



SCH# 2013022012

FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT

2014

REGIONAL TRANSPORTATION PLAN & SUSTAINABLE COMMUNITIES STRATEGY

FOR SAN JOAQUIN COUNTY



2014-2040

**2014 Regional Transportation Plan/Sustainable
Communities Strategy for San Joaquin County**

Final

Program Environmental Impact Report

SCH No. 2013022012

Prepared for:

San Joaquin Council of Governments

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1.0 INTRODUCTION

This document is the Final Program Environmental Impact Report (Program EIR or EIR) for the 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Plan). This document together with the Draft Program EIR and its technical appendices comprise the Final Program EIR. The document has been prepared by the San Joaquin Council of Governments (SJCOG) in accordance with the California Environmental Quality Act (CEQA).

A Final EIR is required under Section 15132 of the *State CEQA Guidelines* to include the Draft Program EIR, comments and recommendations received on the Draft Program EIR, the responses of the lead agency to significant environmental issues raised by those comments in the review and consultation process, and any other relevant information added by the lead agency (including minor changes to the Program EIR). A Mitigation Monitoring and Reporting Program is also required.

The evaluation and response to comments is an important part of the CEQA process as it allows the following (1) the opportunity to review and comment on the methods of analysis contained within the Draft Program EIR, (2) the ability to detect any omissions which may have occurred during preparation of the Draft Program EIR, (3) the ability to check for accuracy of the analysis contained within the Draft Program EIR, (4) the ability to share expertise; (5) the ability to discover public concerns.

Furthermore, this document also provides revisions to the Draft Program EIR made in response to comments, staff review, and/or changes to the proposed projects. These revisions also correct, clarify, and amplify the text in the Draft EIR, as appropriate, and do not alter the conclusions of the Draft Program EIR.

PROCESS

As defined in Section 15050 of the *State CEQA Guidelines* SJCOG is the lead agency which prepared both the Draft and Final Program EIR for the project, the 2014 RTP/SCS.

SJCOG prepared and circulated the Draft Program EIR beginning on March 10, 2014 and ending on April 23, 2014. SJCOG placed the Draft Program EIR at the office of SJCOG and at local libraries in the County, and posted an electronic copy of the Draft Program EIR on the SJCOG website. A public hearing on the Draft Program EIR was held on April 10, 2014 at the City of Ripon Public Library. Additionally, a Notice of Availability of the Draft Program EIR was transmitted to responsible and trustee agencies, regulatory agencies and other to request comments on the Draft Program EIR, pursuant to *State CEQA*

Guidelines Section 15086. Comments on the Draft Program EIR were received during the comment period, and those comments are responded to in this Final Program EIR. The Final Program EIR, together with the proposed project, will be submitted to SJCOG Board for review, and the Board will consider certification of the Final Program EIR and approval of the RTP/SCS.

CONTENT OF THE FINAL PROGRAM EIR

As discussed above, the primary intent of the Final Program EIR is to provide a forum to air and address comments pertaining to the analysis contained within the Draft Program EIR. Pursuant to Section 15088 of the *State CEQA Guidelines*, SJCOG has reviewed and addressed all comments received on the Draft Program EIR by the comment period deadline. Included within the Final Program EIR are the written comments that were submitted during the required public comment period. No oral comments were received.

In order to adequately address the comments provided by interested agencies and the public in an organized manner, this Final Program EIR includes the Draft Program EIR and the following sections and appendices:

Section 1.0: Introduction. This chapter provides a brief introduction to the Final Program EIR and its contents.

Section 2.0: Corrections and Additions. This chapter provides a list of corrections and additions to the Draft Program EIR. None of the changes significantly impact the conclusions presented in the Draft Program EIR.

Section 3.0: Responses to Comments. This chapter provides a list of commenting agencies, organizations, and individual. Responses to comments made by both the public agencies and interested parties are also included in this chapter. Some of the comment letters received on the Draft Program EIR also provide comments on the Plan (not the anticipated environmental impacts). These Plan-related comments are addressed separately as part of the RTP/SCS process.

Section 4.0: Mitigation Monitoring and Reporting Program. This chapter includes the Mitigation Monitoring and Reporting Program (MMRP) prepared in compliance with the requirements of Section 21081.6 of the California Public Resources Code and Section 15091(d) and 15097 of the *State CEQA Guidelines*.

REVIEW AND CERTIFICATION OF THE FINAL PROGRAM EIR

Consistent with CEQA (Public Resource Code Section 21092.5), responses to agency comments are being forwarded to each commenting agency 10 days prior to certification of the Final Program EIR. In addition, responses are also being distributed to all commenters who provided an address. The Final Program EIR is available for public review at libraries throughout the County. Additionally, the Final Program EIR can be downloaded at www.sjcog.org.

2.0 CORRECTIONS AND ADDITIONS

OVERVIEW

The *California Environmental Quality Act (CEQA) Guidelines* Section 15088.5 requires:

- (a) *A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice of its availability ... "significant new information" requiring recirculation includes, for example, a disclosure showing that:*
 - (1) *A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.*
 - (2) *A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.*
 - (3) *A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.*
 - (4) *The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.*
- (b) *Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in the adequate EIR.*
- (c) *If the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified.*
- (d) *Recirculation of an EIR requires notice pursuant to Section 15087, and consultation pursuant to Section 15086.*
- (e) *A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.*

New information is "significant" if as a result of the additional information "the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect." *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* 864 P.2d 502, 510 (1993) (*Laurel Heights II*). *State CEQA Guidelines* Section 15088.5(a). Recirculation is not mandated when the new information merely clarifies, amplifies, or makes and insignificant modification to an adequate draft EIR. (*Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova*, 150 P.3d 709 (2007) (quoting *Laurel Heights II*, 864 P.2d at 510); see also *Marin Mun. Water Dist. v. KG Land California Corp.*, 235 Cal.App.3d 1652, 1667 (1991) (citing *Sutter Sensible Planning v. Board of Supervisors* 122 Cal.App.3d 813 (1981)).

All of the public comments to the Draft Program EIR, as well as these Corrections and Additions to the Draft Program EIR have been carefully reviewed to determine whether recirculation of the Draft Program EIR is required. All of the new information in these Corrections and Additions to the Draft Program EIR and in the comments and in the responses to comments merely clarify or amplify or make insignificant modifications to an adequate Draft PEIR. Therefore, the Draft PEIR need not be recirculated prior to certification.

CORRECTIONS AND ADDITIONS

Changes to the Draft EIR are identified below by the corresponding Draft EIR section and subsection, if applicable, and the page number. Additions are in underline and deletions are shown in ~~striketrough~~ format.

Executive Summary

In Mitigation Measures CR-1 and CR-3, references to the Southern San Joaquin Valley Information Center (California State University Bakersfield) has been revised with references to the Central California Information Center (California State University Stanislaus).

Mitigation Measure CR-1 is revised as follows:

CR-1:	Implementing and local agencies should require historical resource studies and to identify and implement project-specific mitigation. As part of planning, design, and engineering for projects, implementing and local agencies should ensure that historic resources are treated in accordance with applicable federal, state, and local laws and regulations. When a project has been identified as potentially affecting a historical resource, a historical resources inventory should be conducted by a qualified architectural historian <u>that meets the Secretary of the Interior's Professional Qualifications Standards</u> .
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Mitigation Measure CR-3 is revised as follows:

CR-3:	Implementing and local agencies should require consultation, surveys, and monitoring for archaeological resources During environmental review of projects, implementing and local agencies should: <ul style="list-style-type: none">• Consult with the Native American Heritage Commission to determine whether
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known sacred sites are in the project area, and identify the Native American(s) to contact to obtain information about the project area.

- Contact the Native American organizations and/or individuals on the list provided by the Native American Heritage Commission and conduct follow-up phone calls as recommended in the Native American Heritage Commission response.
- Conduct a records search at the ~~Southern San Joaquin Valley Information Center (California State University, Bakersfield)~~ Central California Information Center (California State University Stanislaus) to determine whether the project area has been previously surveyed and whether resources were identified.

In the event the records indicate that no previous survey has been conducted, the ~~Southern San Joaquin Valley Information Center (California State University, Bakersfield)~~ Central California Information Center (California State University Stanislaus) will make a recommendation on whether a survey is warranted based on the archaeological sensitivity of the project area. If recommended, a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards should be retained to conduct archaeological surveys. The significance of any resources that are determined to be in the project area should be assessed according to the applicable local, state, and federal significance criteria. Implementing and local agencies should devise treatment measures to ameliorate "substantial adverse changes" to significant archaeological resources, in consultation with qualified archaeologists and other concerned parties. Such treatment measures may include avoidance through project redesign, data recovery excavation, and public interpretation of the resource.

Implementing and local agencies and the contractors performing the improvements should adhere to the following requirements:

- If significant or sensitive cultural resources have been determined to be present with the project limits, a project is located in an area rich with cultural materials, implementing and local agencies should retain a qualified archaeologist to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property.
- If, during the course of construction cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered work should be halted immediately within 50 meters (165 feet) of the discovery, implementing and local agencies should be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology should be retained to determine the significance of the discovery.
- Implementing and local agencies should consider mitigation recommendations

presented by a ~~professional~~ qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology for any unanticipated discoveries and should carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures (State CEQA Guidelines Section 15064.5(f)). The project proponent should be required to implement any mitigation necessary for the protection of cultural resources.

Mitigation Measure CR-4 is revised as follows:

CR-4: Implementing and local agencies should identify, survey, and evaluate paleontological resources to avoid potential impacts.

During environmental review implementing and local agencies should retain a qualified paleontologist to identify, survey, and evaluate paleontological resources where potential impacts are considered high. All construction activities should avoid known paleontological resources, if feasible, especially if the resources in a particular lithologic unit formation have been determined to be unique or likely to contain unique or significant paleontological resources. If avoidance is not feasible, paleontological resources should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.

Page 2.0-33 is revised as follows:

Impact CR-4: Disturb any human remains, including those interred outside formal cemeteries. (Health and Safety Code 7050.5)

Page 2.0-33 is revised as follows:

Implement **Mitigation Measure ~~CR-2~~ and ~~CR-4~~ CR-3**.

With implementation of **Mitigation Measure ~~CR-2~~, ~~CR-4~~ CR-3** and **CR-5** impacts would be less than significant.

CR-5: Implementing and local agencies should implement Stop-Work and Consultation Procedures Mandated by Public Resources Code 5097.98 and State CEQA Guidelines Section 15064.5(e).

In the event of discovery or recognition of any human remains during construction or excavation activities implementing and local agencies should cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the following steps are taken:

- The San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required.
- If the coroner determines the remains are of Native American origin, either of the following steps will be taken:
 1. ~~The coroner shall contact the Native American Heritage Commission within 24 hours, in order to ascertain the proper descendants from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.~~
 2. ~~The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American. Implementing or local agencies or authorized representatives should retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:~~
 3. ~~The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code 5097.98, or The Native American Heritage Commission is unable to identify a descendent.~~

Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

- (A) The Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
- (B) The descendant identified fails to make a recommendation, or
- (C) The landowner or his authorized representative rejects the recommendation of

the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

- ~~The descendant identified fails to make a recommendation.~~
- ~~The implementing agency or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.~~

4.2 Agricultural Resources

The following mitigation measure has been added to page 4.2-26 and the Executive Summary:

AG-5: Projects located within the Delta Plan area should apply appropriate mitigation in accordance with the Delta Plan. Examples of applicable mitigation measures could include:

- Design proposed project to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land. For project that will result in permanent conversion of farmland, preserve in perpetuity other farmland through acquisition of an agricultural conservation easement, or contributing funds to a land trust or other entity qualified to preserve farmland in perpetuity (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the farmland to be converted, to compensate for permanent loss).
- Redesign project features to minimize fragmenting or isolating farmland. Where a project involves acquiring land or easements, ensure that the remaining non-project area is of a size sufficient to allow viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.
- Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.
- Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land.

Mitigation Measure AG-5 and Mitigation Measure AG-6 in the Draft EIR and Executive Summary are renumbered as Mitigation Measure AG-6 and Mitigation Measure AG-7.

4.4 Biological Resources

The following discussion of the Delta Stewardship Council has been added to page 4.4-33:

Delta Stewardship Council

In November 2009, the California Legislature enacted the Sacramento-San Joaquin Delta Reform Act (Delta Reform Act) of 2009, also known as Sen. Bill No. 1 (Stats. 2009, 7th Ex. Sess., ch. 5) (SB X7-1), one of several bills passed at that time related to water supply reliability, ecosystem health, and the Delta. The Delta Reform Act created the Delta Stewardship Council (DSC). The DSC is made up of seven members that are advised by a 10-member board of scientists. The DSC was charged with developing and adopting a Delta Plan by January 1, 2012.

The DSC is tasked with addressing the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. According to the Delta Reform Act, the coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. The DSC regulates covered actions, as statutorily defined, to address the coequal goals. The following policies from the Delta Plan are applicable to the proposed project.

ER P3. Protect Opportunities to Restore Habitat

- (a) Within the priority habitat restoration areas depicted in Appendix 5 of the Delta Plan, significant adverse impacts to the opportunity to restore habitat as described in section 5006, must be avoided or mitigated.
- (b) Impacts referenced in subsection (a) will be deemed to be avoided or mitigated if the project is designed and implemented so that it will not preclude or otherwise interfere with the ability to restore habitat as described in section 5006.
- (c) Impacts referenced in subsection (a) shall be mitigated to a point where the impacts have no significant effect on the opportunity to restore habitat as described in section 5006. Mitigation shall be determined, in consultation with the California Department of Fish and Wildlife, considering the size of the area impacted by the covered action and the type and value of habitat that could be restored on that area, taking into account existing and proposed restoration plans, landscape attributes, the elevation map shown in Appendix 4, and other relevant information about habitat restoration opportunities of the area.
- (d) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers proposed actions in the priority habitat restoration areas depicted in Appendix 5 of the Delta Plan. It does not cover proposed actions outside those areas

The following discussion has been added at the end of the first full paragraph on page 4.4-46 under the discussion of Sensitive Natural Communities.

Delta Plan Policy ER P3 (cited in the Regulatory Framework) calls for protecting opportunities to restore habitat and provides examples of how projects can comply with the policy. RTP/SCS projects located within the Delta Plan area would be required to comply with Delta Plan Policy ER P3.

4.5 Cultural Resources

Mitigation Measures CR-1, CR-3, CR-4, and CR-5 are revised as stated above.

4.9 Land Use

The following discussion has been added at the top of page 4.9-12:

Delta Stewardship Council

In November 2009, the California Legislature enacted the Sacramento-San Joaquin Delta Reform Act (Delta Reform Act) of 2009, also known as Sen. Bill No. 1 (Stats. 2009, 7th Ex. Sess., ch. 5) (SB X7-1), one of several bills passed at that time related to water supply reliability, ecosystem health, and the Delta. The Delta Reform Act created the Delta Stewardship Council (DSC). The DSC is made up of seven members that are advised by a 10-member board of scientists. The DSC was charged with developing and adopting a Delta Plan by January 1, 2012.

The DSC is tasked with addressing the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. According to the Delta Reform Act, the coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. The DSC regulates covered actions, as statutorily defined, to address the coequal goals. The following Delta Plan policy is applicable to the proposed project:

DP P1. Locate New Urban Development Wisely

(a) New residential, commercial, and industrial development must be limited to the following areas, as shown in Appendix 6 and Appendix 7 of the Delta Plan:

(1) Areas that city or county general plans as of May 16, 2013, designate for residential, commercial, and industrial development in cities or their spheres of influence;

(2) Areas within Contra Costa County's 2006 voter-approved urban limit line, except no new residential, commercial, and industrial development may occur on Bethel Island unless it is

consistent with the Contra Costa County general plan effective as of May 16, 2013;

(3) Areas within the Mountain House General Plan Community Boundary in San Joaquin County; or

(4) The unincorporated Delta towns of Clarksburg, Courtland, Hood, Locke, Ryde, and Walnut Grove.

(b) Notwithstanding subsection (a), new residential, commercial, and industrial development is permitted outside the areas described in subsection (a) if it is consistent with the land uses designated in county general plans as of May 16, 2013, and is otherwise consistent with this Chapter.

(c) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers proposed actions that involve new residential, commercial, and industrial development that is not located within the areas described in subsection (a). In addition, this policy covers any

(d) This policy is not intended in any way to alter the concurrent authority of the Delta Protection Commission to separately regulate development in the Delta's Primary Zone.

Delta Protection Commission Land Use and Resource Management Plan

The LURMP contains policies to protect the Delta environment, including its agricultural, ecological, and recreational resources. The following policies are applicable to the 2014 RTP/SCS:

Land Use, P-2: Local government general plans, as defined in Government Code Section 65300 et seq., and zoning codes shall continue to promote and facilitate agriculture and agriculturally supporting commercial and industrial uses as the primary land uses in the Primary Zone; recreation and natural resources land uses shall be supported in appropriate locations and where conflicts with agricultural land uses or other beneficial uses can be minimized.

Land Use, P-3: New non-agriculturally oriented residential, recreational, commercial, habitat, restoration, or industrial development shall ensure that appropriate buffer areas are provided by those proposing new development to prevent conflicts between any proposed use and existing adjacent agricultural uses and shall not include uses that conflict with agricultural operations on adjacent agricultural lands. Appropriate buffer setbacks shall be determined in consultation with local Agricultural Commissions, and shall be based on applicable general plan policies and criteria including in Right-to-Farm Ordinances adopted by local jurisdictions.

Land Use, P-8: Local government policies regarding mitigation of adverse environmental impacts under the California Environmental Quality Act may allow mitigation beyond county boundaries, if acceptable to reviewing fish and wildlife agencies and with approval of the recipient jurisdiction, for example, in approved mitigation banks or in the case of agricultural loss to mitigation. Mitigation in the Primary Zone for loss of agricultural lands in the Secondary Zones may be appropriate if the mitigation program

supports continued farming in the Primary Zone. California Government Code Section 51256.3 (Assembly Bill 797) specifically allows an agricultural conservation easement located within the Primary or Secondary Zone of the Delta to be related to Williamson Act contract rescissions in any other portion of the secondary zone without respect to County boundary limitations.

Land Use, P-11: Local governments may develop programs to cluster residential units that allow property owners to engage in limited property development in order to ensure the efficient use and conservation of agricultural lands, support open space values, and protect sensitive environmental areas in the Primary Zone. Clustered development occurs when contiguous or non-contiguous parcels are developed to cluster lots for residential use. The purpose of clustered development is to provide a mechanism to preserve agricultural land and open space, to locate housing in areas that can readily be served by public services and utilities, and provide the agricultural community an alternative to transfer of development rights. Clustered development programs shall ensure that the number of clustered lots created does not exceed the allowable density requirement for the zoning of the sum of the parcels. Clustered development may only be used one time. Neither the clustered lots nor the remainder lost may be further subdivided. Residential development shall be consistent with local general plan policies and zoning regulations and standards.

Land Use, P-12: Local governments may develop transfer of development rights (TDR) programs that allow land owners to transfer the development right from one parcel of land to another. The purpose of these TDR programs would be to ensure the efficient use and conservation of agricultural lands, to support open space values, and to protect sensitive environmental areas within the Primary Zone. This purpose would be achieved by relocating development rights within the Primary Zone to more suitable areas such as adjacent to or within existing urban areas within or outside of the Primary Zone, or to provide expanded opportunities for affordable farm worker housing. TDR programs shall ensure that the transferred development density does not exceed the development density identified for the zoning for the sending parcel, and that any farm worker housing is restricted and regulated for that purpose. The land upon which the development rights are transferred from would be restricted with a permanent conservation easement. Receiving areas must have the infrastructure capacity, public services, and utilities to absorb the new development.

AG, P-2: Conversion of land to non-agricultural oriented uses should occur first where productivity and agricultural value are lowest.

AG, P-3: Promote recognition of the Delta as a place by educating individuals about the rich agricultural heritage, the unique recreational resources, the biological diversity, and the ongoing value of maintaining

a healthy agricultural economy in the Delta.

