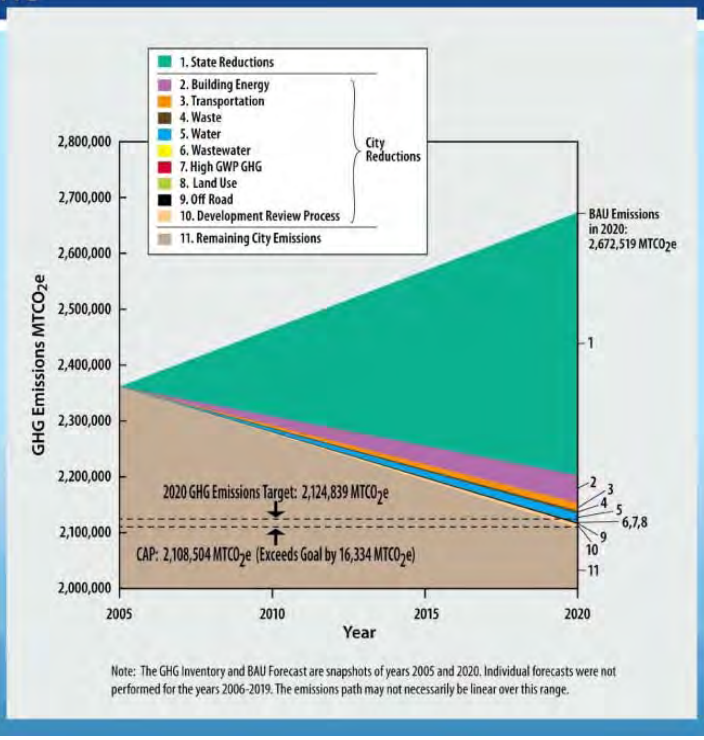
- Other Sector Measures
  - Continue ongoing efforts to reduce waste generation and promote recycling
  - Continue ongoing efforts to conserve and use water efficiently to meet state mandates
  - Energy-efficiency upgrades at City's wastewater treatment plant
  - Supporting incentives for alternative fuel use for the offroad sector
  - Planting to expand City's urban forest
  - Responsible disposal of consumer products

Draft Climate Action Plan
Greenhouse Gas Reductions Overall

GHG Emissions Reductions by Sector

GHG Emissions	MT CO_2e	Percent of Total Reduction (%)
State Programs	**470,561**	**83%**
Local Programs		
Development Review Process	6,332	1%
Building Energy Use Measures	49,767	9%
Land Use and Transportation Measures	13,619	2%
Waste Generation Measures	4,245	1%
Water Consumption Measures	16,228	3%
Wastewater Treatment Measures	312	0.1%
Urban Forestry Measures	75	0.01%
High GWP GHG Measures	255	0.05%
Off-Road Vehicle Measures	2,622	0.5%
Subtotal for Local programs	**93,454**	**17%**
Total Reductions	**564,015**	**100%**

Draft Climate Action Plan Reductions



Draft Climate Action Plan Cost/Benefit Analysis

- Based on data from the CA Public Utilities Commission, CA Energy Commission, EPA, DOE, and PG&E
- Costs and savings estimated
  - Initial capital costs
  - Operations and maintenance costs
  - Operational savings
  - Implementation costs
  - Payback period
  - Cost per metric ton CO2e
- Cost and savings incurred by the City, private residents, and businesses

Draft Climate Action Plan – Cost/Benefit Analysis

Costs and Savings for Private Entities

- Voluntary energy measures make up vast majority of capital cost but many have long-term returns through energy savings (depending on financing approaches).
- Additional O &M Costs primarily reflect waste diversion costs that may be offset through recycled material sales (not presumed in current analysis).
- Mandatory measures with net costs limited to state mandates for water conservation and local idling ordinance.
- Cost analysis presently under revision to examine several items:
  - Financing options, incentives, and lifetimes for voluntary renewable energy measures (costs may be higher than in draft estimate)
  - Waste diversion costs (costs may be lower than in draft estimate)
  - With revisions, it is still expected there will be net savings overall.
  - Revised cost analysis will be released with Draft EIR

Draft Climate Action Plan – Cost/Benefit Analysis

Costs and Savings for City Government

Metric	Value
Additional Capital Costs	$28.5 million
Other Upfront Costs	$1.4 million
Net Operations and Maintenance Cost/year	-$210,000
Annual staff cost	$470,000
Net annual cost to City	$260,000

- Energy Programs
- Transportation Programs
- Waste Programs
- Water Programs
- Urban Forestry
- Other Programs

✓Three measures make up 95% of upfront cost for City: bike paths, safe routes to school, and outdoor lighting.
✓City has successfully obtained state and federal funds for both bike paths/safe routes to school in past.
✓City lighting improvements reduce City's energy bill.

Draft Climate Action Plan
Co-Benefits of Reduction Measures

- Reduced energy use
- Reduced waste generation
- Resource conservation
- Energy diversification/security
- Reduced air pollution
- Increased property values
- Reduced energy price volatility
- Economic growth
- Public health improvements
- Increased quality of life
- Reduced urban heat island effect
- Smart growth

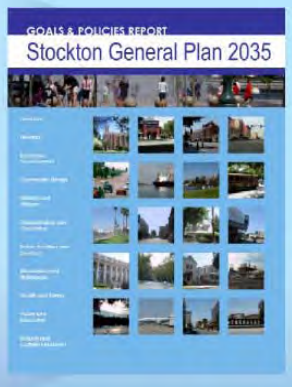
Draft Climate Action Plan
Implementation

- Administration and staffing
- Long term financing
- Phased Implementation from 2012 to 2020
- Supporting strategies
- Community outreach and education

Draft Climate Action Plan Next Steps

- Scoping Period
  - April 27, 2012 – May 29, 2012
- Draft Subsequent Environmental Impact Report
  - Summer 2012
- 2nd Community Meeting
  - During Public Review for SEIR
- Final Climate Action Plan/Final SEIR
  - Fall 2012
- City Council Consideration/Approval
  - Winter 2012/2013

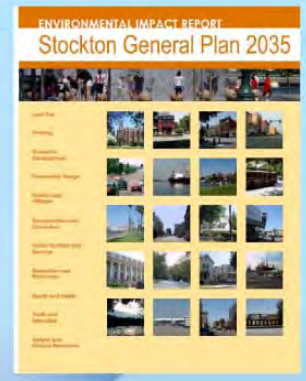
Subsequent Environmental Impact Report



Subsequent EIR will address the following

- Climate Action Plan
- Transit Plan/Program (Appendix D of CAP)
- General Plan Amendments:
  - Climate Change Element
  - Consistency amendments per Climate Action Plan measures (energy, transportation, waste reduction, water, etc.)
  - Policies to support balance of infill and outfill growth,
  - Policies to support increase in Downtown housing
  - Policies for floodplain management per Assembly Bill (AB) 162 (2007)
  - Policies concerning air quality related to AB 170 (2003)
- Revised and new water conservation ordinances.
- Settlement Agreement Funding Program

Subsequent Environmental Impact Report

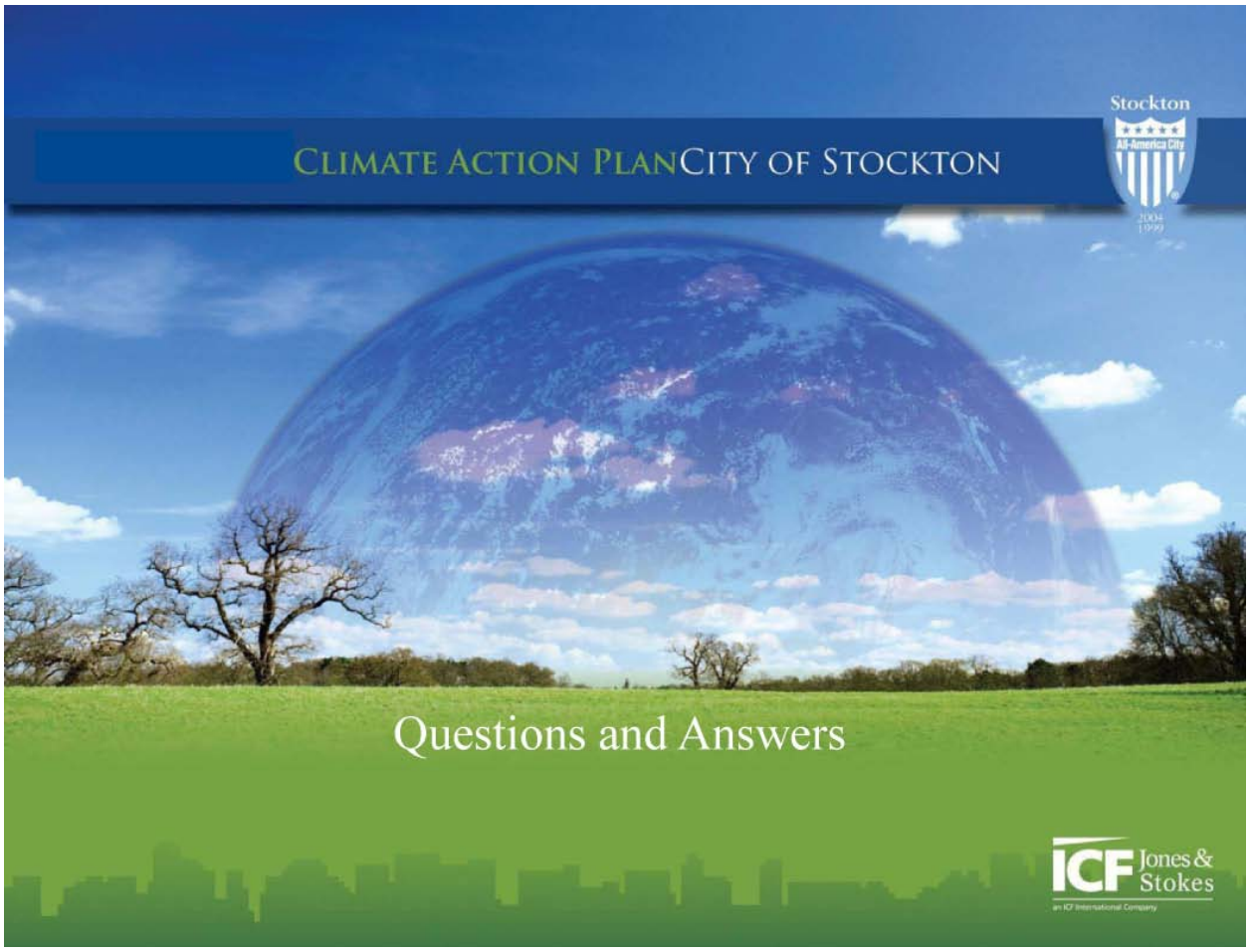


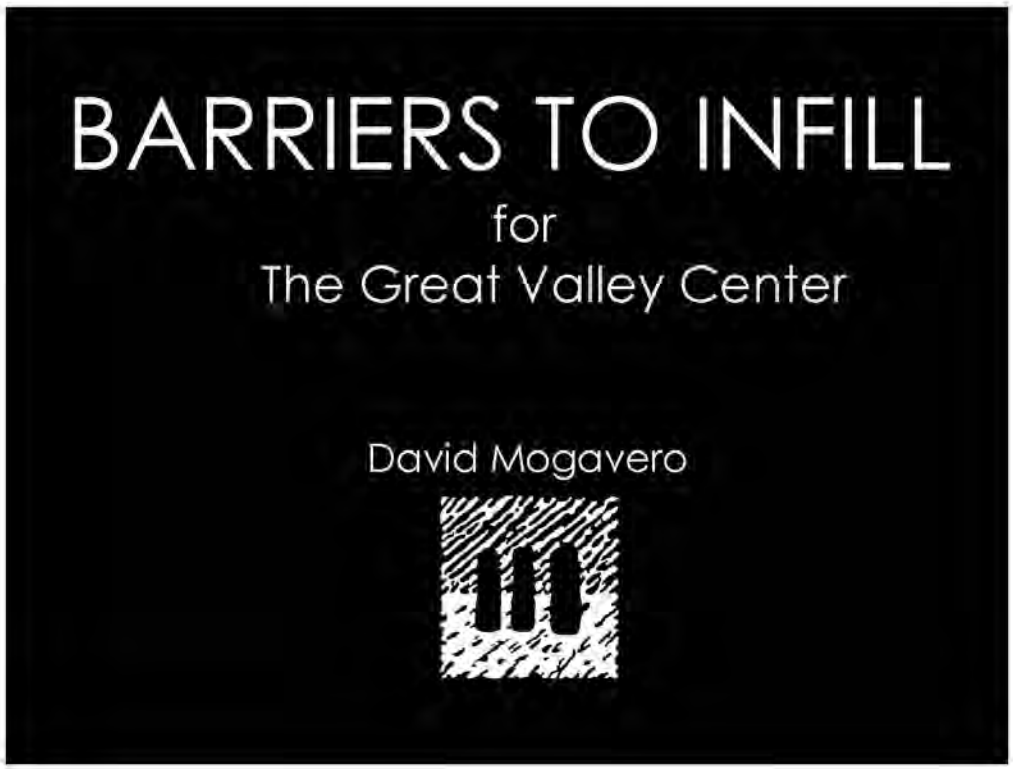
This EIR will "tier" off of the Environmental Impact Report for the Stockton General Plan 2035

- Focus is on potential impacts not already addressed in the prior EIR
- Initial Study prepared for current project, indicates potential impacts to:
  - Aesthetics
  - Air Quality and Noise
  - Biological and Cultural Resources
  - Hazards and Hazardous Materials
  - Hydrology/Water Quality
  - Land Use, Planning and Recreation
  - Population/Housing
  - Transportation/Traffic
- Soliciting input from public agencies and public on
  - Subjects to be analyzed in the EIR
  - Alternatives to be considered in the EIR