AG, P4: Support agricultural programs that maintain economic viability and increase agricultural income in accordance with market demands.

AG, P-5: Local governments shall encourage implementation of the necessary plans and ordinances to: maximize agricultural parcel size; reduce subdivision of agricultural lands; protect agriculture and related activities; protect agricultural land from conversion to non-agriculturally oriented uses.

AG, P-9: Support agricultural tourism and value-added agricultural production as a means of maintaining the agricultural economy of the Delta.

Rec, P-3: Assess the need for new regional public and private recreation and access facilities to meet increasing public need, and ensure that any new facilities are prioritized, developed, maintained, and supervised consistent with local, state, and federal laws and regulations. Ensure that adequate public services are provided for all existing, new, and improved recreation and access facilities.

Rec, P-4: Encourage new regional recreational opportunities, such as Delta-wide trails, which take into consideration environmental, agricultural, infrastructure and law enforcement needs, and private property boundaries. Also, encourage opportunities for water, hiking, and biking trails.

The following discussion has been added at the bottom of page 4.9-48.

It is also possible that land use conflicts could arise between the RTP/SCS growth forecast and other land use plans, such as the Delta Plan. As described in Chapter 1.0 of the Draft EIR, SJCOG does not have land use authority and therefore land use decisions are ultimately made at the discretion of local jurisdictions. Further, the forecast presented in the RTP/SCS is one possible growth forecast and it is up to local jurisdictions to determine consistency with the RTP/SCS and implement any land use changes as SJCOG does not have land use authority.

4.12 Transportation

Mitigation Measure TRANS-1 on page 4.12-60 and in the Draft EIR summary has been revised as follows:

TRANS-1: SJCOG should pursue funding for new unidentified projects and programs, beyond the current financially and institutionally feasible measure included in the 2014 RTP, which may improve LOS results on roadway segments projected to be LOS E or F. Measures such as auxiliary lanes, ramp metering, HOV lanes, and park and ride facilities should be considered in addition to increasing transit use ridesharing and other measures to reduce demand on the transportation system; investments in non-motorized transportation; seeking to optimize land use/transportation connection; other travel demand measures described in in local agency General Plans; and key roadway investments targeted to reduce congestion levels and improve LOS.

The following discussion is added to the top of page 4.12-15.

The Great California Delta Trail System (SB 1556)

Existing law establishes the Delta Protection Commission to preserve, protect, maintain, and enhance the Sacramento-San Joaquin Delta region's environmental resources and quality, including preserving and protecting agriculture, wildlife habitats, open spaces, outdoor recreational activities, public access, and use of public lands. This bill would additionally require the Delta Protection Commission to establish a continuous recreation corridor, including bicycle and hiking trails, around the five-county region of the Delta, as defined.

3.0 COMMENT LETTERS AND RESPONSES

The Draft Program EIR was submitted to the State Clearinghouse Office of Planning and Research and circulated for public review on March 10, 2014. The 45-day comment period concluded on April 23, 2014. Comment letters received after this date were also accepted and are included in this Final Program EIR.

A total of 14 comment letters were received, including one form letter with multiple signatures. One comment was also received at the public hearing on April 24, 2014. A list of commenters is shown on the following pages. The comment letters have been numbered and organized into the following categories:

- State and Local Agencies
- Private and Local Organizations
- Individuals and Public Hearing Comments

The original bracketed comment letters are provided followed by a numbered response to each bracketed comment. Individual comments within each letter are numbered and the response is given a matching number. Where responses result in a change to the Draft EIR, it is noted, and the resulting change is identified in **Section 2.0, Corrections and Additions**.

The Draft 2014 Regional Transportation Plan/Sustainable communities Strategy (RTP/SCS) was circulated for public during the approximately same period as the Draft Program EIR (March 10, 2014 to April 23, 2014). Comments on the RTP/SCS are addressed in a separate document – Response to Comments on the RTP, Technical Appendix.

In some cases, commenters on the RTP/SCS indicated in the subject line of their letter that they were providing comment on the Draft Program EIR but the substance of their letter included only comments on the RTP/SCS. These letters are not addressed in this Final Program EIR. As noted above, comments contained within these letters and responses to those comments can be found in the Response to Comments to the RTP, Technical Appendix and are also available online at www.sjcog.org.

3.0 Responses to Comments

NO.	ORGANIZATION	COMMENTS NAME	COMMENT DATE	RESPONSE PAGE NUMBER
A1	Delta Stewardship Council	Cindy Messer, Deputy Executive Director	April 23, 2014	3.0-4
A2	Central Valley Flood Protection Board	Len Marino, P.E., Chief Engineer	April 1, 2014	3.0-11
A3	California High Speed Rail Authority	Ben Tripousis, Northern California Director Mark A. McLoughlin, Director of Environmental Services	April 14, 2014	3.0-15
A4	San Joaquin County Public Works	Amy Spitzer, Assistant Planner	April 22, 2014	3.0-19
A5	Delta Protection Commission	Erik Vink, Executive Director	April 23, 2014	3.0-21
A6	California Department of Transportation	Tom Dumas, Chief	April 29, 2014	3.0-25
A7	California Department of Transportation	Tom Dumas, Chief	April 23, 2014	3.0-29
B1	Sierra Club	Eric Parfrey, Executive Committee Mother Lode Chapter	April 23, 2014	3.0-32
B2	American Lung Association, Climate Plan	Bonnie Holmes-Gen, Senior Director, Policy and Advocacy, American Lung Association Autumn Bernstein, Director, Climate Plan	April 23, 2014	3.0-67
B3	Defenders of Wildlife	Kim Delfino, California Program Director	April 14, 2014	3.0-75
B4	American Lung Association American Cancer Society California Society for Pulmonary Rehabilitation California Thoracic Society Fresno-Madera Medical Society Health Care Without Harm Human Impact Partners Physicians for Social Responsibility Public Health Institute Prevention Institute San Joaquin County Asthma & COPD Coalition Safe Routes to School National Partnership	Will Barrett, Policy Manager American Lung Association Tim Gibbs, Direction of Campaign Initiatives, American Cancer Society Nancy Perrin, President, California Society for Pulmonary Rehabilitation Heidi R. Flori, MD, FAAP, President, California Thoracic Society Praveen Buddiga, MD, Senior Research Associate, Fresno-Madera Medical Society Eric Lerner, Climate Director, Health Care Without Harm Sara Satinsky, MPH, MCRP, Human Impact Partners Harry Wang, MD, Program Manager, Physicians for Social Responsibility Linda Rudolph, MD, MPH, Co-Director, Public Health Institute Prevention Institute Jeremy Cantor, MPH, Program Manager, Sandra Viera, Program Manager	April 23, 2014	3.0-79

3.0 Responses to Comments

		San Joaquin County Krysta Titel, MPH, Coalition Coordinator, Asthma & COPD Coalition Marty Martinez, Northern California Policy Manager, Safe Routes to School National Partnership		
C1	Michael F. Babitzke	Michael F. Babitzke, Attorney at Law	April 22, 2014	3.0-84
C2	Arnold Rothlin	Arnold Rothlin	April 21, 2014	3.0-158
C3	Form Letter on Raymus Expressway	Multiple	Multiple	3.0-160
C4	Public Hearing Comments	Multiple	April 24, 2014	3.0-169



DELTA STEWARDSHIP COUNCIL
A California State Agency

980 NINTH STREET, SUITE 1500
SACRAMENTO, CALIFORNIA 95814
WWW.DELTACOUNCIL.CA.GOV
(916) 445-5511

April 23, 2014

Diane Nguyen
San Joaquin Council of Governments
555 East Weber Avenue
Stockton, CA 95202
Email: nguyen@sjcog.org

Chair
Randy Fiorini

Members
Frank C. Damrell, Jr.
Gloria Gray
Phil Isenberg
Patrick Johnston
Hank Nordhoff
Frank L. Ruhstaller

Executive Officer
Christopher M. Knopp

RE: Draft 2014-2040 RTP/SCS for San Joaquin County and Draft Program EIR, SCH# 2013022012

Dear Ms. Nguyen:

Thank you for the opportunity to comment on the Draft 2014-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for San Joaquin County and the associated Draft Program Environmental Impact Report (Draft PEIR). The Delta Stewardship Council (Council) is required to review the San Joaquin Council of Governments' (SJCOG's) RTP/SCS for consistency with Delta Plan, pursuant to the Delta Reform Act (Water Code Section 85212), and is required the review the Draft PEIR, pursuant to the California Environmental Quality Act. Coordinating our plans' consistency can help avoid unnecessary conflicts and facilitate cooperation.

Council staff has enjoyed a collaborative relationship with SJCOG staff during the scoping and review periods for the RTP/SCS and its environmental documents. Council staff sent a comment letter on the Notice of Preparation (NOP) of the Draft PEIR on March 6, 2013, while the Delta Plan was still in draft form, and SJCOG staff used those comments as the basis of a presentation to the Council on March 27, 2014. Council staff looks forward to seeing the RTP/SCS move forward to help reduce the region's greenhouse gas emissions by increasing density and transit in already developed areas so that natural lands, including agriculture, can be better preserved.

SCS Consistency with the Delta Plan

As previously mentioned in Council staff's NOP comment letter, the Delta Reform Act establishes specific criteria and categories for excluding actions from the Council's regulatory authority. One of these exclusions is for actions within the secondary zone of the Delta that a metropolitan planning organization determines are consistent with its SCS. Such proposed actions are *not* "covered actions" regulated by the DSC (Water Code Section 85057.5(b)(4)).

The rationale for this exemption from the Council's covered action process is the presumption that metropolitan planning organizations will design their SCS's to be consistent with the Delta Plan. Council

A1-1

"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

- CA Water Code §85054

staff has evaluated the RTP/SCS's consistency based on the three Delta Plan policy areas identified in the NOP comment letter: urban boundaries, habitat restoration areas and flood risk reduction. We have also included suggestions regarding consistency with Delta Plan recommendations.

A1-1

- **Urban boundaries.** The urban boundaries identified in the RTP/SCS should be consistent with the Delta Plan for the areas in which the Council has jurisdiction. The urban boundaries are described in **Delta Plan Policy DP P1** (23 CCR Section 5010), Locate New Urban Development Wisely. They are intended to strengthen existing Delta communities while protecting farmland and open space, providing land for ecosystem restoration needs, and reducing flood risk. DP P1 is based on city boundaries and spheres of influence effective as of the date of the Delta Plan's adoption (May 16, 2013).

Neither the RTP/SCS nor the Draft PEIR contains a map of proposed growth areas. In order to help Council staff determine whether the growth patterns that form the basis of the policies and analyses in the RTP/SCS are consistent with the Delta Plan, SJCOG staff prepared a land use map showing the growth assumptions underlying the RTP/SCS and an overlay of the areas designated for development in Delta Plan Policy DP P1. Council staff appreciates the time and effort that SJCOG staff put into the preparation of this map, which was presented to the Council on March 27, 2014. Members of the Council found the map very useful, and Council staff recommends including the map in the final RTP/SCS.

Based on this map, Council staff determined that the SCS growth areas fall within the areas designated for development in DP P1, with two minor exceptions in the sphere of influence of the City of Tracy. The two areas are located both east and west of the City of Tracy on land designated as "Urban Reserve" in the Tracy General Plan, which was adopted in 2011. Since the Urban Reserve areas are not designated for specific residential, commercial or industrial uses, they are not included among the "areas designated for development" in Figure 7-11, the map including the City of Tracy found in Appendix 7 of the Delta Plan regulations. As noted on the map's legend, in cases where cities have not proposed land uses within their spheres of influence, the map shows land uses designated by county general plans. In this case, the San Joaquin County General Plan designates this area as Agriculture. Urban development in this area would therefore be inconsistent with the Delta Plan and the San Joaquin County General Plan. Consequently, Council staff finds that the RTP/SCS is not consistent with the Delta Plan in this regard.

A1-2

In addition, the Delta Reform Act (Water Code Section 85057.5(b)(4)) only allows exemptions to the covered action process for a "plan, program, project or activity within the secondary zone of the Delta that a metropolitan planning organization...has determined is consistent with either a sustainable communities strategy or an alternative planning strategy..." The statute goes on to state, "For purposes of this paragraph, 'consistent with' means consistent with the use designation, density, building intensity, transportation plan, and applicable policies specified for the area in sustainable communities strategy..." The RTP/SCS does not contain any use designations, densities or building intensities, and therefore does not appear to provide a basis for exemptions to the covered action process.

- **Habitat restoration areas.** The Delta Reform Act (Water Code Section 85212) requires the Council to review the consistency of the SCS with the ecosystem restoration needs of the Delta. Lands should be set aside for natural resource protection, including the San Joaquin Multi Species Conservation Plan, consistent with the priority habitat restoration areas in the Delta Plan. **Delta Plan Policy ER P3** (23 CCR 5007), calls for protecting opportunities to restore habitat in these areas, which are depicted in Figure 5-1, located in Appendix 5 of the Delta Plan regulations. Based on the map you provided, the RTP/SCS growth areas are all located outside the boundary of the San Joaquin River Floodplain, the only priority habitat restoration area located in San Joaquin County, and the RTP/SCS is therefore consistent with that policy.
- **Flood risk reduction.** Land use planning for the RTP/SCS should reduce flood risk in accordance with the following Delta Plan policies.
 - **Delta Plan Policy RR P2** (23 CCR Section 5013) requires flood protection that addresses risks due to sea level rise for residential development in rural areas, i.e., outside the urban boundaries, which are identical to the boundaries described in Delta Plan Policy DP P1. Council staff has looked at the projected flood risk due to sea level rise by 2100 for the growth areas mentioned above that are located in the City of Tracy's sphere of influence, and the city appears to be at low risk.¹ However, at such time that the City of Tracy proposes annexing these areas, the city should address these risks.
 - **Delta Plan Policy RR P3** (23 CCR Section 5014) restricts encroachments in floodways. The information provided does not support an analysis of consistency with this policy.
 - **Delta Plan Policy RR P4** (23 CCR Section 5015) restricts encroachments in specified floodplains. The RTP/SCS growth areas are located outside the Lower San Joaquin River Floodplain bypass area, the only floodplain in San Joaquin County designated by Delta Plan Policy RR P4, and the RTP/SCS is therefore consistent with that policy.
- **General.** On a more general note, Council staff acknowledges the role that the RTP/SCS will play in helping to achieve the Delta Plan's coequal goals of water supply reliability and ecosystem restoration, while protecting and enhancing the Delta as an evolving place. We commend SJCOG for including the policy entitled *Enhance the Environment for Existing and Future Generations and Conserve Energy* in the SCS. The two strategies under this policy that are most relevant to the Delta Plan are "Strategy #1: Encourage Efficient Development Patterns that Maintain Agricultural Viability and Natural Resources" and "Strategy #2: Enhance the Connection between Land Use and Transportation Choices through Projects Supporting Energy and Water Efficiency." Council staff appreciates the inclusion of preservation of prime farmland and water conservation among the performance indicators that will be used to measure the RTP/SCS's progress toward these goals. Council staff also appreciates the RTP/SCS policies that

A1-3

A1-4

A1-5

¹ Flood risk due to sea level rise by 2100 for the City of Tracy was estimated using the following website:
<http://sealevel.climatecentral.org/surgings seas/place/cities/CA/Tracy?lookup=37.738534%2C-121.421127#center=12/37.8177/-121.4218&show=cities&surge=7>.

support the following Delta Plan recommendations related to the economic vitality of the Delta:

- **Delta Plan Recommendation DP R5** recommends providing adequate infrastructure to meet development needs, consistent with sustainable communities strategies and other relevant plans.
- **Delta Plan Recommendation DP R8** calls for promoting value-added crop processing.
- **Delta Plan Recommendation DP R9** calls for promoting agritourism.
- **Delta Plan Recommendation DP R17** calls for enhancing opportunities for visitor-serving businesses.
- **Delta Plan Recommendation DP R18** calls for the Ports of Stockton and West Sacramento to encourage carefully designed and sited development of port facilities.

A1-5

Comments on the Draft PEIR

In addition to the comments on the RTP/SCS itself, Council staff offers the following comments on the Draft PEIR. The Final PEIR should discuss any inconsistencies between the proposed project and the Delta Plan, as required by 15125(d) of the CEQA Guidelines.

A1-6

- **Agricultural Resources.** Council staff appreciates the inclusion of mitigation measures to offset potential impacts to Agricultural Resources. We also recommend adding the following mitigation measures, which are drawn from the Delta Plan's Final Programmatic EIR, to ensure that farmlands are protected to the greatest extent possible:
 - "Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land. For projects that will result in permanent conversion of farmland, preserve in perpetuity other farmland through acquisition of an agricultural conservation easement, or contributing funds to a land trust or other entity qualified to preserve farmland in perpetuity (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the farmland to be converted, to compensate for permanent loss).
 - Redesign project features to minimize fragmenting or isolating farmland. Where a project involves acquiring land or easements, ensure that the remaining non-project area is of a size sufficient to allow viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.
 - Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.

A1-7

- Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land.”
- **Biological Resources.** Please consider adding the regulatory policies and recommendations of the Delta Plan to the Biological Resources Regulatory Setting section of the Final PEIR. **Delta Plan Policy ER P3** calls for protecting opportunities to restore habitat. In the Final PEIR, please cite Delta Plan Policy ER P3 and describe how any potential conflicts with the policy, such as road construction, can be avoided or mitigated. Figure 4-7 of the Delta Plan depicts three examples of how projects can comply with ER P3, two of which may be relevant to the proposed projects:
 - Locate structures at the edge of a habitat restoration area, rather than in the middle, to improve opportunities for restoring habitat connectivity.
 - Elevate structures so that water can flow underneath to allow for restoration of aquatic habitat dependent on tides or periodic flooding.
- **Land Use and Population.** The Final PEIR should acknowledge the regulatory policies and recommendations of the Delta Plan within the Land Use and Population Regulatory Setting section. In the Final PEIR, please cite **Delta Plan Policy DP P1**, provide an analysis of potential conflict with the policy due to the urbanization of agricultural land and open space within the Secondary Zone, and describe how any conflicts with the policy could be avoided or mitigated.

A1-7

A1-8

A1-9

Conclusion

The RTP/SCS contains much common ground with the Delta Plan, and contains only minor inconsistencies. We look forward to your detailed response to this notice of inconsistency, as required by the Delta Reform Act (Water Code Section 85212).

A1-10

Thank you for your collaborative approach to ensuring that our two plans are complementary and serve to protect the Delta while promoting sustainable growth and economic vitality in the broader region. I encourage you to contact Jessica Davenport at jdavenport@deltacouncil.ca.gov or (916) 445-2168 with your questions, comments, or concerns.

Sincerely,



Cindy Messer
Deputy Executive Officer

cc: Tanisha Taylor, SJCOG
Chris Ganson, Governor's Office of Planning and Research
Garth Hopkins, California Department of Transportation
Jonathan Taylor, California Air Resources Board

Letter No. A1: Delta Stewardship Council

Delta Stewardship Council
980 Ninth Street, Suite 1500
Sacramento, CA 95814
Ms. Cindy Messer, Deputy Executive Officer
April 23, 2014

Response A1-1

The comment provides general introductory information regarding the Delta Plan and provides factual background information and does not raise an environmental issue within the meaning of the California Environmental Quality Act (CEQA). The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue, no further response is required.

Response A1-2

The Draft EIR Section 4.9, Land Use, determined that the RTP/SCS has the potential to result in inconsistencies between with existing land use plans (refer to page 4.9-47 of the Draft EIR). In addition, the 2014 RTP/SCS was built primarily from local General Plans and input from local governments, and local transportation agencies. As a result of this comprehensive and integrated approach, the transportation projects and land use strategies included in the 2014 RTP/SCS are generally consistent with the County and local level general plan data available to San Joaquin Council of Governments (SJCOG). Further, consistent with SB 375, the SCS identifies only the general location of uses, residential densities, and building intensities within the region. SJCOG has no land use authority. As described within the SCS and Draft Program EIR, consistency with the SCS will be determined by local agencies. Please also refer to RTP Response to Comment 12-1.