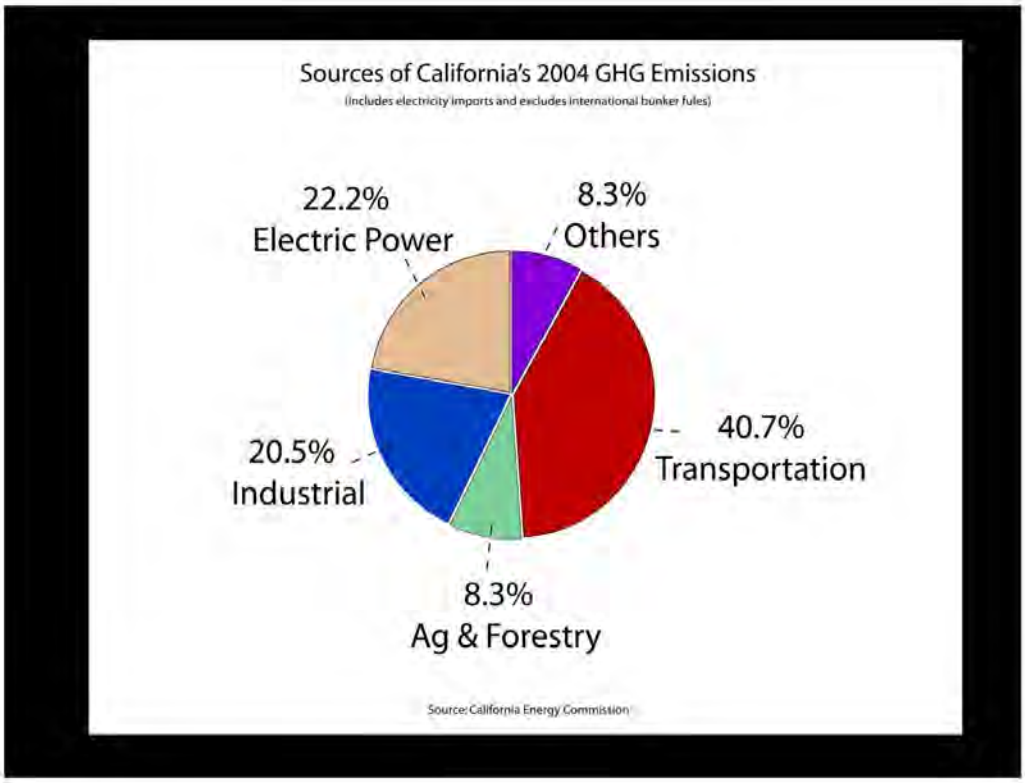
Draft Climate Action Plan Commenting

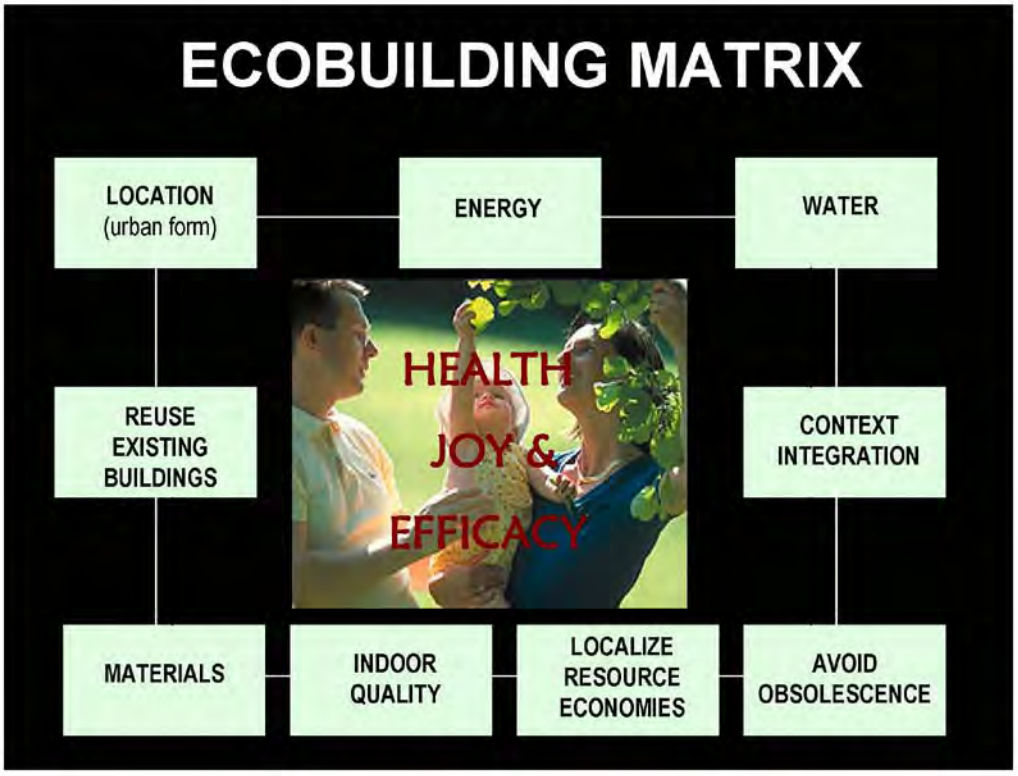
- Comments on the Draft CAP and the Notice of Preparation
  - Submit oral comments tonight (stenographer in attendance)
  - Submit written comments by **May 29, 2012** to:
    - email: Hotline@buethecommunications.com OR
    - email: David.Stagnaro@stocktongov.com
    - U.S. mail: Public Information Coordinator, Climate Action Plan/City of Stockton, P.O. Box 773, Stockton, CA 95201-0773.
  - Questions after the meeting
    - Public Information Coordinator by calling (209) 464-8707, Ext. 101;


CLIMATE ACTION PLAN CITY OF STOCKTON
Stockton
All-America City
2004
1999
Questions and Answers
ICF Jones & Stokes
an ICF International Company


BARRIERS TO INFILL
for
The Great Valley Center
David Mogavero


Natural Foods Co-op


Sources of California's 2004 GHG Emissions
(includes electricity imports and excludes international bunker fules)
22.2%
Electric Power
8.3%
Others
40.7%
Transportation
20.5%
Industrial
8.3%
Ag & Forestry
Source: California Energy Commission



SOME ECONOMIC AND SOCIAL BENEFITS OF INFILL DEVELOPMENT

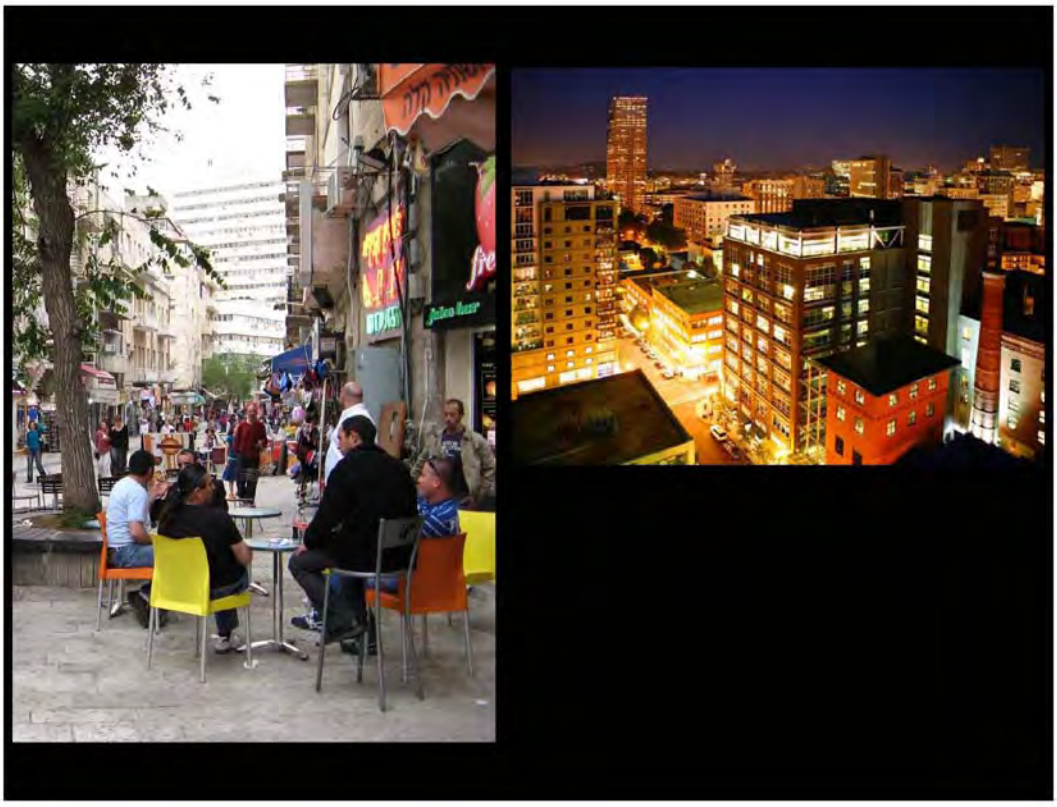
- Reduces the cost of government capital and operations costs…less infrastructure per capita
- Reduces the cost of living
- Reduces the cost of doing business
- Allows the US to be more competitive internationally
- Reduces oil dependency
- Improves health
- Improves safety, especially for children

BENEFITS OF INFILL DEVELOPMENT

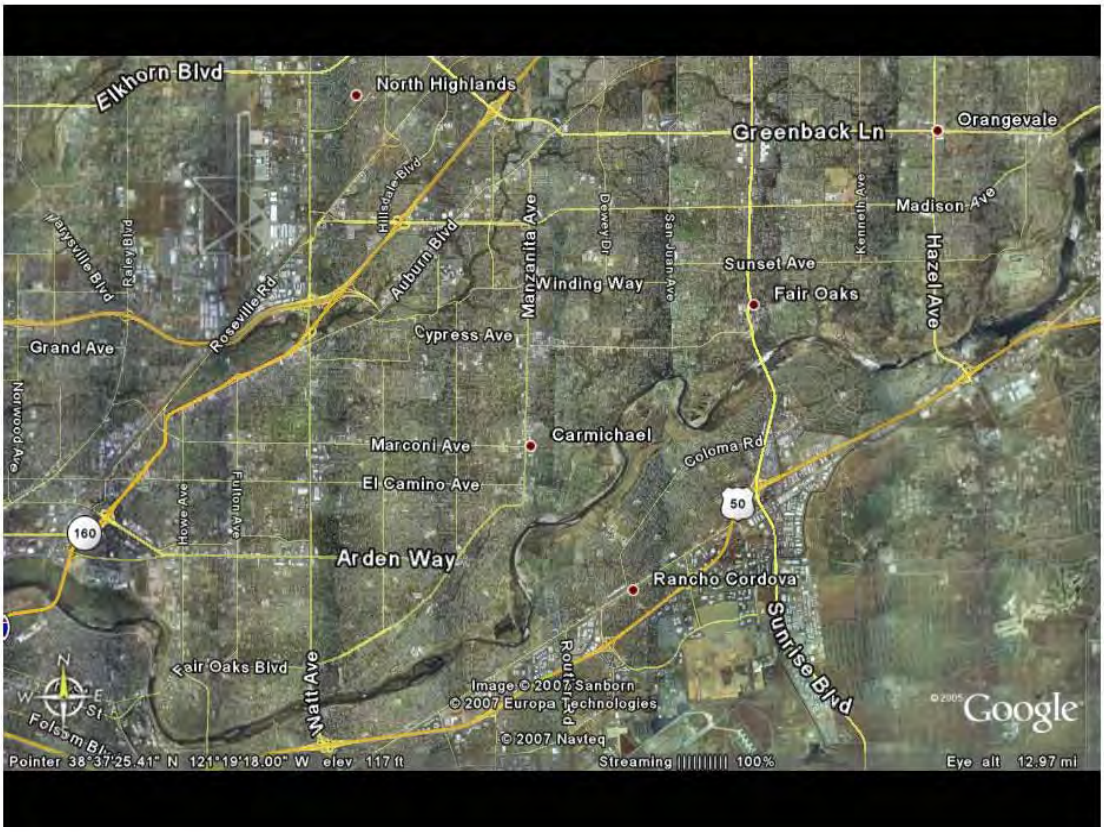
- Provides the investment resources to repair existing neighborhoods
- Increases transit system solvency by increasing ridership
- Improves access to open space
- Reduces energy use in buildings
- Provides better access to jobs goods and services, especially for low income families
- Creates more vibrant and friendly neighborhoods
- Increases civic involvement

WE SQUANDER OUR GROWTH RESOURCES

- **WE HAVE PROVIDED SUBSIDIES TO SPRAWL AND THE AUTOMOBILE**
  - **FHA Mortgage Insurance**
  - **Federal Highway Program**
  - **Clean Water Act**
  - **Local Infrastructure Finance (Prep Prop 13)**




Average annual regional growth
± 10,000 du/year
Potential number of new dwelling units in Central
19,000
2 YEARS OF GROWTH


Elkhorn Blvd
North Highlands
Greenback Ln
Orangevale
Madison Ave
Hazel Ave
Sunset Ave
Fair Oaks
Winding Way
Cypress Ave
Grand Ave
Roseville Rd
Auburn Blvd
Manzanita Ave
Marconi Ave
Carmichael
Coloma Rd
El Camino Ave
Arden Way
Rancho Cordova
Sunrise Blvd
Fair Oaks Blvd
Watt Ave
Folsom Blvd
Howe Ave
Fulton Ave
Norwood Ave
Raley Blvd
Marysville Blvd
Hillsdale Blvd
Dewey Dr
San Juan Ave
Kenneth Ave
Rio Linda Blvd
160
50
Image © 2007 Sanborn
© 2007 Europa Technologies
© 2007 Navteq
Google
Pointer 38°37'25.41" N 121°19'18.00" W elev 117 ft
Streaming 100%
Eye alt 12.97 mi


A NEED TO
• CREATE Community
• Increase Density
• Reduce Resource

10
NEIGHBORHOOD OPPOSITION

- Respect neighbor prerogatives
- Open and honest dialogue
- Early engagement
- Highest quality design
- Willful elected officials
- Clear & strong staff support

9
EXSITING NEIGHBORHOOD REINVESTMENT

- Schools
- Infrastructure
- Social Fabric
- Economic Development
- Strategically Focus Public Resources

8 PROPERTY TAX STRUCTURE ENCOURAGES SPECULATION

- Tax land & structures separately with most of burden on land

7 ZONING ORDINANCES

- Flexibility for density appropriate infill areas (commercial corridors, transit, industrial areas)
- Flexible parking standards

6
STREET DESIGN STANDARDS

- COST
- SAFETY (SUBURBS)

- Pedestrians & bike priority for all repairs & improvements/ slow cars down
- Stop construction of new roads or lanes/ reallocate funds to enhance safety in infill target areas

5
INADEQUATE FUNDING FOR TRANSIT OPERATIONS

- Sales tax
- Offset development fees
- Local government general fund allocations

4

A FOCUS ON CONGESTION

- Eliminate LOS standards for automobiles
- Recognize that congestion is not fixable

3

MOST IMPACTS ARE NOT EQUITABLY MONETIZED

- HEALTH (OBESITY)
- ENVIRONMENTAL
- (AIR & WATER QUALITY)
- ECONOMIC (INSURANCE)

- Evaluate nexus
- Monetize impacts
- Assess geographically
- e.g. VTM fee

2 INEQUITABLE PUBLIC FEE ASSESSMENTS

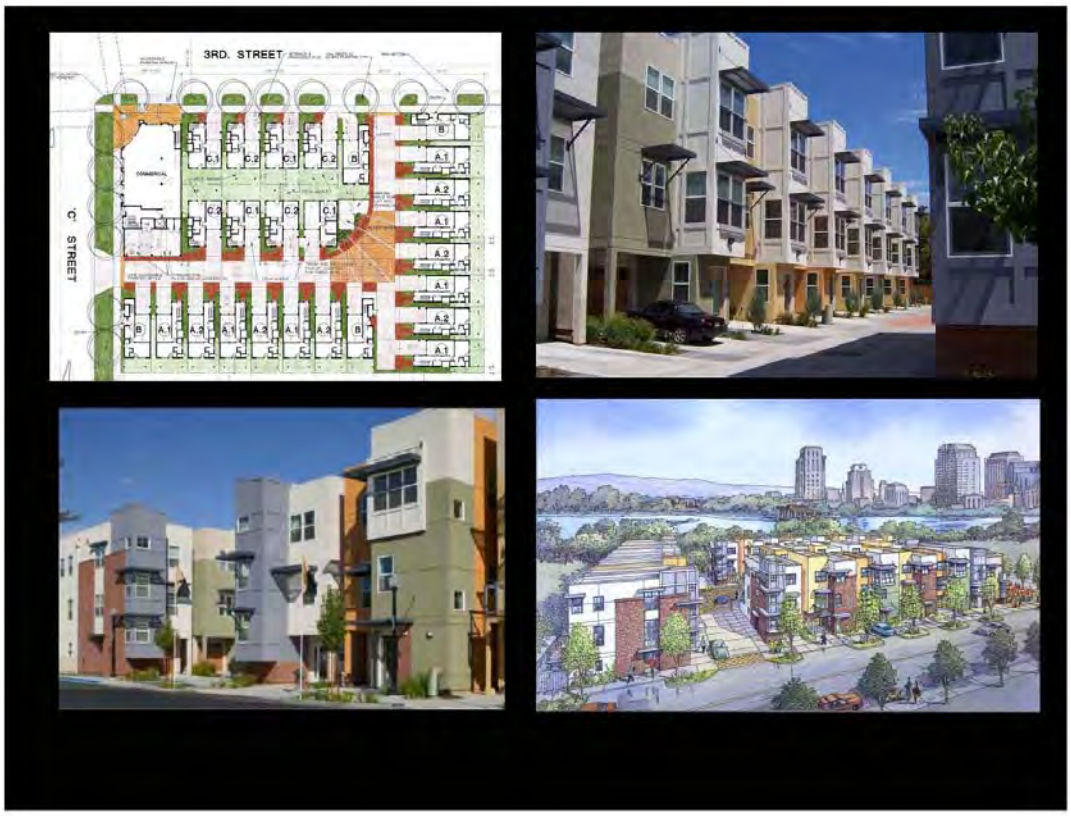
- Assess public fees geographically in accordance with actual impact nexus
- Capital Projects
- Operations
- Regionalize infrastructure reconstruction costs

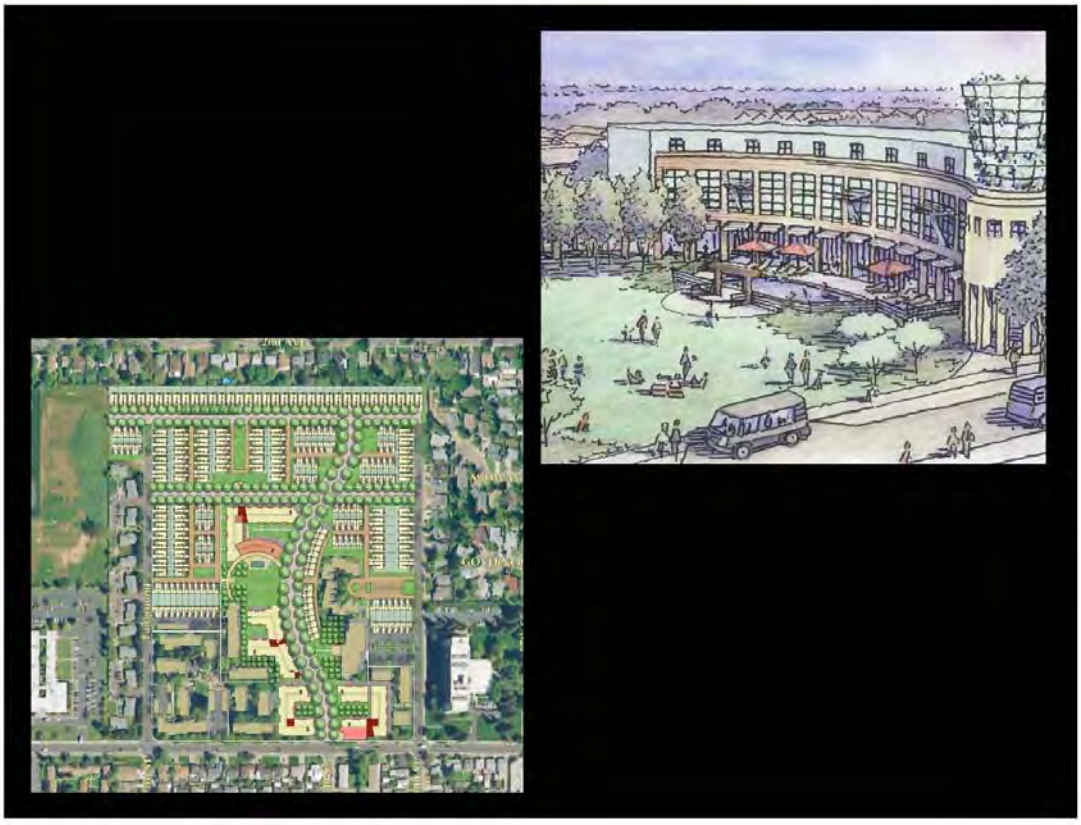
1 OVERSUPPLY OF GREENFIELD LAND (SPRAWL)

- Moratorium on rezoning agriculture & open space
- Increase differential in land values

BARRIERS TO INFILL

1. Oversupply of Greenfield Land (sprawl)
2. Inequitable Public Fee Assessment
3. Most Impacts Are Not Equitably Monetized
4. A Focus on Congestion
5. Inadequate Funding for Transit Operations
6. Street Design Standards
7. Zone Ordinances
8. Property Tax Structure Encourages Speculations
9. Existing Neighborhood Reinvestment
10. Neighborhood Opposition


3RD. STREET
'C' STREET




SAN PABLO AVE.
CHURCH LN.
PROJECT INFO
KEYNOTES
1. Retail along San Pablo Ave
2. Senior Housing - 3 stories over ground floor retail
3. Office Building - 1 story over ground floor retail
4. 4-Story Affordable Multifamily Housing
5. Senior Recreation Center
6. Community Center Facility
7. Child Care Center
8. 2 Story Condominiums
9. Fire truck turnaround
10. Decorative paving at drive/walk lane
11. Community Park
12. Neighborhood Park
13. Wild Cat Creek
14. 2 Story detached (A)
15. 2 & 3 Story townhouse (B) - mix of 1 and 2 bedrooms
16. 2 Story townhouse (C)
ILLUSTRATIVE SITE PLAN
CIRCLE S
BUILD
BRIDGE Housing


Mogavero
Notestine
Associates

Appendix B: Noticing

Published on _____, 2012 in *The Record*

Public Meeting To Discuss City of Stockton Climate Action Plan

Wednesday, May 2, 2012
6:00 p.m. – 7:30 p.m.
6:15 p.m. Presentation

North Hall
Stockton Civic Memorial Auditorium
525 North Center Street, Stockton

The City of Stockton must reduce its greenhouse gas emissions to 10% below 2005 levels by the year 2020. A Settlement Agreement with the Attorney General of California and the Sierra Club requires the City to develop a plan to reduce emissions. A Citizens Committee established by the City has guided development of a Climate Action Plan that will be presented at the May 2 public meeting.

Public comments on the Climate Action Plan and on the Notice of Preparation (NOP) for a Subsequent Environmental Impact Report are welcome. The NOP will be available on the City's website after April 26, 2012.

To read a draft copy of the Climate Action Plan, visit the City of Stockton's Website: www.stocktongov.com. Go to Boards and Commissions, then to Climate Action Plan Advisory Committee, and then to Draft Climate Action Plan.

A Spanish-language translator will be available at the public meeting. If you require translation in other languages, please contact the Public Information Coordinator. Individuals who require special accommodations (American Sign Language interpreter, accessible seating, documentation in alternate formats, etc.) are asked to contact the Public Information Coordinator at least 3 days prior to the public meeting.

Public Information Coordinator: (209) 464-8707, Ext. 101, or Hotline@buethecommunications.com.

Climate Action Plan City of Stockton

CITY OF STOCKTON

You Are Cordially Invited To a Public Meeting

To Discuss the City of Stockton Climate Action Plan

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Ways to reduce the City's greenhouse gas emissions may include supportive policies programs for energy efficiency, renewable energy, smart-growth initiatives, transit-oriented development, new housing and development in the Greater Downtown area of the City, and other strategies.

Information about the Climate Action Plan will be available for viewing at the May 2 meeting, including a Notice of Preparation of the Subsequent Environmental Impact Report. Specialists in environmental studies and planning will be at the meeting to answer questions and receive your comments.

To read a draft copy of the Climate Action Plan, visit the City of Stockton's Website: www.stocktongov.com. Go to Boards and Commissions, then to Climate Action Plan Advisory Committee, and then to Draft Climate Action Plan.

The Notice of Preparation for a subsequent Environmental Impact Report will also be available for your review on the City's Website after April 27, 2012. Comment sheets will be available at the public meeting, and a public stenographer will be available for dictated comments. Comments will be received until 5:00 p.m., May 29, 2012. Your written or dictated comments will become part of the public record and will be considered in developing the Climate Action Plan and Subsequent Environmental Impact Report.

If you cannot attend the meeting but have comments, questions, or concerns about the Climate Action Plan, please contact the Public Information Coordinator by calling (209) 464-8707, Ext. 101; sending e-mail to Hotline@buethecommunications.com; or send U.S. mail to Public Information Coordinator, Climate Action Plan/City of Stockton, P.O. Box 773, Stockton, CA 95201-0773. During the Subsequent Draft Environmental Impact Report public review during summer, 2012, a second community workshop will be held.

A Spanish-language translator will be available at the public meeting. If you require translation in other languages, please contact the Public Information Coordinator.

Individuals who require special accommodations (American Sign Language interpreter, accessible seating, documentation in alternate formats, etc.) are asked to contact the Public Information Coordinator at (209) 464-8707, Ext. 101, at least 5 days prior to the public meeting. Or, send an e-mail to Hotline@buethecommunications.com.

CITY OF STOCKTON

Climate Action PlanCity of Stockton

Está Ud. Cordialmente Invitado a una Junta Abierta

Para Tratar el Plan de Acción Climatológico de la Ciudad de Stockton

Miércoles, 2 de Mayo, 2012
6:00 p.m. – 7:30 p.m.
6:15 p.m. Presentación

Salón Norte
Auditorio Cívico Conmemorativo de Stockton
Calle Center Norte #525, Stockton, CA

Para el año 2020, Stockton debe haber reducido sus emisiones contaminantes a un 10% debajo de los niveles registrados en el 2005. Un Convenio Judicial del Club Sierra con la Procuraduría General de California dicta que el Ayuntamiento debe desarrollar un plan para reducir dichas emisiones. Un comité ciudadano, creado por el Ayuntamiento, ha encabezado el desarrollo del Plan de Acción Climatológica que se presentará en la junta abierta del 2 de mayo.

Los métodos aplicados por el Ayuntamiento para reducir las emisiones contaminantes puede incluyan programas auxiliares de eficiencia energética, iniciativas de urbanismo bien-planeado, desarrollo del transporte público, reurbanización del sector céntrico y áreas aledañas, como otras ideas.

A las 6:15 p.m. del 2 de Mayo se realizará una breve presentación detallando el primer borrador del Plan de Acción Climatológico. Se ofrecerá información y exhibirán documentos incluyendo la Notificación de Preparación del eventual Informe de Impacto Medioambiental. Expertos medioambientales y de planeamiento contestarán preguntas y escucharán sus comentarios.

Para leer el borrador del Plan de Acción Climatológico visite el sitio virtual de la Ciudad de Stockton: www.stocktongov.com. Elija Boards and Commissions, abra Climate Action Plan Advisory Committee y allí presione Draft Climate Action Plan.

Esta Notificación de Preparación del eventual Informe de Impacto Medioambiental se encontrará también disponible en el sitio virtual del Ayuntamiento después del 27 de abril, 2012. En la junta abierta habrá papeletas para dejar comentarios por escrito y un taquígrafo que podrá documentar comentarios dictados. Se recibirán comentarios hasta las 5:00 p.m. del 29 de mayo del 2012. Sus comentarios escritos o dictados se incorporarán al archivo público y serán considerados durante el desarrollo del Plan de Acción Climatológico.

Si no le es posible asistir a la reunión pero quiere tiene preguntas, comentarios o preocupaciones sobre el Plan de Acción Climatológico, sirva comunicarse con el coordinador de información pública telefoneando al (209) 464-8707, ext. 101; enviando un correo electrónico a hotline@buethecommunications.com; o escribiendo por correo a Public Information Coordinator, Climate Action Plan/City of Stockton, P.O. Box 773, Stockton, CA 95201-0773. En el verano del 2012, cuando el subsecuente Informe Preliminar de Impacto Medioambiental se encuentre en su etapa abierta al comentario público, se realizará un nuevo taller abierto a la comunidad.

La junta abierta contará con un intérprete al español. Si usted necesita un intérprete en otras lenguas sirve comunicarse con el coordinador de información pública.

A las personas que requieran asistencia especial (intérprete de Lenguaje Estadounidense por Señas, asientos para discapacitados, documentación en formato alternativo, etc.) se les pide comunicarse con el coordinador de información pública telefoneando al (209) 464-8707, ext. 101 por lo menos 5 antes de la junta abierta. O envíe un correo electrónico a hotline@buethecommunications.com.

CITY OF STOCKTON

Climate Action PlanCity of Stockton

Climate Action Plan City of Stockton

CONTACT: David Stagnaro, AICP
Planning Manager, City of Stockton
(209) 937-8598

FOR IMMEDIATE RELEASE:
April 25, 2012

PUBLIC MEETING ON WEDNESDAY, MAY 2, 2012 TO DISCUSS CITY OF STOCKTON CLIMATE ACTION PLAN

(Stockton, CA)—Members of the public are invited to a public meeting on Wednesday, May 2, 2012, to discuss a Climate Action Plan. The meeting will be held from 6:00 p.m. – 7:30 p.m. in the North Hall, Stockton Civic Memorial Auditorium, 525 North Center Street, Stockton, CA. A presentation of the plan will be made at 6:15 p.m.

The City of Stockton must reduce its greenhouse gas emissions to 10% below 2005 levels by the year 2020. As a result of a Settlement Agreement between the City, the California Attorney General, and the Sierra Club, a draft Climate Action Plan has been developed under the guidance of a Citizens Committee established by the City.

Information about the Climate Action Plan will be available for viewing at the May 2 meeting. Specialists in environmental studies and planning will be at the meeting to answer questions and receive public comments.

Ways to reduce the City's greenhouse gas emissions may include supportive policies and programs for energy efficiency, renewable energy, smart-growth initiatives, transit-oriented development, new housing and development in the Greater Downtown area of the City, and other strategies.

A draft copy of the Climate Action Plan can be viewed at the City's Website: www.stocktongov.com. Go to Boards and Commissions, then to Climate Action Plan Advisory Committee, and then to Draft Climate Action Plan.

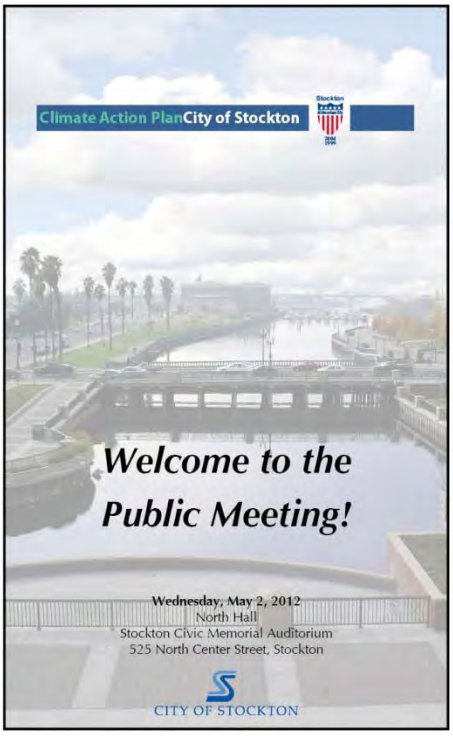
A Notice of Preparation for a Subsequent Environmental Impact Report will be available on the City's Website after April 27, 2012.

A second community workshop will be held this summer.