Response A1-3

The comment provides a determination the RTP/SCS is consistent with Delta Plan Policy ER P3. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue within the meaning of CEQA, no further response is required.

Response A1-4

The comment relates to specific policies to be included within the RTP. The commenter is referred to RTP responses for responses to this comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue within the meaning of CEQA, no further response is required.

Response A1-5

The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue within the meaning of CEQA, no further response is required.

Response A1-6

The comment suggests the Final EIR should discuss any inconsistencies between the proposed project and the Delta Plan. Please see **Chapter 2.0, Corrections and Additions**.

Response A1-7

The commenter provides mitigation measures from the Delta Plan and suggests incorporating them into the Final EIR mitigation measures. However, SJCOG does not specifically have authority to implement mitigation measures (see section 1.9 of the Draft EIR). Therefore, the Final EIR includes a measure that those projects within Delta Plan areas apply appropriate mitigation from the Delta Plan. Please see **Chapter 2.0, Corrections and Additions**.

Response A1-8

Policy ER P3 has been added to the Final EIR. Please see **Chapter 2.0, Corrections and Additions**. Please also see **Chapter 2.0, Corrections and Additions** for a discussion of opportunities to protect habitat as described in Delta Plan Policy ER P3.

Response A1-9

The potential for the RTP/SCS to conflict with land use plans was identified as a significant impact. Please see **Chapter 2.0, Corrections and Additions** for added discussion of the Delta Plan within Section 4.9, Land Use and Population. The following text has also been added to the Final EIR under the discussion of Impact LU-1.

It is also possible that land use conflicts could arise between the RTP/SCS growth forecast and other land use plans, such as the Delta Plan. As described in Chapter 1.0 of the Draft EIR, SJCOG does not have land use authority and therefore land use decisions are ultimately made at the discretion of local jurisdictions. Further, the forecast presented in the RTP/SCS is one possible growth forecast and it is up to local jurisdictions to determine consistency with the RTP/SCS and implement any land use changes as SJCOG does not have land use authority.

Response A1-10

Comment noted. Please see responses to individual comments above.

CENTRAL VALLEY FLOOD PROTECTION BOARD

3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-2380 FAX: (916) 574-0682



April 1, 2014

San Joaquin
Council of Governments

Ms. Diane Nguyen
San Joaquin County Council of Governments
555 E. Weber Avenue
Stockton, California 95202

Subject: CEQA Comments: San Joaquin County Council of Governments 2014 Regional
Transportation Plan - Program EIR, SCH No. 2013022012

Location: San Joaquin County

Dear Ms. Nguyen:

Central Valley Flood Protection Board (Board) staff has reviewed the subject document and provides the following comments:

The proposed transportation plan may result in projects located adjacent to or within the following regulated streams under Board jurisdiction pursuant to Title 23, California Code of Regulations (23 CCR), Section 112:

Stream

- Atherton Cove
- Banta Carbona Intake Canal
- Bear Creek
- Calaveras River
- Duck Creek
- Duck Creek, South Branch
- Fourteenmile Slough
- French Camp Slough
- Littlejohns Creek
- Lone Tree Creek
- Mokelumne River
- Mormon Slough
- Mosher Slough/Creek
- Old River
- Paddy Creek and South Paddy Creek
- Paradise Cut
- Pixley Slough
- San Joaquin River
- Smith Canal

County - Limits

- San Joaquin - northeast bank only
- San Joaquin
- San Joaquin, up to Jack Tone Road
- San Joaquin - to New Hogan Dam
- San Joaquin
- Sacramento, San Joaquin (downstream from Camanche Reservoir)
- San Joaquin
- San Joaquin - to Eight Mile Road
- San Joaquin to Paradise Cut
- San Joaquin to Tully Road
- San Joaquin
- San Joaquin - Eight Mile Road to Bear Creek
- Friant Dam to West End of Sherman Island
- San Joaquin - north levee only

A2-1

<u>Stream</u>	<u>County - Limits</u>
Stanislaus River	San Joaquin, Stanislaus, Calaveras, Tuolumne, to Goodwin Dam
Stockton Diverting Canal	San Joaquin
Tom Paine Slough	San Joaquin - Old River to Western Pacific Rail Road
Tuolumne River	Stanislaus and San Joaquin - to La Grange Dam
Walker Slough	San Joaquin
Walthall Slough	San Joaquin

The Board enforces its regulations for the construction, maintenance, and protection of adopted plans of flood control that protect public lands from floods. Adopted plans of flood control include federal-State facilities of the State Plan of Flood Control, regulated streams, and designated floodways. The geographic extent of Board jurisdiction includes the Central Valley, and all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and the Tulare and Buena Vista basins (23 CCR, Section 2).

A2-1

A Board permit is required prior to working in the Board's jurisdiction for the following:

- Placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (23 CCR Section 6);
- Existing structures that predate permitting, or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (23 CCR Section 6);
- Vegetation plantings require submission of detailed design drawings; identification of vegetation type; plant and tree names (both common and scientific); quantities of each type of plant and tree; spacing and irrigation method; a vegetative management plan for maintenance to prevent the interference with flood control operations, levee maintenance, inspection, and flood fight procedures (23 CCR Section 131).

Other local, federal and State agency permits may be required and are the responsibility of the applicant to obtain.

Board permit application forms and our complete 23 CCR regulations can be found on our website at <http://www.cvpfb.ca.gov/>. Maps of the Board's jurisdiction including all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and Board designated floodways are also available on a Department of Water Resources website at <http://gis.bam.water.ca.gov/bam/>.

Additional Considerations Related to Potential Impacts of Vegetation and Hydraulics

Accumulation and establishment of woody vegetation that is not managed may have negative impacts on channel capacity and may increase the potential for levee over-topping or other failure. When vegetation develops and becomes habitat for wildlife, maintenance to initial baseline conditions typically becomes more difficult as the removal of vegetative growth may be subject to federal and State resource agency requirements for on-site mitigation. The

A2-2

Ms. Diane Nguyen
April 1, 2014
Page 3 of 3

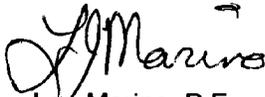
proposed project should include mitigation measures to avoid decreasing floodway channel capacity.

Adverse hydraulic impacts of proposed encroachments could impede flood flows, reroute flood flows, and/or increase sediment accumulation. The proposed project should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. If possible off-site mitigation outside of the Board's jurisdiction should be used when mitigating for vegetation removed at the project location.

A2-2

If you have any questions please contact James Herota at (916) 574-0651, or via email at james.herota@water.ca.gov.

Sincerely,



Len Marino, P.E.
Chief Engineer

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814

Letter No. A2: Central Valley Flood Protection Board

Central Valley Flood Protection Board
3310 El Camino Ave, Rm. 151
Sacramento, CA 95814
Mr. Len Marino, P.E., Chief Engineer
April 1, 2014

Response A2-1

SJCOG has received the comment from the Central Valley Flood Protection Board. The comment provides general information related to specific streams within the San Joaquin region and mitigation that may be required. The commenter does not include any specific comments on the adequacy of the Draft EIR. Nonetheless, the comments related to potential mitigation have been incorporated into the Final EIR.

Response A2-2

The 2014 RTP/SCS and its associated Program EIR does not include specific projects. As such, project level mitigation is appropriately deferred to the project level. Nonetheless, the recommendations related to mitigation in flood control areas have been incorporated into the Final EIR.



RECEIVED
APR 16 2014
San Joaquin
Council of Governments

April 14, 2014

BOARD MEMBERS

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Deputy Director of Planning, Programming & Project Delivery
San Joaquin Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

Thomas Richards
VICE CHAIR

Jim Hartnett
VICE CHAIR

Richard Frank

Re: 2014 Draft Regional Transportation Plan/Sustainable Communities Strategy for San Joaquin County and Draft Programmatic Environmental Impact Report

Patrick W. Henning, Sr.

Dear Ms. Nguyen:

Katherine Perez-Estolano

Thank you for the opportunity to comment on the documents cited above. Passenger rail services at all scales have fundamental roles in achieving regional transportation and sustainability performance objectives. The California High-Speed Rail Program will contribute to economic development and a cleaner environment, preserve and reduce the urbanization of agricultural lands, promote efficient mobility and increased livability within the Central Valley. These same objectives are found throughout the San Joaquin Council of Governments' Draft 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Michael Rossi

Lynn Schenk

Thea Selby

Jeff Morales
CHIEF EXECUTIVE OFFICER

The California High-Speed Rail Authority (Authority) is partnering with regional rail providers within San Joaquin County to implement a rail modernization plan that will result in regional and statewide benefits. To facilitate appropriate coordination between related but separate planning and transit infrastructure investments, the Authority requests your consideration of the following comments for inclusion in the RTP/SCS and Draft Programmatic Environmental Impact Report (Draft PEIR):

- The Authority's Draft 2014 Business Plan and the California State Rail Plan state that high-speed rail passenger service from Merced to the San Fernando Valley will begin in 2022. In 2009, the Authority and the San Joaquin Regional Rail Commission, whose Board members are appointed by the San Joaquin Council of Governments, signed a Memorandum of Understanding to cooperate fully in their respective work in planning and developing regional rail transit and high-speed rail services within and beyond San Joaquin County. The Authority is providing funding for environmental impact studies of the San Joaquin Regional Rail Commission's ACEforward initiative to expand existing Altamont Commuter Express services and extend San Francisco Bay Area services to Modesto and Merced. Goal #3 of the ACEforward Program Work Plan states: "Extend service to meet and connect to the HSR system to Downtown Merced...by 2022, timed to complement the initiation of HSR service between Merced and San Fernando Valley."¹ We note the coordinated regional, commuter

A3-1

EDMOND G. BROWN JR.
GOVERNOR



San Joaquin Regional Rail Commission, ACEforward Program Work Plan, 2013, p. 3

Ms. Diane Nguyen

Page pg. 2

and inter-regional rail improvements described in the Draft PEIR Rail Corridor Short Range Plan, 2014-2025. Acknowledging the Authority's active role in advancing these improvements, and the shared state and regional objectives of building robust local and regional passenger rail services that connect to and support inter-regional high-speed rail service, the RTP/SCS Modal Discussion and PEIR Rail Corridor Short Range Plan, 2014-2025 should include service connections to the high-speed rail segment in Merced in 2022.

A3-1

- Likewise, Phase 2 of the California High-Speed Rail Program includes extending from Merced to Sacramento in the north. The Merced to Sacramento high-speed rail section is planned to have a station in the City of Stockton, creating a downtown gateway to, and destination for travel from the San Francisco Peninsula, Central Valley, and Southern California. Planning for complementary transit connectivity to high-speed rail will increase mobility in the region, reduce the need for interregional travel by car, and spur infill development and economic activity within the station area. The Authority encourages the San Joaquin Council of Governments to prioritize transit connectivity and to work with local transit providers, especially the San Joaquin Regional Transit District, to plan for transit connections to and from the Stockton high-speed rail station. Transit connectivity to the Stockton high-speed rail station should be included in the Draft PEIR Bus Transit Long Range Plan 2025-2040.

A3-2

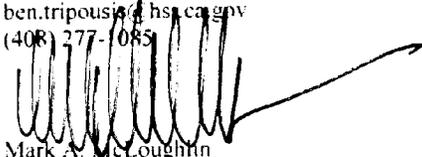
Thank you for considering these comments. The intent of the comments is to ensure consistency between the San Joaquin Council of Government's 2014 RTP/SCS and Draft PEIR, and the Authority's contribution to regional rail modernization and continuing work on the high-speed rail project.

The Authority looks forward to ongoing collaboration with the Council of Governments on issues of shared interest, including passenger rail modernization, expansion of complementary transit services, and station area planning that will leverage the state's and City of Stockton's investments in multi-modal transit infrastructure. The continuing partnership with the San Joaquin Council of Governments is helping the Authority bring high-speed rail service to the community.

We invite you to visit our website at www.hsr.ca.gov for additional project information. Please contact us if you have any questions.

Sincerely,


Ben Tripousis
Northern California Regional Director
ben.tripousis@hsr.ca.gov
(408) 277-1085


Mark A. McLoughlin
Director of Environmental Services
mark.mcloughlin@hsr.ca.gov
(916) 403-6934

Ms. Diane Nguyen

Page pg. 3

**cc: Barbara Gilliland, Director of Planning, Parsons Brinckerhoff
Brian Porter, Senior Environmental Planning Manager, Parsons Brinckerhoff
David Shpak, Senior Environmental Planning Manager, Parsons Brinckerhoff
La Keda Huckabay, High-Speed Rail Station Area/Sustainability Planner, High-Speed Rail
Authority**

Letter No. A3: California High Speed Rail Authority

California High Speed Rail Authority
100 Paseo de San Antonio
San Jose, CA 95113
Mr. Ben Tripousis, Northern California Director
April 14, 2014

Response A3-1

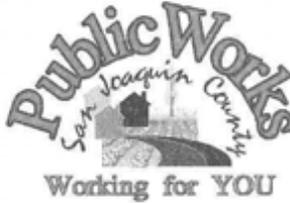
Bus transit projects supporting high-speed rail are included in the EIR and the High Speed Rail segments are not being included in the RTP due to the lack of known funding/financing. Because the EIR evaluates projects at the programmatic level, minor changes in project delivery dates, routes, and similar modifications do not materially change the environmental analysis presented within the EIR.

Response A3-2

Bus transit projects supporting high-speed rail are already included in the EIR and the High Speed Rail segments are not being included in the RTP due to the lack of known funding/financing. Because the EIR evaluates projects at the programmatic level, minor changes in project delivery dates, routes, and similar modifications do not materially change the environmental analysis presented within the EIR.



THOMAS M. GAU
DIRECTOR



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FRITZ BUCHMAN
DEPUTY DIRECTOR

MICHAEL SELLING
DEPUTY DIRECTOR

JIM STONE
DEPUTY DIRECTOR

ROGER JANES
BUSINESS ADMINISTRATOR

April 22, 2014

Diane Nguyen, Deputy Director of Planning,
Programming & Project Delivery
San Joaquin Council of Governments
555 East Weber Avenue
Stockton, California 95202

SUBJECT: NOTICE OF AVAILABILITY OF A DRAFT PROGRAM ENVIRONMENTAL
IMPACT REPORT FOR THE 2014 REGIONAL TRANSPORTATION/
SUSTAINABLE COMMUNITIES STRATEGY

Dear Ms. Nguyen:

The San Joaquin County Department of Public Works has reviewed the Notice of Availability for the above referenced project and has no comments at this time. However, the County does request to be included on the circulation list for any additional project documents.

Thank you for the opportunity to review and comment. Should you have questions please contact me at aspitzer@sjgov.org or (209) 468-8494.

Sincerely,

AMY SPITZER
Assistant Planner

AS:mh

c: Firoz Vohra, Senior Engineer

A4-1

Letter No. A4: San Joaquin County Public Works

San Joaquin County Public Works
P.O. Box 1810
Stockton, CA 95201
Ms. Amy Spitzer
April 22, 2014

Response A4-1

The commenter has no comments on the Draft EIR other than to be included in the circulation list for project documents. No response is necessary.

DELTA PROTECTION COMMISSION
2101 Stone Blvd., Suite 210
West Sacramento, CA 95691
Phone (916) 375-4800 / FAX (916) 376-3962
Home Page: www.delta.ca.gov



Contra Costa County Board of Supervisors

April 23, 2014

Sacramento County Board of Supervisors

Diane Nguyen, Deputy Director
San Joaquin County Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

San Joaquin County Board of Supervisors

Solano County Board of Supervisors

Subject: 2014 Regional Transportation Plan – Program EIR (SCH# 2013022012)

Yolo County Board of Supervisors

Dear Ms. Nguyen:

Cities of Contra Costa and Solano Counties

Delta Protection Commission (Commission) staff have reviewed the *2014 Regional Transportation Plan/Sustainable Communities Strategy – Draft Program Environmental Impact Report (Project)*. The portion of the County’s land area which lies within the Delta’s Primary Zone is subject to consistency requirements with the Commission’s *Land Use and Resource Management Plan (LURMP)*, which contains policies to protect the Delta environment, including its agricultural, ecological and recreational resources. The Project therefore needs to consider the policies outlined in the LURMP for any potential effects to the environment of the Delta’s Primary Zone. While land in the Secondary Zone of the Delta is not subject to consistency requirements, mitigation efforts should still be considered in cases of potential negative impacts on the resources of the Primary Zone. The following LURMP policies apply to your Project:

Cities of Sacramento and Yolo Counties

Cities of San Joaquin County

Central Delta Reclamation Districts

Land Use, P-2, Local government general plans, as defined in Government Code Section 65300 et seq., and zoning codes shall continue to promote and facilitate agriculture and agriculturally-supporting commercial and industrial uses as the primary land uses in the Primary Zone; recreation and natural resources land uses shall be supported in appropriate locations and where conflicts with agricultural land uses or other beneficial uses can be minimized.

North Delta Reclamation Districts

South Delta Reclamation Districts

CA State Transportation Agency

CA Department of Food and Agriculture

Land Use, P-3, New non-agriculturally oriented residential, recreational, commercial, habitat, restoration, or industrial development shall ensure that appropriate buffer areas are provided by those proposing new development to prevent conflicts between any proposed use and existing adjacent agricultural parcels. Buffers shall adequately protect integrity of land for existing and future agricultural uses and shall not include uses that conflict with agricultural operations on adjacent agricultural lands. Appropriate buffer setbacks shall be determined in consultation with local Agricultural Commissioners, and shall be based on applicable general plan policies and criteria included in Right-to-Farm Ordinances adopted by local jurisdictions.

CA Natural Resources Agency

CA State Lands Commission

Land Use, P-8, Local government policies regarding mitigation of adverse environmental impacts under the California Environmental Quality Act may allow mitigation beyond county boundaries, if acceptable to reviewing fish and wildlife agencies and with approval of the recipient jurisdiction, for example in approved mitigation banks or in the case of agricultural loss to mitigation. Mitigation in the

A5-1

Primary Zone for loss of agricultural lands in the Secondary Zone may be appropriate if the mitigation program supports continued farming in the Primary Zone. California Government Code Section 51256.3 (Assembly Bill 797) specifically allows an agricultural conservation easement located within the Primary or Secondary Zone of the Delta to be related to Williamson Act contract rescissions in any other portion of the secondary zone without respect to County boundary limitations.

Land Use, P-11. Local governments may develop programs to cluster residential units that allow property owners to engage in limited property development in order to ensure the efficient use and conservation of agricultural lands, support open space values, and protect sensitive environmental areas in the Primary Zone. Clustered development occurs when contiguous or non-contiguous parcels are developed to cluster lots for residential use. The purpose of clustered development is to provide a mechanism to preserve agricultural land and open space, to locate housing in areas that can readily be served by public services and utilities, and provide the agricultural community an alternative to transfer of development rights. Clustered development programs shall ensure that the number of clustered lots created does not exceed the allowable density requirement for the zoning of the sum of the parcels. Clustered development may only be used one time. Neither the clustered lots nor the remainder lots may be further subdivided. Residential development shall be consistent with local General Plan policies and zoning regulations and standards.

Land Use, P-12. Local governments may develop transfer of development rights (TDR) programs that allow land owners to transfer the development right from one parcel of land to another. The purpose of these TDR programs would be to ensure the efficient use and conservation of agricultural lands, to support open space values, and to protect sensitive environmental areas within the Primary Zone. This purpose would be achieved by relocating development rights within the Primary Zone to more suitable areas such as adjacent to or within existing urban areas within or outside of the Primary Zone, or to provide expanded opportunities for affordable farm worker housing. TDR programs shall ensure that the transferred development density does not exceed the development density identified for the zoning for the sending parcel, and that any farm worker housing is restricted and regulated for that purpose. The land upon which the development rights are transferred from would be restricted with a permanent conservation easement. Receiving areas must have the infrastructure capacity, public services and utilities to absorb the new development.

Ag, P-2, Conversion of land to non-agriculturally-oriented uses should occur first where productivity and agricultural values are lowest.

Ag, P-3, Promote recognition of the Delta as a place by educating individuals about the rich agricultural heritage, the unique recreational resources, the biological diversity, and the ongoing value of maintaining a healthy agricultural economy in the Delta.

Ag, P-4, Support agricultural programs that maintain economic viability and increase agricultural income in accordance with market demands.

Ag, P-5, Local governments shall encourage implementation of the necessary plans and ordinances to: maximize agricultural parcel size; reduce subdivision of agricultural lands; protect agriculture and related activities; protect agricultural land from conversion to non-agriculturally-oriented uses.

Ag, P-9, Support agricultural tourism and value-added agricultural production as a means of maintaining the agricultural economy of the Delta.

Rec, P-3, Assess the need for new regional public and private recreation and access facilities to meet increasing public need, and ensure that any new facilities are prioritized, developed, maintained and supervised consistent with local, state, and federal laws and regulations. Ensure that adequate public services are provided for all existing, new, and improved recreation and access facilities.

A5-1

Diane Nguyen
April 23, 2014
Page 3

Rec, P-4, Encourage new regional recreational opportunities, such as Delta-wide trails, which take into consideration environmental, agricultural, infrastructure, and law enforcement needs, and private property boundaries. Also, encourage opportunities for water, hiking, and biking trails.

A5-1

In addition, Senate Bill 1556 (Torlakson) directed the Commission to develop and adopt a plan and implementation program for a continuous regional recreational corridor, the Great California Delta Trail, that will extend throughout the five Delta Counties, including San Joaquin County, and link to the San Francisco Bay Trail and Sacramento River Trails. The current Project EIR, Chapter 4.12.2: Transportation covers State Regulatory Settings and should mention the Great California Delta Trail since it encompasses a portion of San Joaquin County. Potential language can include the following:

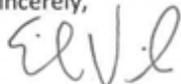
The Great California Delta Trail System (SB 1556)
Existing law establishes the Delta Protection Commission to preserve, protect, maintain, and enhance the Sacramento-San Joaquin Delta region's environmental resources and quality, including preserving and protecting agriculture, wildlife habitats, open spaces, outdoor recreational activities, public access, and use of public lands. This bill would additionally require the Delta Protection Commission to establish a continuous recreation corridor, including bicycle and hiking trails, around the five county region of the Delta, as defined.

A5-2

Currently, the Commission is working on the *Blueprint Report for the Great California Delta Trail in Sacramento, San Joaquin, and Yolo Counties*. Coordination with the Commission's Delta Trail planning process should be made to ensure that pedestrian and bicycle lanes/routes/trails in San Joaquin County's Regional Transportation Plan are linked or incorporated into this regional trail network; thus increasing connectivity for commuters and recreationists.

Thank you for the opportunity to provide input. Please contact Raymond Costantino, Associate Environmental Planner at (916) 375-4534, if you have any questions about the comments provided herein.

Sincerely,



Erik Vink
Executive Director

cc: State Clearinghouse in the Office of Planning and Research

Letter No. A5: Delta Protection Commission

Delta Protection Commission
2101 Stone Blvd, Suite 210
West Sacramento, CA 95691
Ms. Erik Vink, Executive Director
April 23, 2014

Response A5-1

The commenter provides several policies that apply to the RTP/SCS. The comment does not specifically relate to the Draft EIR. Nonetheless, the policies have been incorporated into the Final EIR to ensure consistency. Please see **Chapter 2.0, Corrections and Additions**.

Response A5-2

The commenter provides language on the Great California Delta Trail. This language has been incorporated into the Final EIR. Please see **Chapter 2.0, Corrections and Additions**.

DEPARTMENT OF TRANSPORTATION

DISTRICT 10 DIRECTOR

P.O. BOX 2048

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*Serious drought.
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April 29, 2014

10-SJ-Variou
Draft Program Environmental
Impact Report for the 2014
Regional Transportation
Plan/Sustainable Communities
Strategy
SCH #2013022012

Ms. Diane Nguyen, Deputy Director
San Joaquin Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

Dear Ms. Nguyen:

Below are some additional comments received from our Environmental Division; my apologies for submitting these comments after the April 23, 2014, comment due date. We hope you will still be able to consider them. The California Department of Transportation (Department) appreciates the opportunity to review the Draft Program Environmental Impact Report (DPEIR) for the San Joaquin County 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The Department offers the following additional comments:

Environmental

Executive Summary Mitigation Measures, Cultural Resources:

- Please include definitions for a qualified architectural historian, archaeologist, and paleontologist at the beginning of CR-1, CR-3 and CR-4 as appropriate.
- Change all references to the “Southern San Joaquin Valley Information Center (California State University Bakersfield)” to the “Central California Information Center (California State University Stanislaus)”. The information center in Bakersfield does not contain records for San Joaquin County; they house records for Fresno, Kern, Kings, Madera and Tulare counties. San Joaquin County is housed at the Central California Information Center.

A6-1

*“Provide a safe, sustainable, integrated and efficient transportation system
to enhance California’s economy and livability”*

- Page 2.0-31, Mitigation Measures CR-3 – after the first bullet please add a second bullet stating:

Contact the Native American organizations and/or individuals on the list provided by the Native American Heritage Commission and conduct follow-up phone calls as recommended in the Native American Heritage Commission response.

- Page 2.0-31, third bullet – change beginning to “If significant or sensitive cultural resources have been determined to be present within project limits, implementing”
- Page 2.0-32, CR-3 bullet 2 – add reference to CEQA Section 15064.5(f).
- Page 2.0-32, CR-3 bullet 2 – change “professional archaeologist” to “qualified archaeologist”, for consistency.
- Page 2.0-32, CR-4 third sentence – change to “...particular lithologic unit formation have been determined to be unique or likely to contain unique or significant paleontological resources.”
- Page 2.0-33, Impact CR-4 – add Health and Safety Code Section 7050.5
- Page 2.0-33, under Mitigation Measures, change reference from “CR-2 and CR-4” to “CR-3” only; CR-2 is about sharing information between regulating agencies and CR-4 has to do with paleontological resources. Both of these are not applicable to mitigation relating to the discovering of human remains; CR-3 is the mitigation measure that addresses discoveries.
- Page 2.0-33, CR-5 – the correct Public Resource Code is Section 5097.98. Please change 5097 to read Section 5097.98.
- Page 2.0-33, under Residual Impacts, change “CR-2, CR-4, and CR-5” to CR-3 and CR-5”.
- Page 2.0-33, CR-5 – The procedures for treating unanticipated discoveries of human remains of Native American origin are clearly laid out in CEQA Section 15064.5(e) and Public Resource Code Section 5097.98. The mitigation measure CR-5, as stated, misinterprets the law and incorrectly outlines the procedures to be followed. We recommend simply rewriting the measure using the wording provided in CEQA Section 15064.5(e) to avoid any potential conflicts. Please note, the coroner does not make recommendations for the disposal of the remains, the Most Likely Descendant (MLD)

A6-1

*“Provide a safe, sustainable, integrated and efficient transportation system
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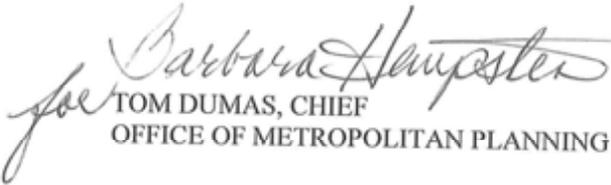
Ms. Diane Nguyen
April 29, 2014
Page 3

will do that in consultation with the Land Owner. The coroner has 24 hours to call the Native American Heritage Commission (NAHC) at which time the NAHC will contact the appropriate MLD, and then the MLD has 48 hours to inspect the site and make recommendations. Please refer to PRC Section 5097.98 for additional details. Also, a Native American Monitor is not the same thing as the Most Likely Descendant. Native American Monitors do not have the ability to direct archaeological work; they are there to observe, consult, and work with the archaeologists, but they cannot take the place of a qualified archaeologist. Again, we suggest using the language as written for the laws dealing with the discovery of Native American remains in order to avoid incident.

A6-1

If you have any questions, please contact Barbara Hempstead at (209) 948-3909 (e-mail: Barbara_Hempstead@dot.ca.gov) or myself at (209) 941-1921.

Sincerely,


TOM DUMAS, CHIEF
OFFICE OF METROPOLITAN PLANNING

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Letter No. A6: Caltrans

California Department of Transportation
P.O. Box 2048
Stockton, CA 95201
Ms. Barbara Hempstead, Office of Metropolitan Planning
April 29, 2014

Response A6-1

Please refer to **Section 2.0, Corrections and Additions** for revisions to the Program EIR in response to the provided comments.

DEPARTMENT OF TRANSPORTATION
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Serious drought.
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April 23, 2014

10-SJ-Various
Draft Program Environmental
Impact Report for the 2014
Regional Transportation
Plan/Sustainable Communities
Strategy
SCH #2013022012

Ms. Diane Nguyen, Deputy Director
San Joaquin Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

Dear Ms. Nguyen:

The California Department of Transportation (Department) appreciates the opportunity to review the Draft Program Environmental Impact Report (DPEIR) for the San Joaquin County 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Department offers the following comments:

Traffic Operations

Pages 2.0-45 to 2.0-46 of the Summary Table of Project Impacts and Mitigation Measures

- The Significant Threshold and Project Impacts column discusses roads and highway congestion, level of service (LOS), etc. The Residual Impacts column indicates these impacts would remain significant and unavoidable. In order to reduce congestion and provide an acceptable LOS on our State Facilities, certain improvements such as implementation of Auxiliary Lanes, Ramp Metering and High Occupancy Vehicle (HOV) preferential lanes and Park and Ride facilities need to be considered and mentioned in the Mitigation Measures column.
- Any projects within the San Joaquin County area may cause a significant impact to State Routes. These impacts will need to be mitigated to a level of less than significant. As the planned projects within the influence area of the State Highway System (SHS) move forward, a detailed traffic analysis for each development will be required. Please refer to

A7-1

*“Provide a safe, sustainable, integrated and efficient transportation system
to enhance California’s economy and livability”*

Ms. Diane Nguyen
April 23, 2014
Page 2

the "Guide for the Preparation of Traffic Impact Studies" developed by Caltrans, in order to determine impacts and mitigations to the affected State Highway System.

A7-1

If you have any questions, please contact Barbara Hempstead at (209) 948-3909 (e-mail: Barbara.Hempstead@dot.ca.gov) or myself at (209) 941-1921.

Sincerely,


for TOM DUMAS, CHIEF
OFFICE OF METROPOLITAN PLANNING

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Letter No. A7: Department of Transportation

Department of Transportation
District 10 Director
P.O. Box 2048
(1976 Dr. Martin Luther King Jr. Blvd. 95205)
Stockton, CA 95201

Response A7-1

The RTP/SCS includes numerous strategies to reduce congestion and improve LOS on state facilities. Strategies such as auxiliary lanes, ramp metering, high-occupancy vehicle (HOV) lanes and park and ride facilities are included within the Plan. The commenter is referred to the RTP project list included in the RTP. Further, the RTP includes measures beyond roadway measures, page 4.12-59 of the Draft Program EIR states:

Measures intended to reduce vehicle travel and improve LOS are part of the 2014 RTP. These include increasing transit use ridesharing and other measures to reduce demand on the transportation system; investments in non-motorized transportation; seeking to optimize land use/transportation connection; other travel demand measures described in in local agency General Plans; and key roadway investments targeted to reduce congestion levels and improve LOS.

Please see **Chapter 2.0, Corrections and Additions** for changes to Mitigation Measure TRANS-1.

The commenter also provides direction for projects which may cause significant impacts to State Routes. These comments relate to procedures for project specific development and do not relate to environmental issues or the Program EIR. No further response is necessary.



April 23, 2014

Via e-mail

Diane Nguyen, Deputy Director
San Joaquin Council of Governments
555 E. Weber Avenue, Stockton, CA 95202
Email: nguyen@sjcog.org

April 23, 2014

RE: Comments on the Initial Draft 2014 Regional Transportation Plan & Sustainable Communities Strategy and associated Draft Programmatic Environmental Impact Report

Dear Ms. Nguyen:

The Mother Lode Chapter of the Sierra Club submits these comments, along with the two attachments to this letter, in response to the San Joaquin Council of Governments' (SJCOG's) Initial Draft 2014 Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS) and the associated Draft Programmatic Environmental Impact Report (DPEIR).

We expect the staff and EIR consultants to respond in detail to all of the specific, detailed comments contained in this letter and the attachments, and to share the staff responses to the public in a timely fashion before any final public hearings and approvals of the two documents. Please send the responses to these EIR comments to me directly via my listed e-mail below.

These comments are directed to our concerns about the greenhouse gas emissions and vehicle miles traveled calculations contained in the Plan and DPEIR, and the lack of effective mitigation measures to achieve the GHG reduction targets required by State law. The attached Technical Memo provides more detailed analysis of the Plan and the DPEIR that supports the comments contained in this letter.

The Region Must Decrease, Not Increase, GHG Emissions Related to Auto Travel Over Time

Under the draft RTP/SCS, from 2012 to 2040, greenhouse gas (GHG) emissions from mobile sources are projected to rise by 71%, or 12.8% per capita (EIR Table 4.7-4), and Vehicle Miles Traveled (VMT) for all trips would rise by 58%, or 4.0% per capita from 2012 to 2040 (EIR Table

B1-1

B1-2

4.12-3). (The per capita increase takes into account population growth over the period as opposed to the real GHG increase measured over the same period.)

Such an increase is inconsistent with the intent of SB 375 and with SB 32 (Executive Order S-03-05). That Executive Order requires statewide GHG reductions to reduce emissions 80% below 1990 levels by 2050. SB 375's GHG reduction targets are 5% by 2020 and 10% by 2035.

As SB 375 makes clear, the State cannot meet its goals if transportation-related GHG continue to rise. Transportation is responsible for approximately 40% of the State's climate emissions (1990-2004).¹ To do its part, this Plan must ensure a steady decline in projected GHG and VMT, but it does not.

B1-2

Neither the Plan nor the DPEIR highlights this inconsistency with the Executive Order S-03-05 as a potentially significant impact.

In a recent legal decision regarding Regional Transportation Plans during the post-SB 375 era (*Cleveland National Forest Foundation, et al., v. San Diego Association of Governments*, Superior Court, San Diego County), Judge Timothy Taylor explained in detail why San Diego's short-term GHG decrease followed by a long-term rise in GHG was inconsistent with the Executive Order (see ruling attached). The case is under appeal, with a decision tentatively expected this summer.

The Plan and DPEIR Must Effectively Mitigate Any Projected Increase in GHG or VMT

B1-3

The DPEIR does acknowledge that increases to greenhouse gases and VMT are significant. But the mitigation measures recommended by the DPEIR are few, vague, lack enforcement, cannot be measured, and are at times are misdirected.

For example, to mitigate projected increases in GHG, Mitigation Measures GHG-1, GHG-2, and GHG-3 include updating future RTPs to reflect local policy changes and exhortations as to what local governments and implementing agencies "should" do. Mitigation Measure TRANS-1 calls for funding improvements that will increase the level of service, which in turn will increase, not reduce, auto travel, hardly a measure to reduce anticipated GHG emissions. Mitigation Measure TRANS-2 vaguely explains that the COG should "continue to explore potential measures to reduce vehicular travel, including such measures as land-use strategies, carsharing programs, additional car- and vanpool programs, additional bicycle programs." TRANS-3 states that local agencies "should" evaluate VMT for projects and implement measures that reduce VMT. TRANS-4 "should" work with agencies "to identify and encourage changes that would increase use of alternative transportation and other means to reduce congestion."

B1-4

These mitigation measures are inadequate to mitigate the identified significant impacts because they are vague, unenforceable, and their success (or failure) cannot be measured over time to gauge their effectiveness. If COG believes these measures can be effective in reducing projected GHG emission over time, the Plan and PDEIR should quantify how much GHG reduction can be projected due to each specific mitigation program or strategy and explain how each strategy will be monitored over time.

¹ Source: California Energy Commission. INVENTORY OF CALIFORNIA GREENHOUSE GAS EMISSIONS AND SINKS: 1990 TO 2004. Staff Report Publication # CEC-600-2006-013

In San Diego, Judge Taylor explicitly rejected measures that encourage action by local agencies, pointing instead to the “purse string control SANDAG has over TransNet funds.”

Similarly, San Joaquin COG has “purse string control” over the planning and funding of regional and local transportation improvement projects. This SJCOG function can be a very effective mechanism to encourage smart growth projects that contribute to GHG emission and VMT reductions and discourage projects that do not conform with the GHG and other goals of the Plan.

B1-5

The SJCOG has been very reluctant to exercise this function in the past for fear of being accused of usurping local land use authority. However, that is not the issue before us now. (In fact, the DPEIR admits that the Plan will affect land use in the County when it states "Although a similar level of development is anticipated even without the RTP/SCS, this Plan would influence growth, including distribution patterns, throughout San Joaquin County" (p. 4.7-23 in the DPEIR). Other COGs in the State are using the SCS process to redefine the relationship between the COGs and local agencies, and the SJCOG must also explore new policies and programs consistent with State law, to comply fully with SB 375 and AB 32.

For example, the Metropolitan Transportation Commission and the Association of Bay Area Governments through development of their region’s SCS Plan Bay Area have initiated a number of new policies and programs that may serve as model for the San Joaquin SCS. These policies designate “priority development areas” which direct where and when regional transportation funds are distributed.

The SJCOG Plan and DPEIR should seriously consider establishing a similar “priority development areas” program to direct funding. The Plan and DPEIR should also analyze mitigation programs that would: prioritize and accelerate spending on non-auto transportation projects; propose an alternate split of funds for any Measure K expansion; and provide local agencies with greater incentive grants that support infill and compact development early on when their impact will be maximized.

B1-6

The SJCOG Plan and DPEIR should examine what innovative programs other COGs in the State are considering and determine if they could be applied here.

More Analysis is Needed to Explain Apparently Contradictory GHG Results

The plan has very high SB 375 GHG reductions, reportedly the largest of any region in the state. How can the region be increasing GHG and VMT from 2012 to 2040, while also reducing SB 375 GHG by more than any other region in the State from 2005 to 2035? A clear explanation is needed for this counter-intuitive result. SB 375 requires MPOs to “disseminate the methodology, results, and key assumptions of whichever travel demand models it uses in a way that would be useable and understandable to the public.” This travel model result is currently not understandable. Without more information, the public does not know how to interpret this apparent discrepancy.

B1-7

SB 375 GHG Reduction Targets Should be Achieved Via Improvements in Land Use and Transportation Policy

The intent of SB 375 is to reduce GHG emissions by reducing car travel. The GHG targets are to be achieved via the development pattern, transportation measures, and other transportation measures and policies – not external circumstances outside of regional and local control (Cal. Govt. Code

Section 65080(b)(2)(B)(vii)). The findings associated with the bill explain that “without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.”

Yet, no data is provided in the Plan to explain what portion of the GHG reductions come from transportation policies and land use versus other factors, some of which may be external and circumstantial. In fact, the vast majority of reductions may not be due to policy changes. The “Business as Usual” scenario shows a 22.1% GHG reduction while the proposed Plan has a very similar 23.8% reduction [Table M-2], suggesting that the Plan may simply result in GHG reductions of 2% to 3% (compared to “no project” or “Business as Usual”). This 2% to 3% reduction would not be consistent with SB 375 reduction targets of 5% by 2020 and 10% by 2035.

Other indicators support this concern. The percentage of travel by transit, walking, and biking is projected to actually decline (!) between 2012 and 2040 (EIR Table 4.12-3). Average trip length in 2040 would be longer under the Plan (8.62 miles) than under a Business as Usual scenario (8.54 miles) (Table M-2). The Plan does not appear to reduce the amount of driving length and time for future residents nor does the Plan ensure that non-auto travel modes are more available and easier to access than current conditions.