Information about the Climate Action Plan: (209) 937-8598
Information about the public meeting: (209) 464-8707, Ext. 101

# # #

Appendix C: Handouts



Thank you for attending this evening!

Climate Action PlanCity of Stockton

Project Background
The City of Stockton must reduce its greenhouse gas emissions to 10% below 2005 levels by the year 2020. A Settlement Agreement with the Attorney General of California and the Sierra Club requires the City to develop a plan to reduce emissions. A Citizens Committee established by the City has guided development of a Climate Action Plan that is being presented at this public meeting.

Ways to reduce the City's greenhouse gas emissions may include supportive policies programs for energy efficiency, renewable energy, smart-growth initiatives, transit-oriented development, new housing and development in the Greater Downtown area of the City, and other strategies.

Maps and other information about the Climate Action Plan are available for viewing this evening, including a Notice of Preparation (NOP) of the Subsequent Environmental Impact Report.

After tonight's meeting, you may want to visit the City of Stockton's Website: www.stocktongov.com. (Go to Boards and Commissions, then to Climate Action Plan Advisory Committee, and then to Draft Climate Action Plan.) The NOP is also available on the Website.

Comment on the City of Stockton Climate Action Plan and on the Notice of Preparation of a Subsequent Environmental Impact Report
Comment sheets are available this evening, and a public stenographer is available for dictated comments. Comments will be received until 5:00 p.m., May 29, 2012. Your written or dictated comments will become part of the public record and will be considered in developing the Climate Action Plan and Subsequent Environmental Impact Report.

For More Information
For more information about the Climate Action Plan and the NOP or how to comment on the documents, contact David Stagnaro, AICP, Planning Manager, City of Stockton, at (209) 937-8266 or David.Stagnaro@stocktongov.com. Or, Contact the Public Information Coordinator by calling (209) 464-8707, Ext. 101; sending e-mail to Hotline@buethecommunications.com; or send U.S. mail to Public Information Coordinator, Climate Action Plan/City of Stockton, P.O. Box 773, Stockton, CA 95201-0773.

Climate Action PlanCity of Stockton

Tonight's Agenda

May 2, 2012

6:00 p.m.
Open House

6:15 p.m.
Welcome and Introductions
Judith Buethe
Public Outreach Coordinator

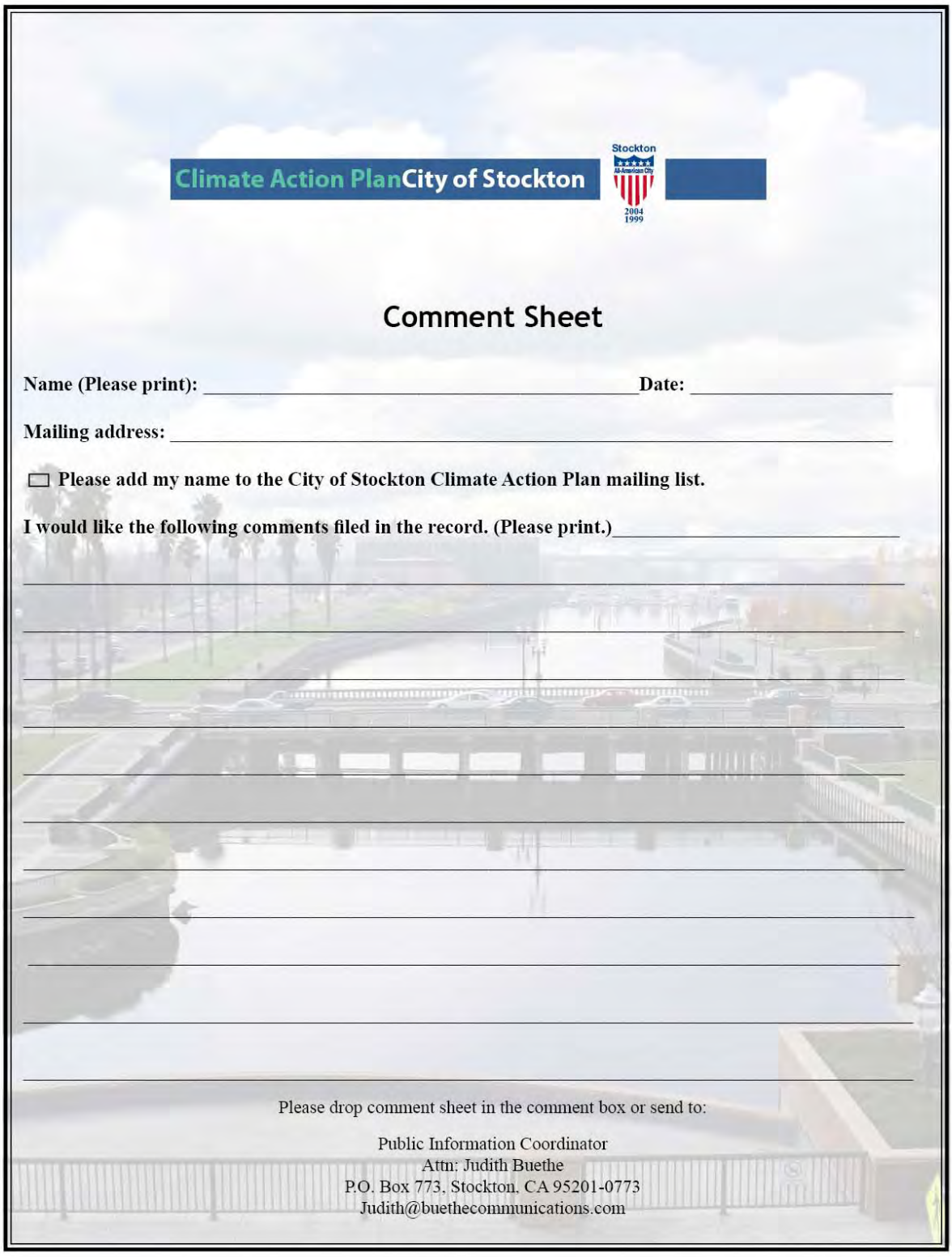
Project Background
Dave Stagnaro, AICP
Planning Manager
City of Stockton

Project Presentation
Rich Walter
Principal
ICF International

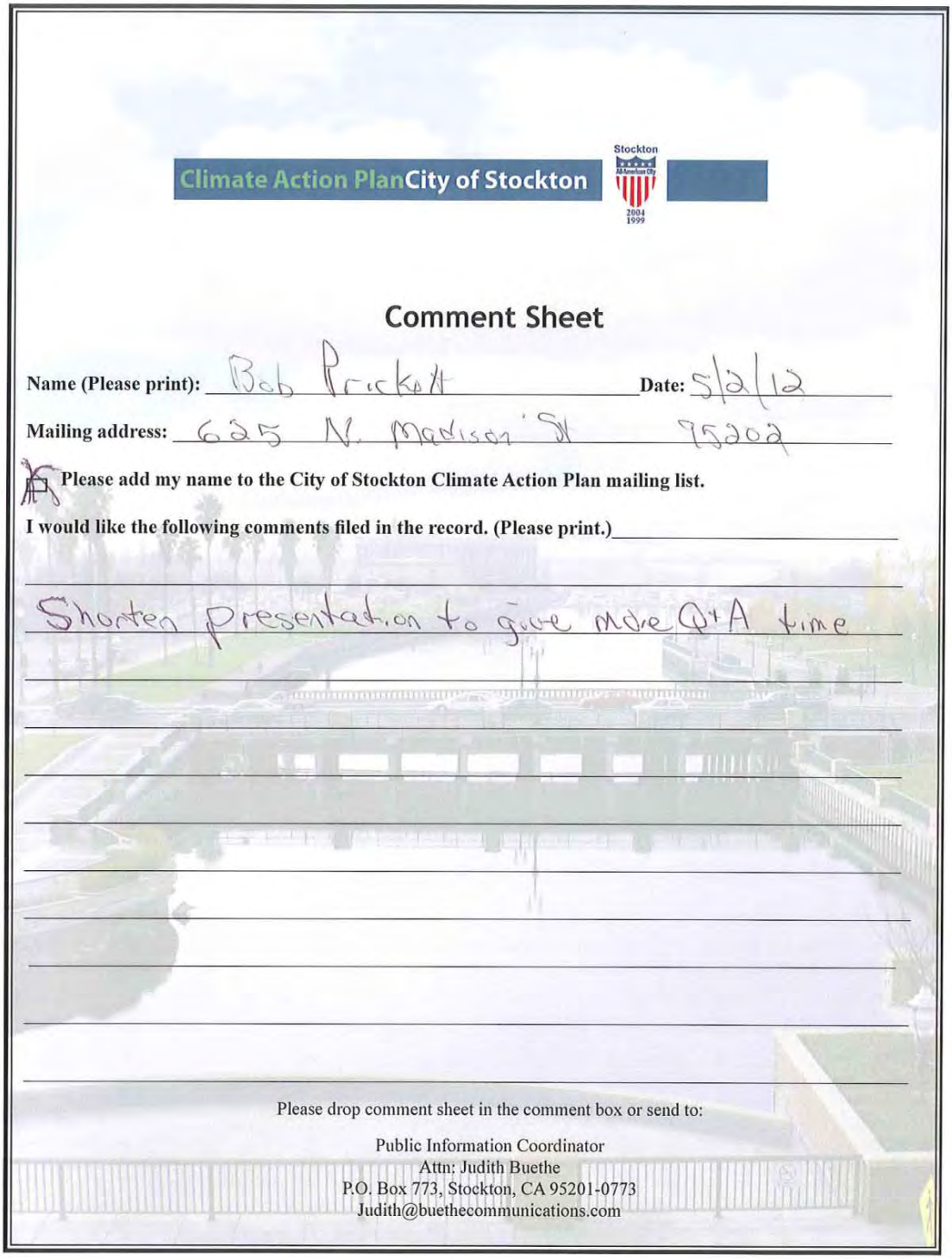
Questions and Comments
Members of the Public

Refreshments

7:30 p.m.
Adjourn


Climate Action Plan City of Stockton
Stockton
All-American City
2004
1999
Comment Sheet
Name (Please print): _____ Date: _____
Mailing address: _____
Please add my name to the City of Stockton Climate Action Plan mailing list.
I would like the following comments filed in the record. (Please print.)_____
Please drop comment sheet in the comment box or send to:
Public Information Coordinator
Attn: Judith Buethe
P.O. Box 773, Stockton, CA 95201-0773
Judith@buethecommunications.com

Appendix D: Comment Sheets



Climate Action Plan City of Stockton

Comment Sheet

Name (Please print): Bob Rickett Date: 5/2/12

Mailing address: 625 N. Madison St 95202

☐ Please add my name to the City of Stockton Climate Action Plan mailing list.

I would like the following comments filed in the record. (Please print.)

Shorten presentation to give more Q+A time

Please drop comment sheet in the comment box or send to:

Public Information Coordinator
Attn: Judith Buethe
P.O. Box 773, Stockton, CA 95201-0773
Judith@buethecommunications.com

Climate Action Plan City of Stockton

Comment Sheet

Name (Please print): Betsy Reifsnider **Date:** 5-2-12

Mailing address: 1106 N. El Dorado St, Stockton 95202

☒ **Please add my name to the City of Stockton Climate Action Plan mailing list.**

I would like the following comments filed in the record. (Please print.)

Does the Climate Action Plan take any "carbon sequestration" projects into account? If so, would cap and trade funds benefit the City of Stockton?

Thank you for an informative and thorough public meeting tonight. Much appreciated.

Please drop comment sheet in the comment box or send to:

Public Information Coordinator
Attn: Judith Buethe
P.O. Box 773, Stockton, CA 95201-0773
Judith@buethecommunications.com

Climate Action Plan City of Stockton

May 2, 2012

Thank you for attending. Gracias por su asistencia.

Please Print Your Name	Organization, if any	Address, City and Zip	E-mail	Phone
NED LEIBA		1047 N Hunter Stockton 95202	ned@leibacpa.com	209 948-9119
Dale Stocking	Sierra Club CAPAC			
BOB BENTZ	RETIRED	PO BOX 7513 STOCKTON 95267		952-4448
Bob Prickett	Retired	625 N. Madison St Stk 95202	bobprickett@hotmail.com	462-1005
Betsy Reifsnider	Catholic Charities	1106 N. El Dorado Stk. 95202	betsyr@comcast.net	444-5925
Rosemary Trevor Atkinson	Campaign for Comm. Trust	5165 Gadwall Cir. 95207	rosymoon atc@comcast.net	
Byron Bosnard	Central Valley Assoc of Realtors		Byron@CVAR.org	2098581700
Daniela Ayala	JB	———	———	———
Theresa English	PG&E	4040 West Lane Stockton, CA 95204	tre2@pge.com	942-1651
Charlie Smith	Kleinfelder	2001 Arch-Airport 95209	csimpsm@kleinfelder.com	948-1345

Appendix F: Dictated Public Comments

CLIMATE ACTION PLAN
City of Stockton
May 2, 2012 at 6:00 p.m.

PUBLIC QUESTION AND ANSWER

Q. Wouldn't it be to our advantage to see what we have today, 2012? All these charts are showing 2020, but where are we now?

MR. WALTER: Yeah. So when you do inventories, generally, you have to -- there's always a lag of about a year or two in getting all the information. Because we do the inventory for the entire year, so we have to get data from the utility companies and we have to do some transportation modeling. So we have to go to all these different sources. And usually that data is not available right now for 2012, and may not even be available for 2011. So I don't know exactly what the number is today. What I can say is based on the numbers we're reviewing from the City, of the amount of growth from 2005 to here, we're maybe one-third of the way to 2020. And that's based on the amount of houses, the growth that we've seen primarily in the residential side between 2005 and 2012 compared to the amount that we think will happen by 2020. So those numbers are probably in between those, but I don't think we're halfway to 2020 right now, even though we're already seven years in, because the growth has been so small.

MR. HELD: So I think you raised a really good question: Why are we looking to the future rather than today? So there's some practical realities why we picked 2005 as a baseline to project. One is data availability, and it's expensive to do an inventory. And the inventory was initially designed to find what measures and climate change measures could mitigate emissions in the future. So it was an effort to identify those measures and how effective they could be as part of the roll-out of the CAP. To make sure the assumptions that are part of these future reductions are actually ground truth, there will be continuous evaluations as the CAP gets --

Q. Yeah, and I guess the flip side of my question is if we don't know where we are in 2012 and we have goals for 2020, do we have to wait until 2030 to say we did it or we didn't? There are just years of lack of data. That's grasping smoke. How do you know if you've succeeded?

MR. WALTER: In the implementation side, we're going to be doing periodic updates to the inventory. And I believe 2014 is the next one; 2014, 2017, and 2020. So we're going to do actual inventories to see how we're doing as with we go, over three times over the life of the plan to track it exactly for that reason. And the reason it's not every year is just to save on costs. That would be great, then you could have it every year. But we think we can track it by 2014, because if the plan gets adopted late this year, we're not going to see the effects for a couple years. But by 2014, we'll see the effect of all the trend to that point with a really good margin on it. And so you're absolutely right. Proof ultimately is in the inventory that you do and see how you're doing and see how it's progressing.