Summary

In conclusion we strongly recommend:

- The final Plan and PDEIR must be revised and improved with detailed strategies to ensure that VMT and mobile source GHG show an ongoing decline from 2012 to 2020 to 2035 to 2040 (measured, at a very minimum, by per capita change).
- The final Plan and PDEIR must explain how SB 375 GHG reductions are reached and ensure that the policy-driven reductions equal at least 5% by 2020 and 10% by 2035 per capita compared to 2005 levels.
- Where a long-term decline cannot be achieved, such as for total mobile source GHG, the Final Plan and PDEIR must explain how adopted mitigation measures will leverage the COG’s “purse strings” control over funding for local and regional transportation improvements projects to achieve the targets.
- Finally, the final Plan should be improved such that bicycle and pedestrian mode share and transit mode share increase from 2012 to 2040.

B1-8

Thank you for your attention to these issues and your consideration of our comments. Please send the responses to these EIR comments to me directly via my listed e-mail below, and send responses to those other parties that are copied in this letter.

Yours truly,

/s/ Eric Parfrey
Executive Committee
Mother Lode Chapter
parfrey@sbcglobal.net

cc: San Joaquin COG Board of Directors
Stockton, Lodi, Manteca, Tracy, Lathrop, Ripon City Councils and staff
State Attorney Generals Office, Lisa.Trankley@doj.ca.gov
Rachel Hooper, Hooper@smwlaw.com, Amy Bricker, Bricker@smwlaw.com

Technical Memo

TO: San Joaquin Council of Governments' (SJCOG) Board of Directors
FROM: David Ausherman and Pete Hathaway
DATE: April 16, 2014
RE: SJCOG 2014 Draft Regional Transportation Plan (RTP)

We are writing to share our analysis of the draft 2014 Regional Transportation Plan (RTP). This analysis was commissioned by the San Joaquin Sustainable Communities Coalition to aid the San Joaquin Council of Governments (SJCOG) in creating a strong Regional Transportation Plan that achieves the region's goals. In addition to the draft RTP, we reviewed detailed geographic data provided by COG staff in response to a data request, the 2011 RTP, recent Measure K annual reports, and numerous COG studies. We commend San Joaquin Council of Governments' track record of thorough, thoughtful planning. This plan is among the best in the San Joaquin Valley. It increases transit service and builds a solid Bus Rapid Transit (BRT) system over time; includes infill growth in Stockton and Lodi; improves Altamont Commuter Express (ACE) service; contains some incentives for compact growth patterns and town centered development in some cities; and recognizes the need for more funding for road maintenance, transit, and active transportation. However, it could go further to advance economic development, meet housing market trends, and spend scarce transportation funds more effectively.

We respectfully offer the following comments as a brief summary of our conclusions and would be happy to provide further detail on any of these comments.

Improve the land use scenario

Federal law requires that RTPs be based on land uses "reasonably expected to be built." After comparing the plan to studies on market demand, our conclusion is that this scenario:

- **Does achieve an appropriate balance between single family and multifamily:** Its mix of roughly 60% single family and 40% multifamily meets the market demand estimates from the San Joaquin Valley Higher Density Residential Housing Market Study. Planning realistically to meet the demand for apartments and townhomes is a positive step for the region's housing affordability.
- **Underestimates the future demand for walkable, mixed-use neighborhoods:** The 2013 Community Preference Survey by the National Association of Realtors found that 60% of Americans want to live in mixed-use, walkable communities. Yet in 2040, only 30% of homes and 22% of jobs would be in walkable neighborhoods, according to a RapidFire analysis of this plan.
- **Underestimates the future demand for transit-oriented development:** Under this plan, fewer than 24% of households will be within half a mile of quality transit service in 2040. *A Home for Everyone: San Joaquin Valley Housing Preferences and Opportunities to 2050* (Arthur C. Nelson, Council of Infill Builders, 2013: councilofinfillbuilders.org/resources/valley-housing.html) shows that statewide, even if all new homes built to 2035 were built as transit-oriented development (TOD), there still would be demand for more than a million

additional units. It is likely not possible to overbuild quality walkable, transit-oriented communities in California in the next three decades.

- **Underestimates the future demand for infill growth within existing communities large and small:** This plan would build only 15% of new homes as infill and 29% of new jobs (per staff communication). More infill is key to build the walkable communities needed.
- **Overestimates the long-term demand for auto-oriented suburban commercial product types:** It appears that approximately 65% of new employment growth in San Joaquin will be built to be auto dependent. For instance, a large share of retail will be Arterial Commercial (ie, strip commercial) and Regional Retail (ie, “big box” retail). With market demand studies showing that all new growth could be walkable and transit oriented and still not meet demand, this degree of continued automobile orientation could stifle the nascent economic recovery of the region.
- **Overestimates demand for large lot single family homes:** The roughly 27% of growth planned as large lot single family homes does not adequately reflect the concerns expressed in *A Home for Everyone* (Nelson 2013), which shows negligible demand for additional large lot homes over coming decades, as this product type has recently been over-built.
- **Warns of the impending loss of agricultural land and natural resources:** Over 40 additional square miles of prime San Joaquin County land, including some of the most productive farmland in the world, will be developed under this draft plan. With more focus on infill development and less focus on building large-lot single-family homes, this number could feasibly be cut in half. Doing so would also serve to bring communities closer to destinations, resulting in decreased Vehicle Miles Traveled (VMT), air pollution, fuel consumption, and adverse effects on public health.

Therefore, we would encourage the COG and local agencies to work together to:

- **Boost the homes and jobs planned within existing communities and near transit.** Targets would be 25% of dwelling units and 45% of jobs as infill, and 35% of homes and 55% of jobs in high-quality transit areas, perhaps using the Smart Growth Transit Oriented Development plan (2004) sites. Three allocation categories, Office Park, Medical Office and Public Office, accounted for 1/3 of the employment allocation. All, or most of these, could easily be fit into existing neighborhoods as infill products, eliminating much of the need for auto-dependent office parks.
- **Reduce single-use suburban product types.** Identify locations in this scenario that are currently planned for single-use residential, office, or retail developments where local general plans or “planned unit development” practices would allow a developer to build a walkable, town-center style mixed use neighborhood.
- **Increase mixed-use and walkable development.** Widely distribute walkable types, like Main Street, in 1-3 acre allocations to serve compact neighborhoods and intercept non-work trips. Small neighborhood centers could be added to the residential neighborhoods to capture some auto trips internally. (Currently, Main Street is sometimes allocated far from neighborhoods in large areas exceeding 30 acres.)
- **Plan for shopping in walkable neighborhoods close to residents.** With the retail sector only comprising about 14% of total regional employment growth, it is important to distribute retail space widely as a part of walkable development, not concentrate it in auto-oriented retail centers. There simply will not be enough growth in the retail sector to support both

strategies. This is consistent with market trends, as former strip commercial and malls are already converting to mixed-use.

- **Convert some large-lot single family to compact single family.** Some of the suburban residential could be changed to Compact Neighborhood Low. This is a more walkable development type than the Suburban Residential, and could effectively be paired with a local walkable Main Street node.

Integrate Land Use and Transportation Planning

Better planning to meet demand for walkable neighborhoods would, we believe, make better use of the planned transportation investments and improve this plan's performance on key indicators. Unfortunately, because this plan underestimates the demand for walkable neighborhoods with homes and jobs built in existing communities and near transit, its indicators currently fall short:

- **Public transit use declines:** In 2040, a smaller share of trips will occur via public transit than today. In 2012, 2.09% of trips occur via public transit. This falls to 1.96% with the plan.
- **Walking and biking declines:** Mode share for bicycle and walking trips also falls slightly, from 4.16% (2012) to 3.91% (2040). (EIR Table 4.12-3)
- **Driving increases:** Instead, every day, the average household will have to drive more. Daily per capita VMT increase from 25.67 to 26.71.
- **Transportation costs stay high:** Under this plan, the average household's costs would decline by only 0.26% compared to business as usual.
- **Greenhouse Gas (GHG) Emissions per capita increase:** While the Plan states that it will reduce SB 375 emissions per capita by 23.8% from 2005 by 2040, the EIR also shows that total mobile source GHG/capita will increase, from roughly 4.6 to 5.6 MTCO₂e/yr (Metric Tons of Carbon Dioxide Equivalent per Year, based on EIR Tables 6.0-11, 6.0-12, Table 1 of Appendix 4.5, and official estimates of population for 2005). More information on the SB 375 VMT and GHG reductions would be a helpful addition to this plan.
- **VMT (and thus GHG) trends upward:** This plan shows a long term upward trend in *total* Vehicle Miles Traveled (VMT) per capita from 25.7 to 26.7 weekday miles per capita from 2012 to 2040 under the Plan. The relationship between VMT and GHG is nearly 1:1 under AB 32 and SB 375, so this suggests that the Plan may not be doing enough to provide alternatives to auto travel within and through the county, support compact land use patterns via strategic transportation investments, and help the state meet its long term GHG goals.

San Joaquin County must integrate land use plans with transportation investments for the region to reach its goals. A plan that met market demand for infill and walkable communities would perform better on these indicators. The plan notes that land use is one of “the two most effective means of achieving increased transit usage, congestion management, and auto-related air quality goals for the region” (Appendix L, p. 12-29). To accelerate progress towards its goals, the COG should improve the scenario as described above, and outline short- and long-term actions to integrate land use and transportation plans. The plan identifies *strategies* (e.g., “Strategy 6: Facilitate Transit-Oriented Development to Maximize Existing Transit Investments”) but few actions. These could be outlined in the main RTP and further detailed in Appendix L (Modal Discussion). While the COG has no land use authority, actions could include:

- Adopt a policy that prioritizes local transportation projects that support infill, compact, and town center development patterns,

- Enact a Street Connectivity Policy, which specifies that streets should connect to create a network rather than end in cul-de-sacs; an interconnected network of streets has been shown to be more conducive to bicycle & pedestrian travel, as well as effective at reducing congestion,
- Update the Regional Smart-Growth Transit-Oriented Development Plan,
- Conduct a market demand study focused on the Community Action Centers identified in the Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan,
- Restructure the Regional Traffic Impact Fee to reward development projects with lower traffic impacts, and build projects that use walking, cycling, and transit to reduce congestion,
- Create a Regional Bicycle & Pedestrian Program, funded at sufficient levels, to which locals could apply for funds annually to plan and construct local bicycle & pedestrian projects,
- Educate stakeholders about the high cost of free parking and best practices in parking policy,
- Educate stakeholders about the importance of preserving affordable homes near transit

Increase and Frontload Key Transportation Investments

The best opportunity to advance the region's goals is to spend its \$11 billion in transportation dollars wisely. This new plan should focus on building San Joaquin's own home economy for people of all incomes. However, the Draft 2014 RTP's project list looks mostly like it did in the 2011 RTP, continuing to support auto-dependent land uses and commuting to the Bay Area. This plan needs more balance, by investing more in local jobs in walkable communities. To this end, we offer three comments:

Provide greater clarity around the timing and funding for key investments. Whether an investment gets made depends on its funding source. Once made, it takes time to come to fruition. Yet too often this plan does not identify when crucial investments will occur nor outline which funds support which activities.

- This plan should include two additional financial summary charts to better explain which funds get spent where, and which parts of the plan depend on new revenues. Samples of this needed information are attached. (Note that these are samples, with some numbers taken directly from the RTP and others estimated with the best information available.)
- The project list lacks target completion dates for many bicycle and pedestrian improvements, and the timing of the Smart Growth Incentive Program. This information should be added.

Prioritize and frontload funds for transit, walking, biking, smart growth, and walkable neighborhoods. Active transportation and transit investments in existing communities can catalyze and support infill. At this time little comment can be made about the timing of active transportation projects and smart growth incentives. This raises a concern that they will occur later in the plan. The sooner they occur, the greater the impact they will have on growth and economic development in the county.

The COG had great success using the Measure K Renewal Early Action Program to accelerate high priority state highway projects, leveraging state and federal dollars. Now we face different conditions in both development trends and transportation fund availability. During that time, other Measure K spending categories were deployed more slowly. Expenditures from 2010 through 2013 appear to include a smaller percentage for active transportation and smart growth

than their share of the 2011 RTP. The COG has offered only one \$1.5m round of Smart Growth Incentive grant-making, although it needs to average \$2.0-\$2.5m per year to spend its \$65m budget over 30 years. The Early Action Plan used bonds to accelerate the construction of highway projects, but so far the COG has not done the same for streetscape, bicycle, and pedestrian infrastructure. We recommend that the COG:

- Establish an Early Action Plan to frontload spending on active transportation, transit infrastructure (for which operations funding is available), and Smart Growth Incentives. This plan could leverage the increasing number of state and federal funding programs that focus on active transportation, transit, and sustainable communities. It could bond against future revenues where appropriate.
- Give priority to serving walkable, transit-oriented mixed use development areas when investing COG controlled funds. Give priority for active transportation projects that specifically improve first-mile/last-mile local access over long range biking, though ideally funding both.
- Establish policies that align the timing of transportation investments with developments. Build local road and interchange expansion projects only in response to greenfields developments, not to anticipate them. Given the oversupply of large lot suburban development and the number of road projects in the first fifteen years of this plan, it seems that many of the local arterial and interchange projects may be scheduled prematurely.

Support new revenues, especially for road maintenance, transit operations, and active transportation. Overall, San Joaquin's draft 2014 RTP revenue estimates and financial plan appear reasonable and appropriate. The plan forecasts \$11 billion in revenues over 26 years, a mild rise compared to the last plan, with 88% from existing sources and 12% from a proposed new ¼% supplemental sales tax measure. Without the new revenue, San Joaquin would face a \$250 million funding shortfall that could cut short completion of Measure K's voter-approved program. The tax is a reasonable way to address the shortfall and could be a positive step for the county. In developing the spending plan, the highest priority for expenditure should be funds for road maintenance, transit operations, active transportation, and smart growth incentives, as well as cutting-edge ideas such as free youth bus passes and regional advanced mitigation for projects' unavoidable environmental impacts.

Better Analyze and Meet Environmental Justice Communities' Needs

The implementation of SB 375 in the San Joaquin Valley offers an opportunity for future residential and commercial growth to be accommodated in a manner which invigorates disadvantaged communities. As noted in a memo from the UC Davis Center for Regional Change, the Environmental Justice Appendix of the SCS/RTP does not conclusively show that the San Joaquin County SCS/RTP will result in equitable outcomes for low-income and minority households.

About half of San Joaquin County residents live where a typical household would spend over 60% of their income on housing and transportation, according to the Center for Neighborhood Technology's Housing + Transportation Index. But the proposed plan would only decrease transportation costs by 0.26% compared to business as usual. This cost burden may fall particularly heavily on low-income households, particularly those that must own one or more

vehicles. In San Joaquin County, these households are often located in areas with fewer low wage jobs than affordable homes and low job growth rates. Residents may have difficulty accessing jobs and services, particularly if they don't have access to a vehicle and live in an area that is not well served by transit. Low-income households may also be heavily burdened by transportation costs.

The current EJ analysis captures nearly 60% of the county's population, but some of these communities experience greater disadvantages and have greater needs. Additionally, disadvantages and needs do not always track perfectly with income levels and race/ethnicity (which is the focus of the EJ analysis). An assessment of San Joaquin County communities with elevated health and infrastructure needs would help to identify areas where the need for investment is greater, and where transportation investments may have a greater impact.

If additional analysis of the SCS/RTP shows that it results in disparities in EJ communities, mitigations should be explored. Even if disparities are not observed along income and race/ethnicity lines, directing a portion of investments into communities identified through a needs assessment (as described above) could help to strengthen those communities. Potential actions could include targeted investments in EJ communities or areas with greater health and infrastructure needs, measures aimed at reducing transportation costs (particularly for low-income or minority households or communities with greater needs), and investments in transportation infrastructure used by low-income and minority residents or communities with greater needs.

For example, low-income and minority residents of San Joaquin County disproportionately use bus transit (including BRT) and bike/pedestrian modes, while they are less likely to use roads and rail transit (ACE). The current plan reserves funds for ACE expansion that may not be realized in the near future. These funds might be used to advance BRT and/or increase local bus service frequency. It may also be desirable to leverage any additional funds that can be used for transit operations in the near future (e.g. before 2025).

Forecast and Track Progress

Federal and state transportation policy ask transportation models to forecast performance on a wide range of metrics. Unfortunately, this plan's performance measures obscure whether things are getting better or worse because they compare to "business as usual" projections instead of current conditions. Regions around California are upgrading their models to project future performance on key metrics. San Joaquin COG should continue to do that in future plans. Finally, the plan should outline how it will track its performance moving forward. The 2011 RTP had concrete goals, objectives, and performance measures. This RTP might include an appendix tracking progress against its 2011 goals to this plan.

Biographies

David Ausherman has extensive experience in large scale design, urban and regional planning and computer modeling. His experience includes both public and private sector design projects from site to regional scales. Most notably, David has been involved in several large-scale regional scenario planning and visioning initiatives including Region 2040, a plan for the Portland region that included land use, transportation and open space planning for a 50-year forecast, Envision Utah, Chicago Metropolis 2020, Envision Central Texas, and the Southern California Association of Governments' COMPASS Blueprint. David completed his master's degree in Design Studies from Harvard University and his undergraduate degree in Landscape Architecture from the University of Florida.

Peter Hathaway has a career in transportation planning and finance spanning 40 years. Most recently he was Director of Transportation Planning at the Sacramento Area Council of Governments (SACOG). Previously, Mr. Hathaway worked for 16 years at the California Transportation Commission (CTC), four years at the Governor's Office of Planning and Research and seven years at the California Department of Transportation (Caltrans). A graduate of Union College, Schenectady, New York, he is a veteran of the United States Army. At SACOG, Hathaway managed transportation planning, programming and project delivery programs. He supervised two groundbreaking Metropolitan Transportation Plans: in 2002, the "Bold First Step" prepared by a broad-based Transportation Roundtable that included the establishment of four new regional funding programs including Community Design, and in 2008, "A Creative New Vision" directly linking the region's Blueprint to transportation planning and setting new standards for congestion, vehicle miles traveled and air quality performance.

Technical Tables Requested

The following two tables illustrate information that we suggest be provided to stakeholders in advance of adopting the final RTP. These financial tables are provided **for illustrative purposes only**. They include actual values when available, but when not available, **contain estimates and approximations**.

San Joaquin Draft 2014 RTP					
2015-2040 Financial Chart #1 - Estimates taken from RTP - (\$\$ in millions)					
Funding Sources	Road	All	Road	Active	TOTAL
	Maintenance	Transit	Expansion	Transport	
Local/Regional Sources					
Measure K sales tax (1/2%)	\$990	\$770	\$430	\$120	\$2,310
Regional TIF (impact fees)		\$40	\$520		\$560
Supplemental new sales tax (1/4%)	\$480	\$360	\$420	\$60	\$1,320
Local gas tax	\$970				\$970
Local Transportation Fund (TDA)		\$740		\$20	\$760
Transit fares		\$420			\$420
Developer fees + General Funds			\$820		\$820
Other local sources	\$120	\$130			\$250
SUBTOTAL: Local Funds					\$7,410
Federal Sources					
Surface Transportation Program (STP)	\$460		\$70		\$530
Congestion Mitigation Air Quality (CMAQ)		\$250		\$30	\$280
Federal transit funds		\$770			\$770
Transportation Alternatives Program (TAP)				\$50	\$50
Federal earmarks			\$130		\$130
SUBTOTAL: Federal Funds					\$1,760
State Sources					
State Transportation Improvement Program (STIP)	\$40		\$520		\$560
State Highway rehab (SHOPP)	\$780				\$780
State Transit Assistance (STA)		\$40			\$40
State discretionary programs			\$260		\$260
Proposition 1B			\$100		\$100
Other state sources	\$40				\$40
SUBTOTAL: State Funds					\$1,780
TOTAL: All sources	\$3,880	\$3,520	\$3,270	\$280	\$10,950

San Joaquin Draft 2014 RTP			
2015-2040 Financial Chart #2 - Estimates Made from RTP -(\$\$ in millions)			
	Existing	New	RTP
	Funding	Funding	Total
Road Maintenance/Operations/Safety			
Local roads	\$2,280	\$400	\$2,680
State Highways (SHOPP)	\$350	\$0	\$350
Railroad Xing safety	\$170	\$20	\$190
Transportation System Management (TSM)	\$600	\$60	\$660
TOTAL: Road maintenance	\$3,400	\$480	\$3,880
		12%	
Transit Operations & Capital			
Bus service operations	\$1,440	\$0	\$1,440
Bus service capital	\$350	\$0	\$350
ACE rail service operations	\$240	\$0	\$240
ACE rail service capital	\$210	\$0	\$210
Bus expansion operations (including BRT)			\$360
Bus expansion capital (including BRT)	\$920	\$360	\$290
ACE rail expansion operations			\$260
Ace rail expansion capital			\$370
TOTAL: All Transit	\$3,160	\$360	\$3,520
		10%	
Highway & Road capacity			
State highway expansion	\$1,200	\$170	\$1,370
Local Road (including interchanges) expansion	\$1,650	\$250	\$1,900
TOTAL: Road expansion	\$2,850	\$420	\$3,270
		13%	
Active Transportation & Community Enhancements			
Active Transportation capital	\$135	\$15	\$150
Active Transportation non-capital activities	\$5	\$10	\$15
Community Enhancements (streetscapes)	\$80	\$35	\$115
TOTAL: Active Transportation	\$220	\$60	\$280
		21%	
TOTAL: Draft 2014 RTP	\$9,630	\$1,320	\$10,950
* Existing/New funding splits among subcategories are estimates, not taken from RTP			

F I L E D
Clerk of the Superior Court

DEC 03 2012

By: _____ Deputy

F I L E D
Clerk of the Superior Court

DEC 03 2012

By: A. Taylor, Deputy

**SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SAN DIEGO**

CLEVELAND NAT'L FOREST
FOUNDATION, et al.,

Petitioners,

v.

SAN DIEGO ASS'N OF GOVERNMENTS,

Respondent;

And CONSOLIDATED CASE and
COMPLAINT IN INTERVENTION BY the
ATTORNEY GENERAL OF CALIFORNIA

Case No. 2011-00101593.

**RULING ON PETITIONS FOR WRIT OF
MANDATE**

Judge: Timothy B. Taylor
Dept.: 72

Hearing: November 30, 2012

1. Overview and Procedural History.

In this CEQA case, the petitioners and the Attorney General claim SANDAG abused its discretion when it decided to certify an EIR and adopt a Regional Transportation Plan (RTP) which for the first time included a "Sustainable Communities Strategy" (SCS) ostensibly designed to meet a greenhouse gas emission reduction target as required by Senate Bill 375, Stats. 2008, Ch. 728. The parties agree this is the first RTP in California to be adopted following the 2008 legislation [AR2075; AR 04465], but they fundamentally disagree about the reach and requirements of that statute as it interfaces with the requirements of CEQA. No court has heretofore interpreted SB 375; the RTP/SCS at issue is meant to provide a blueprint for transportation planning for the next

40 years; and entities like SANDAG up and down the State are looking for guidance from this case regarding how to implement SB 375 in the context of an EIR. Thus, this court is but a way station in the life of this case, which is clearly headed for appellate review regardless of the outcome at the trial level. The case arises against a backdrop of intense scientific and political debate over what one counsel referred to as the signal issue of our time: global climate change.

Petitioners Cleveland Nat'l Forest Foundation ("Cleveland") and the Center for Biological Diversity ("CBD") filed the petition on November 28, 2011. The case was assigned to Judge Hayes, but Cleveland challenged her and the case was reassigned. Petitioners CREED-21 and the Affordable Housing Coalition ("AHC") filed a substantially similar petition, also on November 28, 2011 (ROA 42). This case, No. 2011-00101660, was initially assigned to another department, but the parties later stipulated to (and the court ordered) consolidation with the low-numbered case (ROA 41).

Cleveland and CBD filed an amended petition on 1/23/12, adding the Sierra Club as a petitioner (ROA 17). The AG sought and obtained leave to intervene on 1/25/12, and filed her petition in intervention the same day on behalf of the People (ROA 22-25).

At a CMC on 2/24/12, the parties advised the court that the Administrative Record in this case exceeds 10,000 pages in length (as it turned out, it is over 30,000 pages). In light of this, the court adopted a party-proposed briefing schedule, granted relief from brief page limits imposed by the Rules of Court, and set the matter for a merits hearing (ROA 38). SANDAG subsequently filed answers to both the Cleveland/CBD/Sierra Club amended petition and the CREED-21/AHC petition (ROA 48, 49). SANDAG also filed its answer to the AG's petition in intervention.

The Administrative Record, which is contained on a CD, was lodged on June 27 (ROA 53), having been certified by SANDAG on May 3 (ROA 45). Joint excerpts are contained in two binders, which were lodged 10/25/12. On November 19, the parties lodged a "Corrected Joint Appendix" (ROA 80); but by this time, the court had done the lion's share of its review using the joint excerpts lodged in October.

The briefing has been extensive, and as will be explained below, might have been even more extensive. On June 27, the AG filed an opening brief, an amended opening brief, and (a few days later) an errata to the amended opening brief (ROA 52, 56). Also on June 27, CREED-21/AHC filed their opening brief (ROA 54), and Cleveland/CBD/Sierra Club filed their opening brief (ROA 55). This was a total of 81 pages of briefing (not counting the AG's amendments and corrections). On Sept. 10, SANDAG filed its responsive briefs: one in response to the AG's amended brief (ROA 62), and a second in response to the Cleveland and CREED-21 briefs (ROA 61). This was a total of 95 pages of briefing.

On September 25, 2012, the court had the unpleasant experience of denying several requests for leave to file *amicus* briefs. ROA 68. Respondents recruited several *amicus*

who spent time and energy preparing extensive briefs. See ROA 59, 64. The parties and the proposed *amici* appeared on September 25 to ask the court to allow the filing of these briefs, and to set a briefing schedule for joinders and responses thereto. The court was constrained to exercise its discretion to deny all such requests; it explained its decision in two ways. First, the court is aware of its limited role here: to ensure a complete record, and to provide the parties with a timely decision so that the case may proceed promptly to appellate review. The court was concerned that allowing *amicus* briefing, joinders and responses would retard rather than advance the latter goal (particularly given that the trial court's decision will not affect the others statewide with an interest in this topic, but rather only the parties – and then only for the limited period between the decision set forth below and the issuing of a learned opinion from the 4th DCA, Div. 1).

Second, and in a related vein, the court noted that Brobdingnagian budget cuts recently suffered by the Judicial Branch have caused the San Diego Superior Court to lay off hundreds of staff, stop providing court reporters in civil cases, restrict office hours, and, most recently, close a county-wide total of seven civil independent calendar courtrooms (with a consequent re-distribution of the caseload among the “surviving” departments). Again, the court was concerned that 100+ pages of additional briefing (on top of the lengthy party/intervenor briefs) could not be properly addressed by the court in a timely fashion, given these harsh fiscal and workload realities. Fortunately, the work done by *amici* will not have been wasted; they remain free to polish their briefs in light of this court's decision and seek leave to file them as the case proceeds to review before courts with broader authority.

Finally, reply briefing was filed by the AG on October 12; petitioners filed their consolidated reply that same day (ROA 72, 73). This was an additional 50 pages of briefing. The court has reviewed the opening, opposition and reply briefing, as well as the Administrative Record and the Supplement thereto filed October 22 (ROA 74).

The court notes that the briefing was accompanied by lodgments of non-California authorities. The court asks the parties to forebear from routinely lodging copies of federal or foreign authorities in the future. These are ordinarily available to the court on Westlaw. Counsel are encouraged to review the Summer 2011 amendments to CRC 3.1113(i) in this regard. The former rule made such lodgments mandatory; the current rule permits judicial discretion in this area. The court will advise counsel if it needs a lodgment of a non-California authority. Many trees will be saved if counsel will honor this request. Also, recent budget cuts imposed on the court make the clerk time for the handling of these lodgments quite problematic.

On November 16, 2012, the court published a lengthy tentative ruling. The court did so early, in order to facilitate counsel's preparation in light of the intervening Thanksgiving holiday. The court entertained well-prepared and very thoughtful argument on November 30 from Mr. Seymour on behalf of SANDAG, Mr. Selmi on behalf of petitioners, and by Mr. Patterson and Ms. Durbin on behalf of the AG. Petitioners and the AG used a Powerpoint presentation, which the court marked as Ex. 1 to the hearing for record purposes. Following argument, the court took the matter under submission. The court

now renders its decision. Record references below are to the excerpts lodged by the parties in October, except where stated. The court notes that, near the end of her comments during the 1 hour 45 minute hearing, Ms. Durbin requested a Statement of Decision. This is not required, as there was no “trial” of this matter as contemplated by CCP section 632. There was no testimony or cross examination; the matter proceeded, as most if not all CEQA cases do, in the manner of a complex motion argument. The court hopes that the following discussion will be deemed by the parties and the reviewing court to be an adequate specification of the grounds for non-compliance as required by Pub. Res. Code section 21005(c), and an adequate setting forth of the court’s decision and the reasons therefor.

2. Overview of the CEQA Process.

A. The Court’s Role in CEQA Cases.

In *Mira Mar Mobile Community v. City of Oceanside*, 119 Cal.App.4th 477, 486 (2004) (*Mira Mar Mobile Community*), the court explained that “[i]n a mandate proceeding to review an agency’s decision for compliance with CEQA, [courts] review the administrative record *de novo* [citation], focusing on the adequacy and completeness of the EIR and whether it reflects a good faith effort at full disclosure. [Citation.] [The court’s] role is to determine whether the challenged EIR is sufficient as an information document, not whether its ultimate conclusions are correct. [Citation.]” An EIR is presumed adequate. Pub. Res. Code § 21167.3, subd. (a).

Courts review an agency’s action under CEQA for a prejudicial abuse of discretion. Pub. Res. Code § 21168.5. “Abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence.” *Id.*; see *Mira Mar Mobile Community*, *supra*, 119 Cal.App.4th at 486; *County of San Diego v. Grossmont-Cuyamaca Community College Dist.* (“*Grossmont*”), 141 Cal. App. 4th 86, 96 (2006)(same).

In defining the term “substantial evidence,” the CEQA Guidelines state: “ ‘Substantial evidence’ ... means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made ... is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion[,] narrative [or] evidence which is clearly erroneous or inaccurate ... does not constitute substantial evidence.” CEQA Guidelines, § 15384(a). “In applying the substantial evidence standard, [courts] resolve all reasonable doubts in favor of the administrative finding and decision. [Citation.]” *Mira Mar Mobile Community*, *supra*, 119 Cal.App.4th at 486; *Grossmont*, *supra*, 141 Cal. App. 4th at 96.

Although the lead agency’s factual determinations are subject to the foregoing deferential rules of review, questions of interpretation or application of the requirements of CEQA are matters of law. While judges may not substitute their judgment for that of the decision

makers, they must ensure strict compliance with the procedures and mandates of the statute. *Grossmont, supra*, 141 Cal. App. 4th at 96.

B. The Three Steps of CEQA.

CEQA establishes “a three-tiered process to ensure that public agencies inform their decisions with environmental considerations.” *Banker’s Hill, et al v. City of San Diego*, 139 Cal. App. 4th 249, 257 (2006)(“*Banker’s Hill*”); see also CEQA Guidelines, § 15002(k)(describing three-step process).

First Step in the CEQA Process.

The first step “is jurisdictional, requiring that an agency conduct a preliminary review in order to determine whether CEQA applies to a proposed activity.” *Banker’s Hill, supra*, 139 Cal. App. 4th at 257; see also Guidelines, § 15060. The Guidelines give the agency 30 days to conduct this preliminary review. (Guidelines, § 15060.) The agency must first determine if the activity in question amounts to a “project.” *Muzzy Ranch Co. v. Solano County Airport Land Use Com.* (2007) 41 Cal.4th 372, 380. “A CEQA ...project falls into one of three categories of activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment (§ 21065.)” *Sunset Sky Ranch Pilots Assn. v. County of Sacramento* (2009) 47 Cal.4th 902, 907.

As part of the preliminary review, the public agency must also determine the application of any statutory exemptions or categorical exemptions that would exempt the proposed project from further review under CEQA. See Guidelines, § 15282 (listing statutory exemptions); Guidelines, §§ 15300–15333 (listing 33 classes of categorical exemptions). The categorical exemptions are contained in the Guidelines and are formulated by the Secretary under authority conferred by CEQA section 21084(a). If, as a result of preliminary review, “the agency finds the project is exempt from CEQA under any of the stated exemptions, no further environmental review is necessary. The agency may prepare and file a notice of exemption, citing the relevant section of the Guidelines and including a brief ‘statement of reasons to support the finding.’ ” *Banker’s Hill, supra*, 139 Cal.App.4th at 258, citing Guidelines, §§ 15061(d), 15062(a)(3).

Second Step in the CEQA Process.

If the project does not fall within an exemption, the agency proceeds to the second step of the process and conducts an initial study to determine if the project *may* have a significant effect on the environment. (Guidelines, § 15063.) If, based on the initial study, the public agency determines that “there is substantial evidence, in light of the whole record ... that the project may have a significant effect on the environment, an environmental impact report [(EIR)] shall be prepared.” [CEQA, § 21080(d).] On the other hand, if the initial study demonstrates that the project “would not have a significant effect on the environment,” either because “[t]here is no substantial evidence, in light of whole record” to that effect or the revisions to the project would avoid such an effect, the

agency makes a “negative declaration,” briefly describing the basis for its conclusion. (CEQA, § 21080(c)(1); see Guidelines, § 15063(b)(2); *Banker’s Hill, supra*, 139 Cal.App.4th at 259.)

The Guidelines and case law further define the standard that an agency uses to determine whether to issue a negative declaration. “[I]f a lead agency is presented with a *fair argument* that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect.” (Guidelines, § 15064(f)(1), italics added.) This formulation of the standard for determining whether to issue a negative declaration is often referred to as the “fair argument” standard. See *Laurel Heights Improvement Assn. v. Regents of University of California*, 6 Cal.4th 1112, 1134–1135 (1993). Under the fair argument standard, a project “may” have a significant effect whenever there is a “reasonable possibility” that a significant effect will occur. *No Oil v. City of Los Angeles*, 13 Cal.3d 68, 83-84 (1974). Substantial evidence, for purposes of the fair argument standard, includes “fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.” § 21080, subd. (e)(1). Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts unrelated to physical impacts on the environment. § 21080, subd. (e)(2).

If the initial study reveals no substantial evidence that the project may have a significant environmental effect, the agency may adopt a negative declaration. Pub. Res. Code § 21080, subd. (c)(2); Guidelines, § 15070, subd. (b); *Grand Terrace, supra*, 160 Cal.App.4th at 1331; *Save the Plastic Bag Coalition v. City of Manhattan Beach*, 52 Cal. 4th 155, 175 (2011)(holding common sense is part of the substantial evidence analysis). “Alternatively, if there is no substantial evidence of any net significant environmental effect in light of revisions in the project that would mitigate any potentially significant effects, the agency may adopt [an MND]. [Citation.] [An MND] is one in which ‘(1) the proposed conditions “avoid the effects or mitigate the effects to a point where *clearly* no significant effect on the environment would occur, and (2) there is *no substantial evidence* in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.’ (§ 21064.5)’ [Citations.]” *Grand Terrace, supra*, at 1331-1332. The MND allows the project to go forward subject to the mitigating measures. Pub. Res. Code §§ 21064.5, 21080, subd. (c); see *Grand Terrace, supra*, 160 Cal. App. 4th at 1331.

Third Step in the CEQA Process.

If no negative declaration is issued, the preparation of an EIR is the third and final step in the CEQA process. *Banker’s Hill, supra*, 139 Cal. App. 4th at 259; Guidelines, §§ 15063(b)(1), 15080; CEQA, §§ 21100, 21151.

C. The Environmental Impact Report.

Central to CEQA is the EIR, which has as its purpose informing the public and government officials of the environmental consequences of decisions before they are made. [Citation.] “An EIR must be prepared on any ‘project’ a local agency intends to approve or carry out which ‘may have a significant effect on the environment.’ Pub. Res. Code §§ 21100, 21151; Guidelines, § 15002, subd. (f)(1). The term ‘project’ is broadly defined and includes any activities which have a potential for resulting in a physical change in the environment, directly or ultimately. Pub Res. Code § 21065; Guidelines, §§ 15002, subd. (d), 15378, subd. (a); [Citation].) The definition encompasses a wide spectrum, ranging from the adoption of a general plan, which is by its nature tentative and subject to change, to activities with a more immediate impact, such as the issuance of a conditional use permit for a site-specific development proposal.” *CREED v. City of San Diego*, 134 Cal. App. 4th 598, 604 (2005).

“To accommodate this diversity, the Guidelines describe several types of EIR’s, which may be tailored to different situations. The most common is the project EIR, which examines the environmental impacts of a specific development project. (Guidelines, § 15161.) A quite different type is the program EIR, which ‘may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically, (2) As logical parts in the chain of contemplated actions, (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.’” Guidelines, § 15168, subd. (a); *CREED, supra*, 134 Cal. App. 4th at 605. As the court held in *CREED*, a program EIR may serve as the EIR for a subsequently proposed project only to the extent it contemplates and adequately analyzes the potential environmental impacts of the project. *CREED, supra*, 134 Cal. App. 4th at 615.

The EIR at issue in this case is of the latter variety, a program EIR. Cleveland/CBD/ Sierra Club accuse SANDAG of attempting to use the “programmatically” nature of the EIR as an invalid attempt to excuse it from fully analyzing the health impacts of the RTP. [ROA 55 at 15] The AG joins in this criticism. [ROA 52 at 29]

Under CEQA, an EIR is presumed adequate (Pub. Resources Code, § 21167.3), and the plaintiff in a CEQA action has the burden of proving otherwise. (*Preserve Wild Santee v. City of Santee*, 210 Cal. App. 4th 260, 275 (4th DCA Div. 1 Oct. 19, 2012, internal quotation marks omitted), quoting *Concerned Citizens of South Central L.A. v. Los Angeles Unified School Dist.* (1994) 24 Cal.App.4th 826, 836.) Courts review an agency’s determinations and decisions for abuse of discretion. An agency abuses its discretion when it fails to proceed in a manner required by law or there is not substantial evidence to support its determination or decision. [§§ 21168, 21168.5; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 426-427 (2007) (“*Vineyard*”).] “Judicial review of these two types of error differs significantly: While [courts] determine de novo whether the agency has employed the correct procedures, ‘scrupulously enforc[ing] all legislatively mandated CEQA

requirements' [citation], [courts] accord greater deference to the agency's substantive factual conclusions." (*Vineyard, supra*, 40 Cal. 4th at 435.)

Consequently, in reviewing an EIR for CEQA compliance, courts adjust "scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts." (*Vineyard, supra*, 40 Cal.4th at 435.) For example, where a petitioner claims an agency failed to include required information in its environmental analysis, the court's task is to determine whether the agency failed to proceed in the manner prescribed by CEQA. Conversely, where a petitioner challenges an agency's conclusion that a project's adverse environmental effects are adequately mitigated, courts review the agency's conclusion for substantial evidence. (*Vineyard, supra*, 40 Cal. 4th at 435.)