But based on in terms of the economy and how it's changing here, apart from the slowing of growth, the nature of the economy hasn't changed dramatically yet, in terms of -- it's been a lot slower. And even in some communities, the emissions have actually gone down. The US level -- which, they do the inventory every single year -- in 2009, it went down from 2008. And then it started to come back up a little bit in 2010. And even in the state of California, it's the same. Up until 2008, it's on a slow rise. And 2009 -- and this just came out. The state levels, the 2009 levels just came out early this month. That gives you an idea of some of the lag. And that was down from 2008. So I wouldn't be surprised that the city of Stockton probably followed the same trajectory. It was probably up in 2007-2008, probably dipped a little, and probably is on a very slow, flat rise right now. And that's based on all the other inventories.

Q. When you're talking about inventory of greenhouse gasses, nobody's out there sampling

the air all over the state, right? It's all calculated in derived numbers from things like vehicle miles traveled, which, again, are derived from surveys, power usage, energy usage, and so on. Could you speak to that a little?

MR. WALTER: Yeah, sure. That's a great question. Interesting enough, there are academic researchers out there who do sample CO2. And they are actually looking at the front edge of trying to monitor areas and trying to figure out how much gas is coming from a certain area. But the air is very dynamic. And he knows a heck of a lot more about atmospheric science than I do (indicating Mr. Held). So it's very difficult to attribute problems with a very specific area when you've got neighbors in San Joaquin County, Lodi, or Manteca or wherever. And things move around a lot. So it's very hard to attribute from an atmospheric point of view. But as far as what's in the inventory, the data comes from a variety of sources, to be honest. So some of the best data is in the energy side, because the utilities track things because they've got bills to send out and you've bills to pay. So we have fairly precise data for electricity consumption and natural gas consumption.

Of necessity, transportation is difficult. Because in a city, it's very difficult to tell where everybody bought their gas. So at the state level, they don't actually do it on a model of EMT. State level, they do do it on gas. But it's much bigger to track the fuel use on a much bigger area. But when you get here, people might have gassed up at their job, which might be a neighboring town. It's very difficult to attribute, so the standard has been to use travel -- travel demand models, which are built on surveys and then statistical relationships. So that one is obviously built on a model that's using the best models that we have today.

And then the other ones like waste tracking is very good, actually. The State does a very precise job of tracking how much waste is actually generated and put in landfills because it's so highly regulated. And similar on the water use; it's something to track. So a lot of this is pretty good. The area that will always be improving is probably the travel-demand models. But that's the same way we do air-quality monitoring for San Joaquin Valley.

MR. HELD: And so to answer your question, it's all -- the simulations that we're doing, we're following established protocols that have been put into place by the local government procedures. And when you use the actual factors and analyses, you can do "what-if" experiments. And then you can go out and sample. And then you can do things like, let's not count pass-through traffic. Let's only take trips that originate or destinate. So you asked a good question. If there's concern that any particular emission-factor analysis is faulty, at least we have a whole community looking at that approach. And at the state level, with the cap and trade in place, there's a lot of eyes looking at these factors making sure they're responsive.

Q. To reinforce what you were just saying, I registered a new car last week. So I sat down with my insurance man. And he didn't want to know about the mileage on the new car, exclusively. He wanted to know about the mileage on all the cars. And he offered me a deal: I can plug in one of those devices, and he can watch my brake speed. Excuse my sarcasm, but how far is this going to go? Are they going to start measuring the number of flushes?

MR. WALTER: One would argue that your water bill already does. So they already kind of know that, for good or ill. Every once in a while, someone will throw out this idea. Well, we'll just have everybody report their mileage. Or it'll be, every time you smog, it gets reported for your location. Right now nobody in the practice -- and both Tony and I sit on a lot of professional committees and conferences with other people that who do this for a living like we do -- and nobody in the business is proposing that, because of the privacy concerns. If that might get proposed by the State, it's certainly not something that we're going to -- I've never heard anybody seriously right now talking about that because nobody wants to report that personal data. Now, it is all, frankly, there every time we go smog our cars. But nobody -- the State hasn't gotten around to the point -- I haven't heard of anybody saying, "We'll just go to that, and then we'll have everybody's VMT in the city of Stockton. And then we could total this all up in a different way." Right now, I don't hear it.

Q. They are collecting that data. They take an odometer reading, and they can compare it to the last time you did a smog.

MR. WALTER: They are collecting the data, but at present, there is no plan to make that available.

Q. Well, we already have sensors.

MR. HELD: For this analysis that we're doing, we're not using that type of -- the whole process of coming up with an inventory was so that we could find candidate measures that could influence our greenhouse gas emissions. So having detailed information about information that wouldn't result in the selection of a new mitigation measure is not something that can be analyzed. Unless we can come up with some enforceable rules, it's not going to change people's driving habits. That's not even on the table.

Q. Understood. We already have sensors built into the roads that monitor individual VIN numbers. We already have an air-quality smog program that literally requires recording of your mileage on a biannual basis.

MR. WALTER: I guess what I'm saying is, while all that data is being collected -- and if you have a Fast Pass in the Bay, it knows where you are and all that good stuff. But I've never heard -- nobody has gone to the point of saying we're going to make that data available for the Climate Action Plans. And it has never come up. So we haven't looked at that because whoever's collecting the data is not forthcoming with it. I will say that when they do travel modeling, it is based on periodic surveys. So they are putting out poses and doing counts and all that. So they are always working. And they do travel surveys, send out to people asking how far do you drive to work and school, those kinds of things. So they do build it up on data. I will also emphasize there's a part of the settlement agreement that actually requires assessing the vehicle miles traveled miles traveled as we go forward. So independent of the greenhouse gas, but actually tracking that and monitoring that to see whether we're seeing changes over that time. But we expect that will be done through surveys and counts which are the traditional ways. Although, three or four years from now, it may be just an app on the phone.

Q. Well, I served three years on the Air Quality Citizens Advisory Panel. So I'm kind of aware of the evolution of this stuff. And we can't control interstate transport. So Stockton is a transportation hub with freeways that actually work, which makes us a really desirable hub-and-spoke kind of place. We have a port, an unused airport, freeways that work. We're building warehouses at Rough and Ready Island and at the airport. We're building a new freeway to the airport connecting I-5. We have businesses moving here from the Bay Area and from north and south. But you're not taking into consideration the interstate transport generation of all those vehicles. They're the gross polluters.

MR. HELD: We're taking into consideration that which the City has control over. So the City can influence a trip that either originates or is destined within the city limits, maybe not directly, but indirectly. Pass-through traffic from LA to Sacramento is not something that the City can control. That's why we're excluding that from the greenhouse gas inventory and none of our measures are in contrast to -- and I would also mention that we don't have a measure that is seeking to control or limit that. The only thing it would influence would be some of the yard equipment. But it's not intending to say, "Stop running trucks through here" or "Stop doing transshipment" or those kinds of things. That's not where we're going. And I don't know many communities that have a substantial goods movement industry that is going in that direction. Except, the only ones -- like down in LA, coming out of the ports, there's a lot about moving things on trains between the port and maybe the inland empire or Victorville. When it gets to that scale, at a really macro regional scale, then some other things really do come into play that do have to do with goods movement, but mostly have to do with bringing things inland, not away from the ports, transshipping them and sending them out to the rest of the country. What we don't do is we don't count the emissions that might go through Nevada or Bakersfield. That's beyond what we're looking at right now.

Q. Aren't some of these issues -- those are addressed in that 83 percent, that green triangle the State requirements are going to be addressing, those trans areas?

MR. WALTER: Excellent point. They already have some rules about improving the aerodynamic efficiency, which can get you some big gains on big trucks. And then also the low carbon fuel standard does apply to diesel as well. So those are two measures that the State is doing to address the

movement. And they are going to get some reductions. And there are a few other things on the diesel side they're looking at. And there's huge things happening in the diesel engine world, as you're no doubt aware of.

Q. I want to clarify the timeline for the Public Input Hearing. Today is input on the Climate Action Plan and the report that you're bringing out. The General Plan amendments will not be available until June or so. Will there be a comment period on that?

MR. WALTER: As part of the draft, there will be a 45-day comment period during when the draft EIR comes out.

Q. So we are not expected to comment at this time on the amendments?

MR. STAGNARO: There's no content to comment on at this point, because we haven't released -- we're working on the General Plan amendments.

Q. So today is just to update what you've been doing all this time, and we kind of get the picture.

MR. STAGNARO: Yeah. There are two main themes of this first workshop. One is to inform and get comments on the Climate Action Plan itself. And then the second is the notice of preparation of a subsequent Environmental Impact Report. And the notice of preparation, as we've said earlier in the presentation, is a scoping period for the preparation of the EIR. In other words, it's an opportunity for responsible agencies, trustee agencies of the State and other levels of government to provide their input. But it's also for the public and stakeholders to provide their input.

Q. Input on what is going into the EIR?

MR. STAGNARO: That's correct. What should be analyzed in the Environmental Impact Report. We sent out, with the notice of preparation, an initial study that goes environmental issue area by environmental issue area and gives a direction, if you will, that we anticipate going with our EIR analysis. If there is something that you see in our initial study, that we missed something or are not taking the right approach in your opinion, then you need to let us know about that so that we can change that analysis now. That's what the whole notice of preparation is for, telling the world that we're going to do this environmental document and allowing that opportunity to get feedback, as a city, so that we can prepare a more adequate Environmental Impact Report.

Q. And then when the amendments come out, then there will be a period of time for comment after we've had access to them?

MR. WALTER: You bet. They will come out at the same time as the draft EIR later this summer. You'll have -- 45 days is only on the EIR. Frankly, once they're out, you can comment on the General Plan all the way up to the City Council consideration. SEQUA has a time frame, so the EIR has a 45-day period. But then, obviously, they'll be released at the same time, so you will have any opportunity on the policy side for the community at large to provide any comments for the City Council. "I like this", "I think it should be different", "I don't like it", or "I think it should be changed." That's on the project itself. But then there will be at least a 45-day period, there will be a hearing like this where you can bring comments on the EIR or any element that's in there.

MR. HELD: There will be these general planning rules and there's going to be new General Plan language. And then an EIR, which will look at the environmental impact and some additional analysis as well. So we're going to release that all at once. And you're going to have a comment period. So you're not going to see a roll-out of the GP amendments and then the EIR. This is all going to come out at once.

MR. STAGNARO: And with that said, we're working on the General Plan amendments. That will be the subject of some of our meetings too, as we're working through the committee, getting their input on what that language should be. That will ultimately end up in that uniform package of information that will go out for a formal public review. But rest assured, those General Plan amendments are going before the CAPAC. There's going to be plenty of opportunity to weigh in at that point before they become part of the formal document for formal review. And we're going to have a second workshop during the formal review period of the Environmental Impact Report and of the revised draft Climate Action Plan. And then we'll have a third workshop after that. And we have the monthly CAPAC

meetings. In addition, we're going to have at least one meeting of the Planning Commission on everything. And then we're going to have at least one meeting of the City Council on the Climate Action Plan package, if you will. So there's going to be ample opportunity for input between now and that final hearing.

Q. First of all, thank you very much. I found this fascinating. You had mentioned that you're also working with the San Joaquin Air District or getting information with them. And I was wondering how the indirect-source rule works into all of this, and if it has any additional effect as far as developers who have to mitigate what they're doing and how that might factor into this?

MR. HELD: So San Joaquin Valley came out with guidelines. And so they had the 29-percent reduction against business as usual. And that was the threshold, whether something is significant or not. So they have this 29-percent rule that applies to new development. Now, that's only binding on themselves as an entity. It's a guideline. And it's not necessarily binding on anyone else.

Q. It's binding on the Air District.

MR. HELD: On what the Air District is doing. But if the Air District is not the lead agency, you don't have to use their guideline. However, the City of Stockton has adopted that guideline as what, when the City is the lead agency, would be used.

MR. STAGNARO: I just want to add a slight clarification, here. The indirect-source rule and the Climate Change Action Plan that the San Joaquin Valley Air District did are two different initiatives, if you will. And what you just described is a Climate Change Action Plan. The indirect-source review rule, or ISR, as the Valley Air District calls it, is something that is specific to development projects. And the reason why it's called that is that development indirectly causes air pollution. And that rule is meant as a way for the Air District, like what the City is doing right now, to review projects. And that is not so much for greenhouse gas emissions, but for criteria pollutants. But there's a connection. If you're burning fossil fuels, you're creating both greenhouse gas emissions and criteria pollutants like VOCs and ROG, which is Reactive Organic Gasses, etcetera, etcetera, particular matter. And so the indirect-source review rule is something that's taken into account by the State. Because the State looks -- the Air Resources Board takes a look at all of the work that all the air districts are doing throughout the state, and they factor that into the big picture in terms of emissions. And so, I think we capture some of the benefit of that through the 83-percent statewide reductions. I don't know that to be a specific line item fact. But somewhere, the Air Resources Board, which was in the business primarily of reducing criteria pollutants way back when it was formed and didn't know or care too much about greenhouse gas emissions until the last decade, that was their charge. And that's why the San Joaquin Valley Air District came up with that ISR rule in the first place. I don't know if that answers your question. But that's how I understand it. And that's how I think the whole picture kind of comes together.

MR. WALTER: To add to it, the ISR rule doesn't apply to every new project, but when it applies. With what the City is already doing under SEQUA and what is also basically carried forward in this plan for a new project, having to reduce a greenhouse gas by 29 percent, the things that they might do, some of those are going to reduce criteria pollutants; some aren't. So to the extent that they might be required to do ISR for criteria pollutants, they can count it for both. This plan is going only concerned with greenhouse gas. So if they're doing some land use or transportation initiative, that would count under the ISR rule, it would count for this plan for greenhouse gas. And it would count for that for ISR. So we're not adding something that says you have to get something on top of ISR. But you get some common benefits any time you have a combustion emission, basically.

Q. I think that was my question. Has that factored into the plan?

MR. WALTER: We didn't factor any additional because there are ways to control criteria pollutants that don't help with greenhouse gasses. So we can't anticipate exactly what new projects might do. But when they're doing something that is actually reducing combustion emissions, it's going to help them with both. And to say as to whether we have incorporated them, we do have some tables where we demonstrate that certain measures have co-benefits and improvement of conventional air quality.

MR. STAGNARO: And to go a little bit further, ISR is only going to help us to the

extent that there's been some reduction in emissions from 2005, because that's our baseline inventory year. And as we know, shortly after 2005, development in Stockton and the rest of the San Joaquin Valley just dropped off the face of the earth. And we're experiencing very low levels now. So a program like that, while beneficial in a normal development year, is of very little circumstance to the City of Stockton right now. Because last year, we built less than 200 housing units. And to compare, back in 2002, 2003, and 2004, we built 3,000 units each of those years for a total of 9,000 over a three-year period. So you can see the difference in an over 95-percent drop in residential development in the City of Stockton.

Q. Another question, more out of curiosity than anything else: The Port of Stockton just recently installed two huge cranes to handle loading containers onto barges to set up a marine highway between Stockton and the Bay Area. The marine highway itself will be out of Stockton. But presumably, that entire process is going to be bringing either lots of container trucks or railroads into Stockton to load onto barges. Is that a factor that's being considered in the process of county greenhouse --

MR. WALTER: Interstate transport, not County. The boats coming up, no. The trucks going -- only to the extent within the city, yes. They're counted in the model. Once they get outside, no. As far as rail, we didn't include that. We don't include rail as a rule, because it is interstate. We don't control it. If you've ever worked with Union Pacific, they have a great business model, but they don't work well with others. And they'll tell you that.