4. Issues Raised in This Case.

SANDAG is a council of local governments, and is one of 18 Metropolitan Planning Organizations ("MPO") in California. Each MPO is charged under law with the development of the region's RTP, which must be updated every four years. SANDAG began its work in April of 2010, released drafts of the RTP/SCS for public comment on 4/22/11, and released the draft EIR for public comment on June 7, 2011 [AR225-1580]. Petitioners and the AG's office criticized the drafts. [AR4430, 12696-12699, 17972-75, 18053-55] The final EIR was released on October 18, 2011 [AR1969-3401], and was certified after a public hearing on October 28, 2011. Inasmuch as the petitions were filed on November 28, there is no issue in this case regarding the timeliness of the legal challenges to the EIR. Nor are any issues raised by SANDAG with regard to exhaustion of administrative remedies or standing.

There is substantial overlap in the attacks on the EIR leveled by petitioners and the AG. Both sets of petitioners assert that the EIR fails to adequately analyze air quality impacts [ROA 54 at 3-6; ROA 55 at 12-20]. The AG joins in this assertion [ROA 52 at 7-29]. Both petitioners add that the EIR failed to analyze a reasonable range of alternatives [ROA 54 at 6; ROA 55 at 38].

CREED-21/AHC's brief focuses on the failure of the EIR to properly analyze air quality impacts in two specific areas: greenhouse gas emissions and sensitive receptors [ROA 54 at 4-6]. The Cleveland/CBD/Sierra Club brief carefully analyzes the deficiencies of the EIR in relation to greenhouse gas emissions (ROA 55 at part III), while the AG provides extensive discussion on both sensitive receptors and greenhouse gas emissions [ROA 52 at 14-18 and 22-29]. The Cleveland/CBD/Sierra Club brief raises several other issues which neither the AG nor CREED-21/AHC discuss in any detail (mass transit ridership, agricultural land, growth-inducing impacts, parking management, etc.).

5. Ruling.

The court finds that the real focal point of this controversy is whether the EIR is in conformance with a series of state policies enunciated by the legislative and executive branches since 2005 relating to greenhouse gases. Governor Schwarzenegger issued, in

2005, Executive Order S-03-05, which for the first time set a state goal of reducing greenhouse gas emissions. This Executive Order gave rise to the Global Warming Solutions Act of 2006 (AB 32), which is codified at H&S Code section 38500 *et seq.* Section 38550 provides:

“By January 1, 2008, the [Air Resources Board] shall, after one or more public workshops, with public notice, and an opportunity for all interested parties to comment, determine what the statewide greenhouse gas emissions level was in 1990, and approve in a public hearing, a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. In order to ensure the most accurate determination feasible, the state board shall evaluate the best available scientific, technological, and economic information on greenhouse gas emissions to determine the 1990 level of greenhouse gas emissions.”

It is undisputed that the ARB has established greenhouse gas targets for the SANDAG region for 2020 and 2035.

In 2008, the Legislature passed SB 375, which amended both the Public Resources Code and the Government Code in several respects. In section 1 of the statute, the Legislature found and declared:

“(a) The transportation sector contributes over 40 percent of the greenhouse gas emissions in the State of California; automobiles and light trucks alone contribute almost 30 percent. The transportation sector is the single largest contributor of greenhouse gases of any sector.

(b) In 2006, the Legislature passed and the Governor signed Assembly Bill 32 (Chapter 488 of the Statutes of 2006; hereafter AB 32), which requires the State of California to reduce its greenhouse gas emissions to 1990 levels no later than 2020. According to the State Air Resources Board, in 1990 greenhouse gas emissions from automobiles and light trucks were 108 million metric tons, but by 2004 these emissions had increased to 135 million metric tons.

(c) Greenhouse gas emissions from automobiles and light trucks can be substantially reduced by new vehicle technology and by the increased use of low carbon fuel. However, even taking these measures into account, it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.

(d) In addition, automobiles and light trucks account for 50 percent of air pollution in California and 70 percent of its consumption of petroleum. Changes in land use and transportation policy, based upon established modeling methodology, will provide significant assistance to California's goals to implement the federal and state Clean Air Acts and to reduce its dependence on petroleum.

(e) Current federal law requires regional transportation planning agencies to include a land use allocation in the regional transportation plan. Some regions have engaged in a regional “blueprint” process to prepare the land use allocation. This process has been open and transparent. The Legislature intends, by this act, to build upon that successful process by requiring metropolitan planning organizations to develop and incorporate a sustainable communities strategy which will be the land use allocation in the regional transportation plan.

(f) The California Environmental Quality Act (CEQA) is California's premier environmental statute. New provisions of CEQA should be enacted so that the statute encourages developers to submit applications and local governments to make land use decisions that will help the state achieve its climate goals under AB 32, assist in the achievement of state and federal air quality standards, and increase petroleum conservation.

(g) Current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives.

(h) The California Transportation Commission has developed guidelines for travel demand models used in the development of regional transportation plans. This act assures the commission's continued oversight of the guidelines, as the commission may update them as needed from time to time.

(i) California local governments need a sustainable source of funding to be able to accommodate patterns of growth consistent with the state's climate, air quality, and energy conservation goals.”

Section 4 of SB 375 added Government Code section 65080, which provides, in relevant part:

“(a) Each transportation planning agency designated under Section 29532 or 29532.1 shall prepare and adopt a regional transportation plan directed at achieving a coordinated and balanced regional transportation system, including, but not limited to, mass transportation, highway, railroad, maritime, bicycle, pedestrian, goods movement, and aviation facilities and services. The plan shall be action-oriented and pragmatic, considering both the short-term and long-term future, and shall present clear, concise policy guidance to local and state officials. The regional transportation plan shall consider factors specified in Section 134 of Title 23 of the United States Code. Each transportation planning agency shall consider and incorporate, as appropriate, the transportation plans of cities, counties, districts, private organizations, and state and federal agencies.

(b) The regional transportation plan shall be an internally consistent document and shall include all of the following:

(1) A policy element that describes the transportation issues in the region, identifies and quantifies regional needs, and describes the desired short-range and long-range transportation goals, and pragmatic objective and policy statements. The objective and policy statements shall be consistent with the funding estimates of the financial element. The policy element of transportation planning agencies with populations that exceed 200,000 persons may quantify a set of indicators including, but not limited to, all of the following:

(A) Measures of mobility and traffic congestion, including, but not limited to, daily vehicle hours of delay per capita and vehicle miles traveled per capita.

(B) Measures of road and bridge maintenance and rehabilitation needs, including, but not limited to, roadway pavement and bridge conditions.

(C) Measures of means of travel, including, but not limited to, percentage share of all trips (work and nonwork) made by all of the following:

(i) Single occupant vehicle.

(ii) Multiple occupant vehicle or carpool.

(iii) Public transit including commuter rail and intercity rail.

(iv) Walking.

(v) Bicycling.

(D) Measures of safety and security, including, but not limited to, total injuries and fatalities assigned to each of the modes set forth in subparagraph (C).

(E) Measures of equity and accessibility, including, but not limited to, percentage of the population served by frequent and reliable public transit, with a breakdown by income bracket, and percentage of all jobs accessible by frequent and reliable public transit service, with a breakdown by income bracket.

(F) The requirements of this section may be met utilizing existing sources of information. No additional traffic counts, household surveys, or other sources of data shall be required.

(2) A sustainable communities strategy prepared by each metropolitan planning organization as follows:

(A) No later than September 30, 2010, the State Air Resources Board shall provide each affected region with greenhouse gas emission reduction targets for the automobile and light truck sector for 2020 and 2035, respectively.

(B) Each metropolitan planning organization shall prepare a sustainable communities strategy, subject to the requirements of Part 450 of Title 23 of, and Part 93 of Title 40 of, the Code of Federal Regulations, including the requirement to utilize the most recent planning assumptions considering local general plans and other factors. The sustainable communities strategy shall (i) identify the general location of uses, residential densities, and building intensities within the region, (ii) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over

the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth, (iii) identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Section 65584, (iv) identify a transportation network to service the transportation needs of the region, (v) gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of Section 65080.01, (vi) consider the state housing goals specified in Sections 65580 and 65581, (vii) set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board, and (viii) allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C. Sec. 7506).

Section 14 of SB 375, among other revisions, amended Pub. Res. Code section 21155.3 to provide as follows:

“(a) The legislative body of a local jurisdiction may adopt traffic mitigation measures that would apply to transit priority projects. These measures shall be adopted or amended after a public hearing and may include requirements for the installation of traffic control improvements, street or road improvements, and contributions to road improvement or transit funds, transit passes for future residents, or other measures that will avoid or mitigate the traffic impacts of those transit priority projects.

(b)(1) A transit priority project that is seeking a discretionary approval is not required to comply with any additional mitigation measures required by paragraph (1) or (2) of subdivision (a) of Section 21081, for the traffic impacts of that project on intersections, streets, highways, freeways, or mass transit, if the local jurisdiction issuing that discretionary approval has adopted traffic mitigation measures in accordance with this section.

(2) Paragraph (1) does not restrict the authority of a local jurisdiction to adopt feasible mitigation measures with respect to the effects of a project on public health or on pedestrian or bicycle safety.

(c) The legislative body shall review its traffic mitigation measures and update them as needed at least every five years.”

As already noted, the centerpiece of this case is the parties’ fundamental disagreement over implementation of these statutory requirements within the framework of CEQA. In all the statutory quotations immediately above, **bold type** has been added by the court.

The court agrees with the points made in section III of the Cleveland brief (ROA 55), part II of the AG’s brief (ROA 52), and pp. 4-5 of the CREED-21 brief (ROA 54) regarding the inadequate treatment of greenhouse gas emissions in the EIR. This failure is not, as SANDAG would have it, merely a debate over “editorial control” of the EIR (ROA 62 at 32:24). Rather, the issue is whether the EIR fails to carry out its role as an informational document to inform the public about the choices made by its leaders. The court finds that this failure is manifest in several ways.

First, although SANDAG acknowledges SB 375 mandates a “sharper focus on reducing GHG emissions” (AR 13091, Excerpt Tab 190), the EIR is impermissibly dismissive of Executive Order S-03-05. SANDAG argues that the Executive Order does not constitute a ‘plan’ for GHG reduction, and no state plan has been adopted to achieve the 2050 goal. [ROA 62 at 34] The EIR therefore does not find the RTP/SCS’s failure to meet the Executive Order’s goals to be a significant impact. This position fails to recognize that Executive Order S-3-05 is an official policy of the State of California, established by a

gubernatorial order in 2005, and not withdrawn or modified by a subsequent (and predecessor) governor. Quite obviously it was designed to address an environmental objective that is highly relevant under CEQA (climate stabilization). See AR 17622 (Excerpt Tab 216). SANDAG thus cannot simply ignore it. This is particularly true in a setting in which hundreds of thousands of people in the communities served by SANDAG live in low-lying areas near the coast, and are thus susceptible to rising sea levels associated with global climate change. The court in *Association of Irrigated Residents v. State Air Resources Board*, 206 Cal. App. 4th 1487, 1492-93 (2012), recognized the importance of the Executive Order in upholding the ARB's Scoping Plan. The court agrees with petitioners that the failure of the EIR to cogently address the inconsistency between the dramatic increase in overall GHG emissions after 2020 contemplated by the RTP/SCS and the statewide policy of reducing same during the same three decades (2020-2050) constitutes a legally defective failure of the EIR to provide the SANDAG decision makers (and thus the public) with adequate information about the environmental impacts of the SCS/RTP. Moreover, as was pointed out in oral argument, having chosen to develop a plan for 15 years beyond that which was required under law, SANDAG was obligated to discuss impacts beyond the 2020 horizon. The ARB's scoping plan adopts the Executive Order, and SANDAG failed to extend the analysis to 2050.

Second, SANDAG's response has been to "kick the can down the road" and defer to "local jurisdictions." See, e.g. AR 31-0064, 32-0065, 33-0066, 34-0067, 35-0068, 117-0090, 118-0091 (Excerpts Vol. 1, Tab 3); 4.8-36, 0790 (Excerpts Tab 7); AR G-63-64, 03825-3826 (Excerpts Tab 8B); AR 27734 and 8A:2588 (Nov. 19 Appx.). This theme is repeated in SANDAG's brief at page 38 (arguing mitigation is the responsibility of other agencies). This perverts the regional planning function of SANDAG, ignores the purse string control SANDAG has over TransNet funds, and more importantly conflicts with Govt. Code section 65080(b)(2)(B) quoted above. As the AG argues, it is certainly feasible for SANDAG to agree to fund local climate action plans, yet the EIR does not adopt or even adequately discuss this form of mitigation (AR 2588, Excerpt Tab 8A). And as argued by petitioners in their consolidated reply brief, "encouraging" an optional local plan that "should" incorporate regional policies falls well short of a legally enforceable mitigation commitment with teeth. This is what the CEQA Guidelines require at subsections 15126.4(a)(1)(B), (a)(2) and (c)(5) in a setting in which SANDAG controls the funding for at least some of the projects contemplated by the SCS/RTP. Contrary to SANDAG's assertion (Oppo. at 38:21), it does have the legal power -- indeed, the obligation -- to see to it that TransNet funds are spent in a manner consistent with the law. SANDAG conceded (even embraced) this at the November 30 hearing.

Resolution No. 2012-09, adopted by SANDAG, finds that the RTP/SCS "achieves the regional greenhouse gas reduction targets established by CARB" (AR 239-0219, Excerpts Tab 4) when in fact it either does not (AR 118-0091-92, Excerpts Tab 3; AR 4.8-21-23, 0775-0777, Excerpts Tab 7; AR 4.8-15-17, 02567-2569, 2578, Excerpts Tab 8A; AR08242-8245, Excerpts Tab 111) or does so based on questionable inputs [AR 30143, 30187 *et seq.* (Supp. filed 10/22/12); compare AR 14550 (Excerpt Tab 190)]. The shortcomings of the EIR in this regard (for petitioners do not contend, nor does the court

find, that SB 375 was violated) were called to SANDAG's attention as evidenced by what it called "Master Response # 20-23," discussed at AR G-55, 03817 *et seq.* (Excerpts Tab 8B); see also AR 19685 (Excerpts Tab 296); AR 25640 *ff* (Excerpts Tab 311). SANDAG erroneously and preemptorily states in response to these comments that the "upward trajectory" in per capita GHG emissions "does not present an SB 375 or CEQA compliance issue." AR G-59. CEQA requires further discussion, not a one sentence dismissal. Nor is the court convinced that SANDAG may avoid examination of GHG reduction due to "modeling constraints." AR G-68, 003830 (Master Response #23).

In light of the foregoing, the court finds that the petitioners and intervenor have overcome the presumption of validity and have established a prejudicial abuse of discretion. The court does not reach this conclusion lightly, as it is evident from section 9.0 of the EIR that it involved thousands of hours of effort by numerous talented professionals. No doubt the EIR is a satisfactory informational document in many respects; being the first in the state to tackle something as important to future generations as reduction of greenhouse gases in a regional transportation setting carried some risk, and the court, after reviewing the Administrative Record independently, finds that the EIR is inconsistent with state law as described above. Thus, it is the court's duty under *Vineyard, supra*, to sustain the positions advanced by petitioners and the petitioner in intervention.

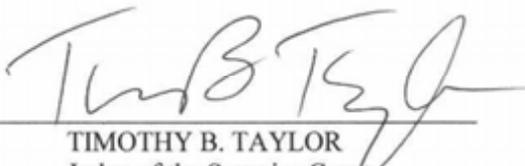
Had they been permitted to file briefs, *amici* would no doubt have argued that the court's interpretation of CEQA's interface with Executive Order S-03-05 and the statutory scheme of SB 375 (which the Legislative Counsel's Digest filed with Secretary of State September 30, 2008 concedes is an "unfunded mandate") will retard growth, harm California's efforts to attract jobs and create economic activity, and slow down the state's recovery from the recession. All of this may very well be true, but these are arguments properly presented to the political branches of the government which adopted the Executive Order and enacted SB 375 in the first place.

Because the court finds it can resolve the case solely on the inadequate treatment in the EIR of the greenhouse gas emission issue, it finds that it need not address the other issues raised by the parties. *Compare Natter v. Palm Desert Rent Review Comm'n.*, 190 Cal. App. 3d 994, 1001 (1987); *Young v. Three for One Oil Royalties*, 1 Cal. 2d 639, 647-648 (1934).

Let a writ of mandate issue forthwith, directing respondent SANDAG to set aside its October 28, 2011 certification of the EIR for the RTP/SCS. Counsel for petitioners is directed to forthwith submit same to the court for signature.

IT IS SO ORDERED.

Dated: December 3, 2012


TIMOTHY B. TAYLOR
Judge of the Superior Court

SUPERIOR COURT OF CALIFORNIA, COUNTY OF SAN DIEGO

Central
330 West Broadway
San Diego, CA 92101

SHORT TITLE: Cleveland National Forest Foundation vs. San Diego Association of Governments [IMAGED]

CLERK'S CERTIFICATE OF SERVICE BY MAIL

CASE NUMBER:
37-2011-00101593-CU-TT-CTL

I certify that I am not a party to this cause. I certify that a true copy of the Ruling on Petitions for Writ of Mandate dated December 3, 2012 was mailed following standard court practices in a sealed envelope with postage fully prepaid, addressed as indicated below. The mailing and this certification occurred at San Diego, California, on 12/03/2012.

Clerk of the Court, by: *Archea Taylor*
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CLERK'S CERTIFICATE OF SERVICE BY MAIL

Page: 1

Letter No. B1: Sierra Club

Sierra Club
Mother Lode Chapter
parfrey@sbcglobal.net
Mr. Eric Parfrey, Executive Committee
April 23, 2014

This letter also contains comments on the RTP. Please refer to the RTP Response to Comments Technical Appendix.

Response B1-1

Staff and the EIR consultant have reviewed the letter and all attachments. Responses to the specific comments raised within the letter are provided below.

Response B1-2

The Draft EIR Section 4.7, Greenhouse Gas Emissions, evaluates three thresholds (1) would the proposed project result in an increase in total greenhouse gas (GHG) emissions compared to existing (2012) conditions; (2) would the proposed project conflict with AB 32 or any other applicable plan policy or regulation adopted for the purpose of reducing emissions of greenhouse gases; and (3) would the proposed project conflict with SB 375 GHG emission reduction targets.

The first two thresholds are necessary under CEQA to gain an understanding of the total GHG emissions that will occur over the lifetime of the proposed project and provide analysis of the SJCOG RTP/SCS's impacts on GHG and compliance with AB 32 or any other applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gases.

AB 32 requires the Air Resources Board (ARB) to develop a Scoping Plan to chart the states path to reduce greenhouse gas emissions. As ARB describes the 2014 AB 32 Scoping Plan Update:

the Scoping Plan builds upon the initial Scoping Plan with new strategies and recommendations. The update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The update defines ARB's climate change priorities for the next five years and sets the groundwork to reach long-term goals set forth in Executive Orders S-3-05 and B-16-2012. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use.

As a result, compliance with the AB 32 Scoping Plan (2014) is assumed to set the SJCOG region on a path consistent with Executive Order S-3-05.

The analysis conservatively presents emissions from several sources, including mobile sources (all vehicles), energy use (natural gas, electricity), water supply and construction associated with land use and infrastructure projects. These gross estimates represent SJCOG's attempt to quantify the total emissions that could occur between 2012 and 2040 (the Plan horizon year). Further, as described on page 4.7-26 of the Draft EIR it should be noted that a number of potential sources have not been included, such as agricultural machinery, plants (including crops), solid waste collection and disposal, trains, airplanes, ships and other port activity, stationary sources, and industrial processes. This is due to a lack of information about these sources as well as a lack of potential impact by the RTP on these sources. For example, new industrial sources are typically relatively unique, and must be calculated using precise information regarding the specific process. No such information exists for potential future industrial sources of GHG emissions.