So the Climate Action Plan, the candidate measures were only things the City has jurisdiction or control over. So if there wasn't a pathway for control, then it wasn't included into the list of things in the inventory. The only thing that would affect the port would be -- you know, we do have some voluntary small programs that are seeking to make sure that everybody on the off-road fleet is aware of all the State and San Joaquin incentives that come up that will help people with yard equipment to retrofit them. That's the only relation here, but we're building on what they're doing.

Q. First, a comment. You don't have to respond to the comment. I saw they can expand on the trees. I think all of us who have had City-owned trees -- the nightmares of City-owned trees for years will be thrilled if the City took care of the trees they got, rather than building more.

The question: I found the online report -- 500 pages. And I tried to wade my way through it. And I just saw all these megamillions of dollars all over. So I skipped to page 114, "How are we going to pay for this?" And it says that voters could raise sales tax, raise special tax, raise bonds. What is your confidence level on any of this?

MR. WALTER: Very little.

MR. STAGNARO: That's why we put "could" instead of "would".

Q. Yeah, I looked for that. I wanted to make sure I could see it.

MR. STAGNARO: Yeah, the idea is here -- and that's one of the reasons why we have mostly a voluntary program where people in their own self-interest are acting to put that extra layer of insulation in their attic, change out their single-paned windows to dual-paned windows, change out their old air conditioner to a new one, like Dale did when he retrofitted his house, and things like that. Knowing that energy costs over time are going to go up, you don't want to have your energy bill go up as much, so you're willing to invest some level of money in your own self-interest to keep your own personal costs down. We know we're in a very challenging environment right now. But we also recognize that by 2015, 2016, 2017, we're going to be in much better shape than we are today, and that maybe these are still possibilities. Are they likely? Probably not. But we do have between now and 2020, and things do change.

Five, six years ago, we were building a lot of houses. We're building virtually nothing now. Five or six or seven years from now, we could be building a lot of houses again. So things have a way of changing fairly quickly. And we just want to hold it out as a possibility and not automatically reject the idea that somebody may want to -- you know, if Stockton gets healthy again, financially, five or six years, maybe we can float a bond at that time. Or there may be an appetite for a quarter-percent sales tax increase. Who knows? But we don't want to just make a unilateral decision to foreclose a possibility of funds, when it is out there, theoretically.

Q. On the public process: Now we have the Climate Action Plan, and then we're going to have the General Plan amendments and all, and then a supplemental EIR. Is the supplemental EIR -- is one EIR going to cover both the Climate Action Plan and the General?

MR. WALTER: All of it.

Q. So we have one SEQUA process covering both administrative ends?

MR. WALTER: Yes, multiple decisions by the City.

MR. STAGNARO: And then we're also -- we don't know yet, but we have a rough idea what's going to come out of the ULI report. And if there's some strategies or some amendments to the General Plan that may come out that report, then we're going to factor that in as well.

Q. Yes, because we talked about that at the last CAPAC meeting. That there are two -- actually three entities that we're working with that the Climate Action Plan is the vehicle to carry it on through the Council.

MR. STAGNARO: Yeah.

Q. Some ambient comments: It seems to me this meeting ought to be recorded, because a transcript ought to be produced. Because in the course of this conversation, there is valuable information being exchanged that is not going to be part of the record unless every one of us has a perfect memory and has time to stand in line with her.

I've served on boards and held hearings. You can buy recording equipment very cheaply that -- you just have to give a notice in advance at the beginning of the hearing that you're recording. Not because you want to invade anybody's privacy, but you want accurate representation in the transcript of the events that occurred.

MS. BUETHE: I might just add that Desiree has been getting the comments and the questions down.

MR. STAGNARO: So it is being recorded so to speak, not voice recorded, but eventually translated to paper.

MR. WALTER: We think we'll have a pretty good record of tonight's discussion.

MR. STAGNARO: Now we have a record of saying it's being recorded.

Q. Some more ambient remarks: We import solid waste into San Joaquin County that passes through the City of Stockton from the Bay Area. Does the plan anticipate a reduction of that value, since we could curtail receiving Oakland's waste? In fact, we might even direct a toll booth and send back some of the jetsam and flotsam that comes from the cars too.

It seems to me, with regard to alternatives and your building energy pie chart, natural gas versus electric. Some of us have been responsible citizens. I, for one, converted my range, my fireplace, my dryer. Seems to me, there's probably some other things in the house as well. We switched over to natural gas, because, quite frankly, there's more natural gas than we know what to do with. Are you guys factoring in the values of the people who are doing those kind of conversions? Do you have a finger on the building permits? Are you talking to the wholesalers of heaters and air conditioners and ranges and fireplace equipment?

MR. HELD: So part of the reason we picked 2005 as a baseline year is to address some of the comments that you're making. So we're at 2012 right now. So we're six years after AB-32 was first passed or getting close to that. And we didn't want to penalize the City's organizations and efforts to have early reductions. So that's why we picked 2005 as the baseline year.

And then we defined 2020 as business as usual, not taking into account any mitigation efforts like what you're talking about. So then when you look at what the future's going to look like in 2020, you get the full credit of everybody who's making these changes as a consequence, trying to reduce their greenhouse gas footprint. Or they may be doing it for economic reasons, because it makes more economic sense to use a building code permit.

So if it happened 2005 and later, you will definitely get credit for it. If it happened earlier, it gets a little complex. But there's an inherent effort not to penalize early action. And we're tying the reductions to a specific action that the City can take.

So there is other action that's happening in the community on private initiatives that will happen independent of the Climate Action Plan. To the extent that those help, they will be reflected in the greenhouse gas emissions subsequent inventories. We will see what residential electricity or natural gas looks like in 2014. And some of it could be because of Climate Action Plan; some of it could be because of the State; some could be because of independent action or reaction to whatever the gas price is in 2014. So there's a lot going on here, but when you do Climate Action Plans, we try to tie it to something specific that the City can do.

So one place -- in the guidance that we provide for new development, for example, there is a credit and certain percentage points that are given for using appliances that are low-energy emission. And we're talking about a number of them like that you've replaced. So if they're dedicating those, that's one way for a new developer can say, "Well, meet mine. I have this remaining piece I need to do. I'm going to go with these type of ranges or these type of appliances, Energy Star or whatever it might be. And they would get credit for that.

But as far as in the private market that's outside of any retrofit program that we do, that'll help. There's no doubt.

Q. In that regard, since we have a representative of PG&E in the room, I've done all of the Energy Star stuff I could do to my house. Not a single time have I been able to time my opportunity to get your rebate, not once. You have timed me out of the program every time. But let me carry that a step further, again, with the ambient remarks.

Several years ago, in anticipation of retirement, I retrofitted my pickup with a new engine, and transmission, and tires, and exhaust system, and the whole nine yards. I mean, I put $10,000 into a $2,000 pickup. And it now gets seven miles to the gallon. So it doesn't get driven much. But what I hear is -- and what I anticipate, because of my experience with the air-quality folks, I think you guys are going to take my pickup, and you're going to take it with my lawnmower and edger and my chain saw and my gas blower. Every one of those things is going to be impacted dramatically by this.

MR. HELD: Well, those are State programs that you're talking about. And it's not that it's being taken away. There are Cash-For-Clunkers and other such programs.

Q. You're going to give me ten grand?

MR. HELD: But as part of this program, nothing like that is going to be considered.

MR. WALTER: Yeah, there's an offer of a voluntary program that might deal with if you have an ancient mower. That's a classic thing. But, again, it's a voluntary program. The State at times will make measures that will ramp up so you can't smog. I had a 1985 Plymouth Reliant with a very strange carburetion system, and it just couldn't be smogged. The car ran just fine, but it just couldn't be smogged. And I had to get rid of it. But that was the State's regulation at the time.

Q. And it's kind of weird that way. Because the pickup always passes the smog, but I'm sure sooner or later, they'll change the requirements on it.

MR. WALTER: Right now, the State is only focusing on standards for new cars. And then on the fuel side of it, so what goes in, whether it's diesel or gas. Right now they're not focusing on -- as far as what the State will do in the future, I can't speak for them.

Q. I have a couple of comments or questions. I'm Byron Bogaard with Central Valley Association of Realtors and also a resident here in the city of Stockton. Just one comment first:

I was disappointed in the way the meeting was set up tonight. This is a lot of great information that the residents should know and hear about. And the three members of the committee as well as some of the citizens that have been involved in this process for a couple years now are here. But there's not very many members of the public. But yet we have City Council and the mayor holding events tonight that have 75 people there, because that's the big news. And so I'm disappointed in the way that this was brought about. And I hope that as we move forward in this process, we can do a better job of working with City Council to support this. Because they're the ones that are driving it and ultimately making the decision.

That being said, from the Realtor's perspective, we've been engaged in this process for a while now. We've been out talking to the homeowners about the benefits like this gentleman was talking about

doing to his house. And when there's not a permit process in place for something or there's not a rebate in place for something, our concern is that those numbers are not being tracked, and that we're not being given the proper credit for those initiatives. And the goal that was set forth by the City of 8,500 homes by the end of 2013, there's no way for us to ever know if we're coming close to that, if we're way far away, or if we're going to blow that number out of the water and exceed that goal without any type of tracking mechanism. And the committee members here are tired of me saying this, but I must for the record. I would hope and encourage that at some point, we get this in place. I saw on one of the charts back here that the residential portion is one of the biggest components. And yet, if we have no way of tracking what's going on, how do we know? It's all just pie in the sky.

MR. STAGNARO: We are working on that. Our own system in the City of Stockton, admittedly, is not robust enough -- or when they do pull a building permit -- because we are not tracking whether you do a retrofit or not in the past. We didn't do it in 2005, 2006, 2007, 2008, 2009, 2010. We're in the process over the next year or so of replacing our information technology. So our system isn't going to be much of a help. However, we are working with PG&E to try get information, because they have a hand in energy retrofits that are done. And we're trying to also gather information from the senior program that the County is doing and the low-income program that the County is doing. And we're trying to come up with ways. And Theresa and I have met on this particular subject a couple of times. And Theresa assures me that we're within a very short time of coming up with the numbers to date so that we can report that back out and see how we are doing against that ultimate 8,500 retrofit.

Q. I would just say that there are certain instances and certain things that homeowners are doing that are not going to fall in that permit process, are not going to qualify for a rebate. And we have all this fancy modeling stuff. What type of modeling or stuff are we putting in place to anticipate for the homeowner that's doing stuff that all the stuff you mentioned isn't going to show up anywhere?

MR. STAGNARO: That's just the nature of the beast that we're talking about. Is that if I go down to Home Depot today and buy a couple rolls of insulation for my attic, we're not going to catch that; we just aren't. And that's reality. However, if they change out windows, and they do it legally within the city of Stockton, now -- it wasn't the case a couple years ago, but today, you have to get a building permit. If you, of course, change out your HVAC system, you have to get a building permit. If you do some other things that are normally attributed to energy retrofits, then you have to get a building permit. Some of the things we are going to miss. But we're going to try to capture as many as of these things as we can. When you do weatherization, that is not caught with a building permit; however, through these programs -- the senior program, the low-income program -- that's weatherization, no building permit required. But we're going to try to capture that information. So that's an example of where there is no building permit pulled, but we believe we'll be able to capture some of that information and count that as at least a partial retrofit. And we also recognize that there's a huge gamut of retrofit activity. There is the simple weatherization where you're getting the caulking and insolation. Maybe that's about it, sealing the openings and whatnot. And then there's the Dale Stocking standard, where you're spending in excess of $40,000 on a Cadillac energy retrofit. And you're doing everything that you can think of and maybe some things that he didn't think of initially and found out about while he was doing it. It's going to run the whole gamut. But we're going to do our best job to capture those numbers and to report those back out. And PG&E is really a good clearinghouse for that information.

And when we get that green building ordinance, which we're working toward in a fashion that can be approved by the California Energy Commission, then we will be implementing that. And we will be tracking that through the worksheets that are filled out with every building permit that has something to do with an energy-retrofit-type item. So that's our commitment; that's our goal; and that's what we intend to do.

MR. WALTER: And I would just add briefly, Dave spoke to the tracking part of it. At the macro level, in 2014, 2017, 2020, any improvements that we see in the residential energy use is going to show up at the macro level inventory. So it gets caught. Tracking is important because you can attribute it to the program. It's very important. And then at the macro level, in terms of output for electricity or natural gas, we do see it in the utility database.

Q. That could also be skewed based on weather patterns, right? If we had a hot summer, mild winter?

MR. WALTER: Yeah. In tracking these measures over time, you have to track it so we can attribute it. This portion of the change is due to that program. And that's terribly important. It won't be missed in the macro. But if you don't have the tracking, it's going to get missed in the greenhouse gas. But the benefit will be in there to the extent that we can get the best tracking possible. Then we will be able to come back in 2020 and say, "Here's where we are and here's what caused it down the line."

MS. BUETHE: With that, I would say we have time for maybe one more comment, since we're half an hour over. I really appreciate your interest. This has been very, very good exchange. But one more comment?

Q. I realize the report from UOP was really good this week. Jobs are expanding in Stockton.

MS. BUETHE: Economic forecast.

Q. Yes, economic forecast. It's not lost on me that there are six lanes that stop at Boggs Tract that only have to leapfrog about a quarter of a mile to get to the Port of Stockton. We're bringing in all this new marine traffic. Traffic doesn't move in the Bay Area like they want it to, so it's only natural that that container crap's coming out here and going to be moving around. You got to wonder, though, how much of this stuff is going to get in the way of employers who want to create jobs? I hope the City plans into their EIR the idea that jobs are damn sight more important than controlling a little bit of air pollution. We import air pollution from the Bay Area that they never get full credit for. I commuted over there for eight and a half years. I tried to get the air district to measure it at the top of the Altamont. But they won't do that. But the fact of the matter is, there's a whole lot of factors here that I don't see really being considered in your analysis and in setting up the paradigm for the EIR.

MR. WALTER: So one of the things that Dave mentioned is the economic concerns are paramount. And for obvious reasons, it has been a dominant theme of our conversations with the City Council to date. We do have competitiveness analysis that is being done by an economic planning system with a longstanding economic consultant the City has used that we are looking at these issues. I will also note -- comments are welcome. I would note that this plan has been designed with as light of a hand as possible for new growth. It's looking at continuation of current initiatives in terms of SEQUA not changing the game for new development, not creating it. It's a heavy lean on voluntary measures. You can't have a Climate Action Plan that doesn't have any measures. That is our charge that you have to have a plan that does reduce emissions back to the City Council. Their considerations can be very broad. They can be environmental; they can be a settlement agreement; they can be economic growth. All of those things are all fair consideration for the City Council and we expect lots of comments on it. We want to bring into this as much information as we can. So we're bringing the cost of benefit analysis that has been done. We'll be bringing in the competitiveness analysis to them. We'll be bringing the environmental analysis to them. And then it's really up to the City Council to make these decisions based on all the input from the community. So very good comments. I hear you. And the formulation of what candidate measures even exist was borne from a round table where everyone got to specify what candidates got to be on the table. And those were evaluated by the committee as whether they were feasible and the economic concerns and so on and so forth. When we did look at a measure that got thrown out, then penetration rates of retrofits or participation, what percent, those were all set within realistic bounds as to what we thought was going to happen. So it has been an integral part of the analysis. Whether it's feasible, both economically and other aspects. But that's a very good point.

MS. BUETHE: And, with that, I'm going to call the meeting to a close.

5/29/12
NO COMMENT
PER MWD
DS.

EAST BAY MUNICIPAL UTILITY DISTRICT

May 25, 2012

RECEIVED
MAY 29 2012
CITY OF STOCKTON
COMMUNITY DEVELOPMENT DEPT.

David Stagnaro, Planning Manager
City of Stockton
c/o Community Development Department
Planning Division
345 North El Dorado Street
Stockton, CA 95202

Re: Notice of Preparation of a Subsequent Environmental Impact Report for the Climate Action Plan/Related Actions and Other General Plan Amendments

Dear Mr. Stagnaro:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation of a Subsequent Environmental Impact Report (EIR) for the City of Stockton Climate Action Plan/Related Actions and other General Plan Amendments (Project). EBMUD has the following comments.

MOKELUMNE AQUEDUCTS

Portions of EBMUD's Mokelumne Aqueducts (Aqueduct) are located within the City of Stockton through the Brookside Country Club in the west and along March Lane east to Camanche Lane within an EBMUD right-of-way (owned in fee). EBMUD understands that no specific projects are proposed at this time for the Project. However, all specific development projects subsequently proposed within or in the vicinity of EBMUD's Aqueduct right-of-way must adhere to EBMUD's procedure and requirements for use of the right-of-way; a copy of which is enclosed for your reference.

If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, Water Service Planning at (510) 287-1365.

Sincerely,

William R. Kirkpatrick
Manager of Water Distribution Planning

WRK:AMW:sb
sb12_100.doc

Enclosure

EBMUD

Procedure 718

EFFECTIVE 06 FEB 12

SUPERSEDES 15 MAR 10

LEAD DEPARTMENT O&M

RAW WATER AQUEDUCT RIGHT-OF-WAY NON-AQUEDUCT USES

PURPOSE - To establish procedures and criteria for review and authorization of surface and sub-surface use of District-owned property containing raw water aqueducts and raw water pipelines for purposes other than installation, maintenance, and operation of District raw water aqueducts.

Forms Used

L-14	Limited Land Use Permit
K-47	Work Request Agreement
N-15	Certificate of Public Liability Insurance
N-17	Certificate of Workers' Compensation Insurance
	Application for Use of EBMUD Property or Request for Information
	General Fund Receipts for Miscellaneous Payments

Authority and Responsibility

Use, development, and control of fee-owned rights-of-way for District and non-District uses must be consistent with water supply operation and security and the rights and obligations of the District. District and non-District uses of District-owned aqueduct rights-of-way may be permitted when they conform to Policy 7.01, Aqueduct Rights-of-Way Maintenance.

- No use of District aqueduct properties by others will be permitted as a condition to meet city/county zoning requirements or to obtain any land use permit, approval, or entitlement affecting properties not owned by the District.
- No use of District properties by others will be permitted except under terms of a written agreement.
- Use of raw water aqueduct rights-of-way for District purposes shall have the concurrence of the Aqueduct Section Superintendent.
- Use of aqueduct rights-of-way for District treated water lines shall include all applicable aqueduct protections required for similar third-party utility water line crossings.

For all raw water aqueducts and pipelines, acceptable long-term uses of the rights-of-way include but are not limited to: utility crossings, road crossings, limited agriculture, equestrian and pedestrian trails, parks, oil and gas leases, and District-owned ground water wells. Acceptable, long-term uses of rights-of-way and easements for future raw water aqueducts will be evaluated upon facility completion. Such uses will be authorized by letter, limited land use permits, revocable licenses, leases or easements, as appropriate. All approved uses will conform to the requirements and limitations described in Requirements for Entry or Use of Mokelumne, Lafayette, and Moraga Aqueducts and Raw Water Pipeline Rights-of-Way (Requirements for Entry or Use) (Supplement No.1 to Procedure 718) and all other conditions as specified in the written approval, permit or easement for each individual use.

The Water Supply Division is responsible for monitoring permitted uses and detecting and preventing unauthorized uses of raw water aqueduct rights-of- way. The Office of General Counsel and the Manager of Real Estate Services will be consulted when an unauthorized user will not voluntarily desist.

The Water Supply Division is responsible for coordinating the development of recommendations with respect to the terms and conditions to be stipulated when a District or non-District use of a raw water aqueduct right-of-way is to be permitted.

The Director of Engineering and Construction shall be consulted when needed to supply location analysis or to determine what structural, grading, drainage, corrosion protection or other engineering measures are required and to obtain estimates of engineering, design and inspection costs.

Inquiries and Applications for Use

For all raw water aqueducts and pipelines, applications and inquiries for use of raw water aqueduct rights-of-way shall be processed by the Water Supply Division. Applications for non-District uses will not be processed unless accompanied by the appropriate application fees outlined in Supplement No. 2 to Procedure 718, Fees and Documentation Charges, Use of Aqueduct Rights-of-Way by Others.

The Water Supply Division is responsible for:

- Providing requirements for use of the District's raw water aqueduct rights-of-way to applicants and to other District departments requesting use of the right-of-way. See Supplement No. 1, Requirements for Entry or Use.
- Checking for completeness to ensure compliance with the requirements for entry or use of raw water aqueduct rights-of-way contained in Requirements for Entry or Use plus any other conditions applicable to the proposed use.
- Collecting engineering, plan review and construction inspection costs and documentation of insurance coverage, if necessary.
- Monitoring existing encroachments and inspection of the construction of new approved encroachments.
- Providing information to the Engineering and Construction Department for technical input regarding additional permit requirements or special restrictions that may be applicable (in addition to those outlined in Supplement No. 1, attached) and for update of District raw water aqueduct right-of-way drawings.
- Collecting application fees and charges associated with the preparation and execution of revocable licenses.
- Assuring proper environmental documentation.

Real Estate Services is responsible for:

- Advising the Manager of Water Supply Division of any real estate matters which relate to a specific proposed use.
- Collecting application fees and charges, preparing and executing limited land use permits, leases, easements, and all other property-related agreements (except for revocable licenses and temporary entry permits) and recommending fees and charges appropriate to the property use allowed, and for securing payment. See Supplement No. 2, Fees and Documentation Charges, Use of Aqueduct Rights-of-Way by Others.
- Maintaining records relating to rights-of-way crossings and use, and providing information to the Survey Section and Engineering Services Division for the update of District raw water aqueduct right-of-way drawings.

Types of Permit License or Easement

The Manager of Water Supply Division shall keep available the forms listing the general requirements set forth in Requirements for Entry or Use for each of the following:

Temporary Entry/Temporary Construction Permit

For temporary access to raw water aqueduct right-of-way such as for surveying, potholing, construction, for temporary access via the District's right-of-way to property adjacent to the right-of-way, and other similar short-term situations.

Revocable License and Revocable Landscape License

For pipelines, sewers, storm drains, overhead and underground cables, public trails, landscaping and other crossings or lateral encroachments.

Limited Land Use Permit

Provides for agricultural or other surface use of the right-of-way for a period not to exceed one year (vehicular parking is prohibited). These permits are renewable annually if inspection reveals satisfactory conformance to conditions of permit.

Easement

For streets, highways, large pipelines, canals and railroads, and other permanent publicly owned encroachments. Easements are officially recorded with the county having jurisdiction. The fee or consideration will be significant and based on the value of the property being encumbered.

The Manager of Water Supply Division shall request review of any proposed revisions to application forms and lists of requirements from the Engineering and Construction Department, Real Estate Services Division, Office of General Counsel, and the District's Pipe Committee.

Processing Applications

Temporary Entry Permits

The Manager of Water Supply Division may issue temporary entry permits including standard and temporary conditions relating to the use. The Manager of Real Estate Services and the Office of General Counsel will be consulted regarding unusual circumstances.

Revocable Licenses

The Water Supply Division, if warranted, shall conduct a field investigation to determine requirements for aqueduct protection and, in consultation with the Design Division or the Pipeline Infrastructure Division, will set forth the engineering and operating requirements.

The Manager of Water Supply Division shall then specify any and all requirements, including special conditions to the applicant, discuss the terms and conditions of the license agreement as well as any processing, design and inspection costs and license fee. The Manager of Water Supply Division may then enter into a standard license agreement with relevant special conditions on behalf of the District. The Manager of Real Estate Services and the Office of General Counsel shall be consulted regarding any unusual circumstances.

Copies of all revocable licenses issued by the Water Supply Division shall be provided to the Manager of Real Estate Services.

Limited Land Use Permits

The Manager of Water Supply Division shall convey the District's requirements to the applicant and investigate to determine any special conditions.

Real Estate Services shall prepare the Limited Land Use Permit (Form L-14) in duplicate, including special conditions or stipulations, accompanied by a District-prepared location sketch that will refer to aqueduct stationing and other appropriate location identifiers, including adjacent aqueduct structures.

Engineering and Construction shall prepare the District-prepared location sketch.

After payment of the stipulated consideration determined by Real Estate Services, the Manager of Water Supply Division shall review and execute the permit. These copies are then returned to the Manager of Real Estate Services, together with any stipulated consideration.

Forty-five days before expiration of a Limited Land Use Permit, the Manager of Real Estate Services shall notify the Manager of Water Supply Division, who shall investigate the permittee's operations. If renewal of the permit is recommended, the permit will be renewed by letter from the Manager of Real Estate Services.

Leases and Easements

The Manager of Water Supply Division shall conduct a field investigation to determine requirements for aqueduct protection and, in consultation with the Design Division or Pipeline Infrastructure Division, if necessary, will set forth the engineering and operating requirements.

If structural or corrosion protective facilities are required, the Manager of Water Supply Division shall request the Manager of Design Division or Pipeline Infrastructure Division to proceed with the required design or plan reviews. (During design, the designer will communicate with the applicant's engineer.) Upon completion of design, the plans will be delivered to the applicant via the Manager of Water Supply Division, who will arrange for inspection as required.

The Manager of Real Estate Services shall discuss with the applicant the terms of the agreement and the amount of the consideration, including any processing, design, and inspection costs. Real Estate Services shall obtain an appraisal and engineering estimates, if necessary.

Upon agreement with the applicant, the Manager of Real Estate Services, shall draft, for review and approval by the Water Supply Division and Office of General Counsel, an agreement granting the applicant the property interest under the terms and for the consideration as approved. Real Estate Services shall assure that evidence of insurance is provided, if required. The lease or easement shall be submitted to the District's Board of Directors for approval, if required by Procedure 108. Two copies of the lease or easement shall be sent to the applicant with instructions to sign and return the copies, together with the consideration, to the Manager of Real Estate Services. Easements shall be recorded and the applicant shall provide the Manager of Real Estate Services with the recording data.

Approvals

District uses of the raw water aqueduct right-of-way shall be confirmed in writing listing any special conditions which may apply to the proposed use to the requesting District departments by the Manager of Water Supply Division.

Terminations

If the Water Supply Division terminates any permit or license, the Manager of Real Estate Services and the Design Division shall be so notified by memo.

Appeals

The final determination of the terms and conditions appropriate for District uses of aqueduct properties rests with the Director of Operations and Maintenance.

The final determination of the terms and conditions appropriate for a specific third party applicant rests with the General Manager and the Board of Directors. Appeals by third parties directed to the Board of Directors shall be forwarded to the General Manager for resolution.

Records

The Manager of Real Estate Services shall maintain a file containing copies of all documents relating to right-of-way crossings or uses and is responsible for the assignment of right-of-way crossing numbers to approved documents.

The Engineering Services Division of the Engineering and Construction Department shall maintain working sets of right-of-way prints for each District raw water aqueduct right-of-way. These prints shall be updated following:

1. Grant of Revocable License or Easement. Notice to be supplied by the Manager of Real Estate Services.

2. Completion of crossing construction covered by license or easement. Notice, including "as built" location data, to be supplied by the applicant to the Water Supply Division for transmittal to the Engineering and Construction Department. This notice will be routed through the Engineering and Construction Department., as necessary, then to the Manager of Real Estate Services. After right-of-way tracings are revised, new prints will be released to those having sets.

3. Termination of any raw water aqueduct right-of-way use. Notice to be supplied by the Manager of Real Estate Services.

Revised prints shall be released following all right-of-way drawing revisions.

Requirements and Fees

Requirements for use of raw water aqueduct right-of-way and fees for the processing of applications and documents related to such uses are included in the documents Requirements for Entry or Use and Fees and Documentation Charges, Use of Aqueduct Rights-of-Way by Others, respectively (see Supplement No. 2, attached). The Manager of Water Supply Division is responsible for periodic review and updating of Requirements for Entry or Use. The Manager of Real Estate Services is responsible for review and updating of Fees and Documentation Charges, Use of Aqueduct Rights-of-Way by Others.

References

Policy 7.01 – Aqueduct Rights-of-Way Maintenance
Procedure 108 – Real Estate Transactions
Procedure 436 – Cash Receipts

Requirements for Entry or Use of Mokelumne, Lafayette, and Moraga Aqueduct and Raw Water Pipeline Rights-of-Way (attached)
Fees and Documentation Charges Use of Aqueduct Rights-Of- Way by Others (attached)
Schedule of Rates and Charges to Customers of the East Bay Municipal Utility District – Real Property Use Application Fees – Resolution 33046-97

REQUIREMENTS FOR ENTRY OR USE OF MOKELUMNE, LAFAYETTE, AND MORAGA AQUEDUCTS and RAW WATER PIPELINE RIGHTS-OF-WAY

SUPPLEMENT NO. 1 TO PROCEDURE 718

East Bay Municipal Utility District
P. O. Box 228, Stockton, CA 95201
(209) 946-8000

1. Requests for encroachment rights or for other uses of the District's raw water aqueduct and pipeline properties shall be directed to the Manager of Water Supply Division, P.O. Box 228, Stockton, California 95201. Property uses shall only be permitted subject to appropriate written permit, license, easement, or lease agreement.

2. Requests for property uses shall be in writing and accompanied by a completed application, plan and profile drawings of the area and work involved. District aqueduct stationing and adjacent above-ground structures must be shown. Applicant's horizontal and vertical control must be correlated to the District's. Drawings and maps shall be full size (11x17inch) or half-size (8½ x 11 inch). Application must include complete insurance documentation.

3. The applicant must agree to indemnify and hold harmless the District from any loss, claim, or liability which may arise by reason of applicant's use of District property and may be required to provide insurance coverage.

4. All requests for uses of District property must be consistent with requirements and limitations set forth by Procedure 718 and will be reviewed and approved on a case-by-case basis.

5. District land and facilities shall be restored to a condition as good as that which existed before applicant's entry on the right-of-way.

6. Applicant's use of property shall not increase District costs or interfere with District access, operations, maintenance, or repair of its facilities.

7. The applicant must pay the District the appraised value of the easement or lease, if appropriate, for the rights granted to the applicant. Appropriate environmental documentation must be completed in accordance with the California Environmental Quality Act before the rights can be granted.

8. For any District-approved encroachment, the applicant must pay the District for any of the following measures, as needed:

    a. Design of structural protective measures
    b. Design of fences or other structures
    c. Corrosion control protective measures
    d. District engineering, plan review, and inspection of activities
    e. Environmental documentation
    f. Application, permit or license fees.

9. The plan for the execution of the work must be approved by the District.

10. The type and weight of equipment working over the aqueduct must be approved by the District.

11. The use of vibratory compaction equipment is prohibited on the aqueduct right-of-way unless otherwise approved by EBMUD. Allowable compaction effort, allowable equipment, and maximum depth of each lift of fill shall be subject to District review and approval before start of construction.

12. A minimum of 48 hours notice must be given to the District before work commences. To contact the District by telephone, call: the Aqueduct Section's Stockton Office at (209) 946-8000.

13. A preconstruction meeting is required prior to start of work.

14. No building or portions of buildings shall be constructed on the property. No other types of structures shall be constructed unless specific approval is given by the District.

15. No longitudinal encroachments such as drainage ditches; gas, phone, or electrical lines; pipelines, or roads will be permitted. All property line fences (including footings) must be located completely outside the aqueduct property lines.

16. No pile driving will be allowed within 100 feet of the aqueducts.

17. Railroad, freeway and highway crossings of the aqueduct right-of-way shall be on permanent bridges with a minimum vertical clearance of 14 feet 6 inches between the finished ground surface and the underside of the bridge. Crossings on grade will be over structurally-encased aqueducts with a sleeve for a fourth aqueduct.

18. Street and road crossings constructed on grade shall incorporate protection of the aqueducts. Protective measures will be designed by the District or by applicant's licensed engineer to District standards with specific District approval of each design.

19. Existing aqueduct protective measures such as concrete slabs shall not be cut, penetrated, or otherwise disturbed. If a protective measure is cut, penetrated, or disturbed, it shall be replaced with a new protective measure, designed by a District engineer or applicant's licensed engineer to District standards with specific District approval of design.

20. Traffic control fences or approved barriers shall be installed along each side of the street, road or trail before opening to the public.

21. Temporary construction fences and barricades shall be installed by contractor as directed by the District.

22. No geotechnical exploration such as drilling or boring shall be allowed on an Aqueduct right-of-way.

23. Any changes in finished grade must be approved by the Aqueduct Section. Earthfills or cuts on adjacent property shall not encroach onto District property except where authorized for vehicular crossings on grade and where the District determines that there will be no detrimental effect on the aqueducts or their maintenance.

24. Crossings shall be at an angle not less than 45 degrees to the aqueducts and on a constant grade across District property.

25. Sanitary sewers, water lines or petroleum product lines crossing above the aqueducts must be encased in a steel or polyvinyl chloride (PVC), or reinforced concrete pipe conduit or be imbedded in reinforced concrete with a minimum vertical clearance of two (2) feet between the casing/embedment and the top of District aqueducts unless other protective measures are provided.

26. All pipelines crossing below the aqueducts must be encased in a steel or reinforced concrete conduit and provide a minimum of three (3) feet of clearance between the casing and the bottom of the District aqueducts.

27. Trenchless construction methods such as horizontal directional drilling or jack-and-bore between the top of the aqueducts and the bottom of the protective structure (slab) are prohibited.

28. On pressurized pipe crossings, shutoff valves shall be provided outside and adjacent to both sides of District property.

29. At the point of crossing, steel pipeline crossings and steel casings shall incorporate electrolysis test leads, bond leads, and leads necessary for interference testing. Corrosion control devices, when required, must be approved by the District.

30. Cathodic protection for steel encasements must be installed as follows:

- Provide a dielectric coating to the exterior surface of the steel casing within the District's right-of-way, 16 mil epoxy or equivalent.
- Provide galvanic protection to the portion of the steel casing within the District's right-of-way in accordance with the National Association of Corrosion Engineers RP-01-69.
- If the carrier pipe is constructed of ductile iron or steel, provide electrical isolation between the carrier and casing using casing insulators; redwood skids are not permitted.
- Provide test results to the District demonstrating the adequacy of the cathodic protection system, and the adequacy of the electrical isolation of the carrier (if metallic) from the casing. The District reserves the right to witness any such tests.

31. Gravity drainage of District property shall be maintained. Open channels constructed across the right-of-way shall be paved with reinforced concrete. Headwalls, inlets, and other appurtenances shall be located outside District property. Drainage facilities shall be provided outside the District's property at the top and/or toe of fill slopes or cuts constructed adjacent to District property to assure adequate drainage.

32. Overhead electrical power conductors across the property shall be a minimum of 30 feet above ground. Communication and cable TV crossings shall be a minimum of 20 feet above the ground. Supporting poles or towers shall be located outside the aqueduct right-of-way.

33. Buried electrical cables passing over the aqueducts shall be installed in PVC conduit and encased in red concrete across the entire width of the right-of-way. In some cases, PVC-coated steel conduit with a red concrete cap may be substituted. All other buried cables shall be installed in conduits and marked in the appropriate Underground Service Alert (USA) colored marking materials and with surface signs installed at 4-foot intervals that include the utility name, type, and emergency contact information across the entire width of the aqueduct right-of-way. The minimum vertical clearance between the conduit and the top of the District's aqueducts is two (2) feet unless other protective measures are provided.

34. Electrical or telecommunications cables passing under the aqueducts shall be encased in conduit and marked at both edges of the aqueduct right-of-way with the appropriate USA color coded markers. The minimum vertical clearance between the conduit and the bottom of the District's aqueducts is two feet. For directional bored conduits the minimum vertical clearance is five feet.

35. Vehicular parking and storage of equipment or material on aqueduct property are specifically prohibited.

36. Extraction of oil and gas from aqueduct properties may be permitted under appropriate lease agreements.

37. All District survey monuments and markers shall be undisturbed. If any District survey markers or monuments must be disturbed, they will be replaced or relocated by the District at applicant's expense prior to the start of any ground disturbing work.

38. All aqueduct crossings involving mechanical excavation on the right-of-way require potholing of all three aqueducts at the site of the proposed crossing. Visible reference markings showing the aqueduct alignments and depths to top of pipe shall be maintained for the duration of any mechanical excavation on District property. Excavations within two (2) feet of aqueducts shall be made by hand. Entry permits are required for pothole work.

39. All grading or excavating of the right-of-way requires USA notification and the maintenance of a current inquiry identification number.

40. Certified six-sack mix is the minimum acceptable concrete batch to be used on the aqueduct right-of-way. Concrete compression strength shall be 3,000 per square inch (PSI) or better at 28 days. If samples do not reach 3,000 PSI at 28 days, the entire section of slab or encasement related to that sample must be removed and replaced at applicant's expense.

41. Each truckload of concrete to be placed on the aqueduct right-of-way may be sampled by the District. No water may be added to the mix after sampling.

42. Maximum allowable slump is three inches. All concrete exceeding three inches will be rejected and cannot be used on the aqueduct right-of-way.

43. No traffic will be allowed over protective slabs until 3,000 PSI is reached.

44. All work areas shall be inspected by the District for final approval. As-built drawing submittals are required for District approval.

EBMUD

FEES AND DOCUMENTATION CHARGES
USE OF AQUEDUCT RIGHTS-OF-WAY BY OTHERS

SUPPLEMENT NO. 2 TO PROCEDURE 718

TYPE OF DOCUMENT	APPLICATION FEE
Fee Title (Outright purchase of District property)	$2,000
Easement (Rights for permanent use of District property such as access, utilities, etc.)	$1,000
Quitclaim (Removal of District's right, title, and interest to property)	$1,000
Revocable License (Permission to use District property for periods exceeding one year. Subject to revocation)	$500

Revocable License and Application Fees:

Applicant	Application	Property Rights	Total
Government Agencies	May be Waived	$1,000	$1,000
Public Utilities	May be Waived	$1,000	$1,000
Privately Owned Public Utilities (AT&T, PG&E, etc.)	$500	$1,000	$1,500
Developers & other profit-seeking activities	$500	$1,000	$1,500
Private, nonprofit organizations	$500	$1,000	$1,500

Lease (The right to occupy and use District land for a specified time period)	$600
Telecommunication Lease (The right to occupy and use District land for a specified time period)	$2,000
Information Only (Request for information requiring research of District records)	$60/hr
Processing and Review of Watershed Land Use Proposals (Request for District to perform a formal evaluation of watershed land use proposal)	$60/hr ***(Plus all other District costs)***
Property Entry Permits, Rights of Entry, Temporary Construction Permits (Permission for temporary access onto District property)	$100
Limited Land Use Permit (Allows landscaping, gardening, or other minor surface use of District property; subject to annual renewal)	$25

1. In addition to the above charges, applicants will be required to reimburse the District for its costs of engineering, surveying, and inspection of the proposed use of encroachment.

2. Fair market value for property rights conveyed shall also be paid by the applicant, where appropriate including all costs (appraisal, recordation, title report, etc.).

REQUIREMENTS FOR ENTRY OR USE OF MOKELUMNE, LAFAYETTE & MORAGA AQUEDUCT RIGHTS-OF-WAY

SUPPLEMENT NO. 1 TO PROCEDURE 718

East Bay Municipal Utility District
P. O. Box 228, Stockton, CA 95201
(209) 946-8000

Requests for encroachment rights or for other uses of the District's aqueduct properties shall be directed to the Manager of Water Supply Division, P.O. Box 228, Stockton, California 95201. Property uses shall only be permitted subject to appropriate written permit, license, easement, or lease agreement.

2. Requests for property uses shall be in writing and accompanied by a completed application, plan and profile drawings, in triplicate, of the area and work involved. District aqueduct stationing and adjacent above ground structures must be shown. Applicant's horizontal and vertical control must be correlated to the District's.

3. The applicant must agree to indemnify and hold harmless the District from any loss, claim, or liability which may arise by reason of applicant's use of District property and may be required to provide insurance coverage.

4. District land and facilities shall be restored to a condition as good as that which existed before applicant's entry on the right-of-way.

5. Applicant's use of property shall not increase District costs or interfere with District access, operations, maintenance, or repair of its facilities.

6. The applicant must pay the District the appraised value of the easement or lease, if appropriate, for the rights granted to him. Appropriate environmental documentation must be completed in accordance with the California Environmental Quality Act before the rights can be granted.

7. The applicant must pay the District for:

    a. Design of fences or other structures
    b. Structural protective measures
    c. Corrosion control protective measures
    d. District engineering, plan review, and inspection of activities
    e. Environmental documentation
    f. Application, permit or license fees.

8. The plan for the execution of the work must be approved by the District.

9. The type and weight of equipment working over the aqueduct must be approved by the District. The use of vibratory compaction equipment is prohibited on the aqueduct right-of-way.

10. A minimum of 48 hours notice must be given to the District before work commences. To contact the District by telephone, call: The Aqueduct Section Stockton Office at (209) 946-8000.

11. A preconstruction meeting is required prior to start of work.

12. No building or portions of buildings shall be constructed on the property. No other types of structures shall be constructed unless specific approval is given by the District.

13. No longitudinal encroachments such as drainage ditches; gas, phone, or electrical lines; pipelines, or roads will be permitted. All property line fences must be located completely outside the aqueduct property lines.

14. No pile driving will be allowed within 50 feet of the aqueducts.

15. Railroad, freeway and highway crossings of the aqueduct right-of-way shall be on permanent bridges with a minimum vertical clearance of 14 feet 6 inches between the finished ground surface and the underside of the bridge. Crossings on grade will be over structurally-encased aqueducts with a sleeve for a fourth aqueduct.

16. Street and road crossings constructed on grade shall incorporate protection of the aqueducts. Based on the load carrying capability of the aqueduct, protective measures will be designed by the District or by applicant's licensed engineer to District standards with specific District approval of each design.

17. Traffic control fences or approved barriers shall be installed along each side of the street, road or trail before opening to the public.

18. Temporary construction fences and barricades shall be installed by contractor as directed by the District.

19. Any changes in finished grade must be approved by the Aqueduct section. Earthfills or cuts on adjacent property shall not encroach onto District property except where authorized for vehicular crossings on grade and except where the District determines that there will be no detrimental effect on the aqueducts or their maintenance.

20. Pipeline crossings shall be perpendicular to the aqueducts and on a constant grade across District property. Sanitary sewers, water lines or petroleum product lines crossing above the aqueducts must be encased in a steel or PVC conduit or reinforced concrete with a minimum vertical clearance of one foot between the pipeline and the top of District aqueducts.

21. All pipelines crossing below the aqueducts must be encased in a steel or reinforced concrete conduit and provide a minimum of two feet of clearance between the casing and the bottom of the District aqueducts.

22. On pressurized pipe crossings, shutoff valves shall be provided outside and adjacent to both sides of District property.

23. At the point of crossing, steel pipeline crossings and steel casings shall incorporate electrolysis test leads, bond leads, and leads necessary for interference testing. Corrosion control devices, when required, must be approved by the District.

24. Cathodic protection for steel encasements must be installed as follows:

    Provide a dielectric coating to the exterior surface of the steel casing within the EBMUD right-of-way, 16 mil epoxy or equivalent.

    Provide galvanic protection to the portion of the steel casing within the EBMUD right-of-way in accordance with the National Association of Corrosion Engineers (NACE) RP-01-69.

    If the carrier pipe is constructed of DIP or steel, provide electrical isolation between the carrier and casing using casing insulators; redwood skids are not permitted.

Provide test results to EBMUD demonstrating the adequacy of the cathodic protection system, and the adequacy of the electrical isolation of the carrier (if metallic) from the casing. EBMUD reserves the right to witness any such tests.

25. Gravity drainage of District property shall be maintained. Open channels constructed across the right-of-way shall be paved with reinforced concrete. Headwalls, inlets, and other appurtenances shall be located outside EBMUD property. Drainage facilities shall be provided outside the District's property at the top and/or toe of fill slopes or cuts constructed adjacent to District property to assure adequate drainage.

26. Overhead electrical power conductors across the property shall be a minimum of 30 feet above ground. Communication and cable TV crossings shall be a minimum of 20 feet above the ground. Supporting poles or towers shall be located outside the aqueduct right-of-way.

27. Buried electrical cables passing over the aqueducts shall be installed in conduit and encased in red concrete across the entire width of the right-of-way. All other buried cables shall be installed in conduit and marked in the appropriate Underground Service Alert (USA) colored marking materials across the entire width of the aqueduct right-of-way. The minimum vertical clearance between the conduit and the top of the District's aqueducts is one foot.

28. Electrical or telecommunications cables passing under the aqueducts shall be encased in conduit and marked at both edges of the aqueduct right-of-way with the appropriate USA color coded markers. The minimum vertical clearance between the conduit and the bottom of the District's aqueducts is two feet. For directional bored conduits the minimum vertical clearance is five feet.

29. Vehicular parking and storage of equipment or material on aqueduct property are specifically prohibited.

30. Extraction of oil and gas from aqueduct properties may be permitted under appropriate lease agreements.

31. All EBMUD survey monuments and markers shall be undisturbed. If any EBMUD survey markers or monuments must be disturbed, they will be replaced or relocated by EBMUD at applicant's expense prior to the start of any ground disturbing work.

32. All aqueduct crossings involving mechanical excavation on the right-of-way require potholing of all three aqueducts at the site of the proposed crossing. Visible reference markings showing the aqueduct alignments and depths to top of pipe shall be maintained for the duration of any mechanical excavation on EBMUD property. Entry permits are required for pothole work.

33. All grading or excavating of the right-of-way requires Underground Service Alert (USA) notification and the maintenance of a current inquiry identification number.

34. Certified six-sack mix is the minimum acceptable concrete batch to be used on the aqueduct right-of-way. Concrete compression strength shall be 3000 PSI or better at 28 days. If samples do not reach 3000 PSI at 28 days, entire section of slab or encasement related to that sample must be removed and replaced at applicant's expense.

35. Each truckload of concrete to be placed on the aqueduct right-of-way may be sampled by the District. No water may be added to the mix after sampling.

36. Maximum allowable slump is three inches. All concrete exceeding three inches will be rejected and cannot be used on the aqueduct right-of-way.

37. No traffic will be allowed over protective slabs until 3000 PSI is reached.

38. All work areas shall be inspected by EBMUD for final approval.