As shown in Table 4.7-4 of the Draft EIR, total emissions without regulation or implementation of AB-32 Scoping Plan measures would increase between 2012 and 2040. As further described in the Draft EIR (page 4.7-27), it should be remembered in general that this is a very rough approximation in that it depends on many simplifying assumptions and does not include many types of sources. Also, emissions shown for both scenarios are highly conservative as the emission factors used do not reflect possible or planned improvements in the future from programs such as those contained in AB 32 Scoping Plan (2014) table 6: Summary of Recommended Actions by Sector, updated green building standards, advancements in energy efficiency, and increased use of electrical vehicles. Lastly, while the 2014 RTP/SCS includes many strategies for reducing GHG emissions from land use, the RTP does not have any authority over how land is actually developed in San Joaquin County. The analysis is included within the Draft EIR to provide a useful comparison between existing conditions and 2040, as required by CEQA. As SJCOG does not have the authority to guarantee that all measures contained in the AB 32 Scoping Plan will be implemented by the responsible implementing agency (which based on ARB analysis would meet the 80 percent below 1900 emissions target set by Executive Order S-3-05 resulting in a less than significant impact), the Draft EIR conservatively find the proposed project would result in a significant impact due to the projected increase in total GHG emissions.

SB 375 highlights that current models and analytical techniques should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives. SJCOG has used the SJCOG Travel Demand Model to measure the impacts of scenarios reflecting changing residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives; a clear indication of the legislature's intent to allow the use

of existing planning models and analytical techniques to quantify GHG reductions resulting from the RTP/SCS.

SB 375 also requires the California Transportation Commission (CTC) to develop guidelines for travel demand models used in the development of RTP/SCSs. In April 2010, the CTC adopted the RTP Guidelines incorporating SB 375 planning requirements. Chapter 2: Latest Planning Assumptions of the Draft Conformity Analysis for the 2015 Federal Improvement Transportation Program and 2014 Regional Transportation Plan documents how the requirements are met. No comments regarding this documentation were received during the public comment period.

It is important to note that the analysis of total emissions, while important under CEQA, does not reflect SJCOG's ability to either comply with the goals of AB 32 or meet its obligations under SB 375. SB 375 is one strategy in the state's overall plan for meeting AB 32 goals as identified in the AB 32 Scoping Plan. Where applicable, the SJCOG 2014 RTP/SCS is consistent with the AB 32 Scoping Plan rules, regulations, and programs.

Under SB 375, SJCOG was given a specific target to meet (5 and 10 percent). SJCOG has demonstrated its ability to meet these targets and as such, is fulfilling its obligations under AB 32 (Executive Order S-3-05) and SB 375. Although the Draft EIR elects to take a conservative approach to the determination of GHG impacts, inclusion of the above mentioned AB 32 Scoping Plan rules, regulations, or programs that have or will be implemented as envisioned by ARB into the analysis, is anticipated, based on ARB analysis of the Scoping Plan and SCJOG's consistency with SB 375, to result in a less than significant impact. Nonetheless, the Draft EIR recognizes that based on a conservative estimate of GHG emissions there may be a net increase in emissions between 1990 and 2020, rather than a reduction (see Draft EIR Table 4.7-5). Under the 2014 RTP/SCS the increase would be 2.0 million metric tons of carbon dioxide equivalent (MMTCO₂e), or approximately 51 percent. As indicated in the Draft EIR, this figure does not take into account any of the AB 32 Scoping Plan rules, regulations, or programs that have been or will be implemented, and therefore, presents a grossly conservative estimate. The 2014 RTP/SCS provides numerous strategies to reduce GHG emissions from land use and development, none of which are accounted for in these results. If the AB 32 Scoping Plan and 2014 RTP/SCS strategies could be fully accounted for and included it is expected that emissions in San Joaquin County would also meet the AB 32 reductions targets. However, information required to show a full and accurate quantified analysis of the impact of the 2014 RTP/SCS on AB 32 is currently not available and the Draft EIR conservatively considered the potential for the plan to conflict with AB 32 to be potentially significant.

Lastly, the Draft EIR evaluates the potential for the Plan to meet SB 375. As demonstrated within the 2014 RTP/SCS, the Plan exceeds the targets set by SB 375. While it is true that total GHG emissions are

expected to increase, (absent AB 32 Scoping Plan rules, regulations, or programs that have been or will be implemented), SB 375 represents a subset of those emissions. These are the emissions the COG, as determined by the state, has the greatest ability to influence and as a result is responsible for showing compliance with the 5 and 10 percent targets. The methodology for calculating these emissions is much more refined than the gross estimates presented in the CEQA analysis of total emissions (Threshold GHG-1) described above however, do not include AB 32 measures such as Pavley or the Low Carbon Fuel Standard consistent with the ARB board approved SB 375 targets.

For purposes of preparing the GHG emissions analysis for SJCOG consistent with the methods used by ARB to set SB 375 targets in September 2010, SJCOG subtracted all emissions from through trips (trips without and origin and a destination in San Joaquin County). In addition, the portion of vehicle miles traveled (VMT) attributable to trips that either begin or end within the County but travel to/from neighboring regions (IX/XI) were included for all portions of the trip within the County (i.e., 100 percent of IX/XI VMT up to the County line).

Accounting for interregional travel, or travel that crosses the County boundaries, continues to be a key issue for SB 375 implementation across the state.

Therefore, the presentation of conservative GHG emissions estimates included in the Draft EIR is not inconsistent with SB 375 or the AB 32 Scoping Plan's long-term strategy to meet Executive Order S-3-05 GHG reduction goals as it clearly indicates the targets have been met. As described above, the Draft EIR indicates, based on a conservative estimate, that total emissions could increase which would be inconsistent with AB 32. However, as discussed, SJCOG's responsibility under AB 32 is to meet the targets established by CARB, using the approved CARB methodology. SJCOG has demonstrated an ability to meet its SB 375 targets as explained with the RTP and Draft EIR.

Response B1-3

See **Response B1-4, below**, for a discussion of mitigation measures within the RTP EIR.

Response B1-4

The commenter is referred to subsection 1.9, Mitigation Measures, (page 1.0-9) of the Draft EIR. This subsection specifically describes the role of metropolitan planning organizations (MPOs) in enforcement of mitigation measures. As described, the Draft EIR identifies programmatic mitigation measures to be implemented by SJCOG and identifies mitigation measures that SJCOG will encourage implementing and local agencies to implement as appropriate as part of project specific environmental review. SJCOG as part of their Intergovernmental Review process will facilitate and encourage implementing and local agencies to require these measures as applicable. The language of the mitigation measures indicates that

implementing and local agencies should implement measures. It is assumed that each agency has the ability to implement and/or impose these measures (i.e., that they can implement them). As such, this Program EIR identifies programmatic mitigation that would be implemented by SJCOG or other agencies with broad-scale planning jurisdiction.

As noted above, this Program EIR provides a regional scale analysis and a framework of mitigation measures for subsequent, site-specific environmental review documents prepared by lead agencies within the County as individual planning, development and transportation project are identified, design and move through the planning, review and decision-making process. As authorized by *State CEQA Guidelines* and case law, the mitigation measures included in this Draft Program EIR are appropriately less detailed than those that would be part of a project-specific EIR and the selection of detailed mitigation measures is properly deferred to future project-specific CEQA reviews. SJCOG's role is to prioritize and facilitate transportation projects consistent with adopted procedures. For regionally significant land use and transportation projects, SJCOG reviews and provides comments on environmental documents to determine consistency with applicable SJCOG planning and policy documents including the RTP/SCS. SJCOG does not dictate land use, directly implement transportation projects, nor does it conduct project specific environmental review. SB 375 specifically addresses the role of MPOs, such as SJCOG, and it explicitly does not provide SJCOG with the authority to regulate land use. Therefore, SJCOG has no ability to impose or enforce mitigation measures within the authority of local jurisdictions.

The Draft Program EIR provides a regional scale analysis and a framework of mitigation measures for subsequent, site-specific environmental review documents prepared by lead agencies in the region as individual planning, development and transportation projects are identified, designed and move through the planning, review and decision-making process.

Regarding the specific measures addressed in the letter, the referenced measures (GHG-1, GHG-2, GHG-3, TRANS-1, TRANS-2, and TRANS-4) represent a combination of those actions that are under the direct authority of SJCOG (i.e., update future RTPs) as well as actions that can be undertaken by local jurisdictions (i.e., create climate action plans). SJCOG does not have land use authority and cannot require jurisdictions to undertake actions such as the development of climate action plans. However, as SJCOG's role is as a facilitator within the region, SJCOG can (as described within the proposed measures) encourage local jurisdictions that have not developed these plans to do so. As described above, the measures included in this Draft Program EIR are adequate under CEQA as they directly correspond to the level of specificity within a Program EIR as required by CEQA. It is not appropriate for SJCOG to include specific project-level mitigation measures on every project within the RTP. Development of such project-level measures would be inappropriate for many projects. For example, a requirement on specific

energy saving measures for residential projects would not apply to transportation projects and could create confusion and place a burden on some projects. Additionally, individual jurisdictions may have specific guidelines which could be in conflict with proposed measures resulting in unnecessary additional mitigation measures. Further, SJCOG would have to develop a methodology for enforcing measures, many of which would be well beyond SJCOG's core mission and purview. For these reasons, the measures included in the Draft EIR are programmatic in nature and appropriately place an emphasis on information sharing, review of regionally significant projects, and collaboration among regional partners.

Response B1-5

SJCOG's Measure K is a half-cent sales tax measure that is allocated for transportation improvements through the year 2041. SJCOG staff has been facilitating a process that allows for consideration of amendments every fiscal year. The process aims to add flexibility and responsiveness to the expenditure plan for Measure K. In addition, SJCOG has developed a Strategic Plan that provides guidance in the development of programs and projects that could benefit from Measure K funds and includes priority funding for 10 years of identified projects across a range of transportation modes in San Joaquin County. The Strategic Plan identifies the following categories to which funding shall be allocated: congestion relief (32.5 percent), local street repair (35 percent) and passenger rail/bus and bicycle/pedestrian projects (30 percent). In particular, these bicycle/pedestrian projects would help to reduce VMT and associated GHGs. The 2013 Strategic Plan continues to identify that funds would be available for infrastructure enhancements, such as street calming, walkable community projects, transit amenities and alternative modes of transportation that will assist local agencies in better integrating transportation and land use. These funds would be available to support infill development, neighborhood revitalization and downtown improvements. Some or all of the funding available for the Smart Growth Incentive program would be allocated via a competitive allocation process. To date, a total of \$1.5 million of Measure K Renewal funds has been allocated for various Smart Growth Incentive projects.

The Strategic Plan is updated every two years. The updates evaluate the scope, cost and schedule of all projects in the plan. In addition, the need to phase projects is also considered. The allocation of Measure K funds also can be amended. Adding a new Measure K project will require amendments to both the Measure K Strategic Plan and the Measure K Expenditure Plan. The expenditure plan may be amended only once a year. If projects are proposed to be added to the plan, they are to be considered as a group of projects and acted on annually by the SJCOG's Board before the end of the fiscal year. SJCOG encourages organizations such as Sierra Club to identify projects and/or programs to be added to the expenditure plan following the process outlined above.

Response B1-6

SJCOG appropriately evaluated several land use scenarios within the 2014 RTP/SCS and these scenarios are included in the Draft EIR. These scenarios meet the CEQA definition of alternatives and provide a “reasonable range” of alternatives. For a programmatic level document such as the RTP/SCS, infinite land use scenarios could have been evaluated including priority development areas. However, inclusion of additional alternatives would be speculative as they would require changes to existing land uses. SJCOG has established Transit Priority Areas and identified these areas with the RTP/SCS as required by SB 375. These areas were developed in concert with the community during SJCOG’s comprehensive public outreach process. As previously described, SJCOG is a regional facilitator and aims to bring consensus to the region on future possible land use and transportation scenarios. Several other scenarios could be considered, however, it would not be appropriate to include a new concept within the 2014 RTP/SCS such as “priority development areas” without building community consensus.

As described in **Response B1-5**, above, SJCOG has a process for the expenditure of funds within the County that identifies plans and projects for Measure K funds. SJCOG believes this iterative process to be preferable to development of “priority development areas” as it allows flexibility and amendments as needed. Selecting certain areas for “priority development” could result in inconsistencies between existing land uses, available funding, project delivery schedules and economic conditions all of which may change at any time.

The RTP/SCS includes a mitigation program in that those projects that seek CEQA streamlining under SB 375 would be required to evaluate the appropriate mitigation measures provided within the Draft EIR. The commenter suggests SJCOG should consider including in the RTP programs that prioritize and accelerate spending on non-auto transportation project; propose an alternative split of funds for any Measure K expansion; and provide local agencies with greater incentives that support infill and compact development. As described above, SJCOG has a process for amending Measure K and encourages Sierra Club to participate in the process and suggest future amendments. SJCOG did not consider alternatives with alternative splits in Measure K funding as such a consideration would be speculative at this time as the funding priorities for this RTP have been established. Further, SJCOG has provided incentives to local agencies that support infill by providing a vehicle for CEQA streamlining as allowed under SB 375. Many policies within the RTP/SCS and mitigation measures within the RTP EIR encourage infill development. Further, as described above and in the Draft EIR, SJCOG will use its role as a regional facilitator and its authority to comment on regionally significant projects to further policies and mitigation measures within the RTP/SCS and Draft EIR that encourage infill/compact development and non-auto transportation.

Response B1-7

See **Response B1-2**, above.

Response B1-8

Refer to **Responses B1-1** through **B1-8**.



April 23, 2014

Diane Nguyen, Deputy Director
555 E. Weber Avenue, Stockton, CA 95202

Dear Ms. Nguyen:

On behalf of the American Lung Association in California and ClimatePlan we are writing to express concerns with the progress indicators and long-term success of the San Joaquin Council of Governments' Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). First and foremost, we want to commend the hard work by staff and the Board to prepare the plan and engage in this first iteration of the SCS process under Senate Bill 375. We appreciate the open dialogue to discuss our comments and questions throughout this important process.

We are strong supporters of SB 375, knowing that land use and transportation decisions have real impacts on our health, environment, economy, and quality of life for people of all incomes. This plan presents many opportunities to maximize community benefits. We believe that the plan includes many indications that San Joaquin County is moving in the right direction.

However, in reviewing the RTP/SCS we have also noticed that, despite high reported achievements on SB 375 per capita greenhouse gas (GHG) emission reductions, the plan does not include a clear explanation of what factors lead to the GHG reductions. In addition, the plan also fails to maintain steady forward progress on a number of important indicators into the future. These indicators paint a different story than the model results. They raise concerns about the future success in reducing pollution and climate risk and improving healthier communities and active transportation. Our concerns related to the long-term viability and benefits of the plan are three-fold:

First, the draft modeling shows GHG reduction numbers well in excess of the targets, but other more modest indicators of the plan's performance raise questions about these high levels of target achievement. Even the business-as-usual planning scenario would achieve a GHG emission reduction of over 20 percent in 2040 (Appendix M, Table M-2). The narrative to explain how such large numbers are achieved is not clear. The plan would benefit from a clear explanation and a table expressing how individual policies and other, external factors (e.g., economic changes, gas prices, interregional trips) achieve levels of GHG reduction heretofore unseen in any region in the state.

Second, several indicators and measures of the plan's performance decline or begin to reverse their gains over time. Compared to a 2012 baseline, in 2040, a smaller share of travel would be by walking, biking, and transit (dEIR Table 4.12-3, appended). Congested lane miles would increase by over 50% compared to 2012 (dEIR p. 4.12-58). These are not

B2-1

indicative of long-term success in reducing vehicle miles traveled (VMT) and suggest that overall GHG performance could also decline following 2035 or 2040.

B2-1

Third, while modeling indicates that this plan would drastically exceed the 5% and 10% regional targets assigned under SB 375, it is not clear that the region is on a long-term trajectory of reducing greenhouse gases (GHG) from passenger travel. GHG emissions reductions under SB 375 would be greater in 2020 (24.4%) and decline slightly by 2035 (23.7%, a per capita increase of 0.7%) as compared to 2005 (dEIR p. 4.7-33, appended).¹ This suggests that the region’s GHG from personal vehicle travel may be rising, rather than declining. This concern is deepened by the report that per capita VMT for all trips (not specifically SB 375 trips) would increase from 2012 to 2040 (dEIR Table 4.12-3), as would per capita mobile source GHG (dEIR Table 4.7-4, appended, with population estimates from dEIR Table 4.12-3).

B2-2

Our concern is that the region may be experiencing a short-term decline, perhaps caused by the recession, followed by resuming a long-term upward trend. This “backsliding” is inconsistent with the intent of SB 375 and Executive Order (S-03-05), which set statewide targets for GHG reductions from every source by 2050. It is also not clear why the SB 375 GHG reductions are so great while other indicators, including ones that might reasonably be expected to trend in a similar direction, are flat or moving in the wrong direction. Given these facts, and the questions above, we are concerned that this plan may be challenged at the state level.

In closing, we believe that there is work to be done to address these issues and that both the COG and the California Air Resources Board (CARB) should move quickly to evaluate the GHG reduction calculations under SB 375 and the long-term trajectory of the plan’s benefits in advance of the COG’s adoption of the plan. The final plan should include a clear explanation of how SB 375 GHG reductions are reached, including descriptions of all model inputs and methodologies; demonstrate that the majority of reductions come from policy improvements, rather than economic shifts, rising gas prices, or other factors outside of the region’s control; and clearly explain any unexpected or confusing modeling results that may occur.

We look forward to working with the COG and CARB to ensure the long-term success of the plan is aligned with the goals and expectations of SB 375 to provide residents with the greatest level of health, economic and environmental benefits today and into the future.

Sincerely,

Bonnie Holmes-Gen
Senior Director, Policy and Advocacy
American Lung Association in California

Autumn Bernstein
Director
ClimatePlan

CC: Mary Nichols and Richard Corey [California Air Resources Board], Ken Alex [Governor’s Office of Planning & Research], Mike McCoy [Strategic Growth Council]

¹ Creating further question, the Executive Summary reports different GHG reductions, 23.9% by 2020 and 24.6% by 2035. The discrepancy from the EIR merits clarification.

Table 4.12-3
Plan Impacts on Key Transportation Measures vs. Existing and 2040 No Project

Indicators & Measures	2012 Existing	2040 Plan	2013-2040 Percentage Change with Plan	2040 No Project	2040 Plan vs. No Project % Change
Total Population	704,794	1,070,486	52%	1,070,486	0.0%
Total VMT per Weekday (Miles, in Thousands)	18,091	28,593	58.0%	28,795	0.7%
Congested Lane Miles (Level of Service D, E, F – PM 1 Hour)	408.6	989.5	59%	1,189.7	17%
Other Indicators					
Public Transit (Boardings)	93,972	129,657	38%	126,496	-2.4%
Transit (Walk+Drive Access)	2.09%	1.96%	-6.22%	1.68%	-14.3%
Bike+Walk (Non-Motorized)	4.16%	3.91%	6.0%	3.76%	3.8%
Single Occupancy Vehicle (SOV)	37.96%	37.89%	-1.8%	38.11%	0.5%
High Occupancy Vehicles (HOV) 2+ per vehicle	55.79%	56.24%	0.8%	56.44%	0.3%
Per Capita Vehicle Miles Traveled (VMT) (All Trips)	25.67	26.71	4.0%	26.90	0.7%

Source: SJCOG, 2014.

However, between 2012 and 2040 public transit boardings are projected increase by one third, although transit as a total share will drop to slightly under 2 percent. The share of trips by bicycle and walking will also drop to slightly under 4 percent. The share of trips by single-occupancy vehicles will fall by 1.8, and high-occupancy vehicle mode share will rise slightly to 56 percent of all trips. However, due to the substantial increase in population (approximately 365,694 persons), VMT per capita between 2012 and 2040 will rise by approximately 4 percent. Congested lane miles will also increase under the Plan from 408.6 existing lane miles operating at D, E, or F during the PM peak hour to 989.5 lane miles.

The last two columns of **Table 4.12-3** compares the Plan against the No Project alternative in which new transportation investments cease after 2015 while population and development continue to grow to forecast levels and development follows a more dispersed pattern than called for in the Plan. Compared to the No Project Alternative, the Plan would result in less VMT as well as an increase in transit boardings, more transit and bike trips as a percentage of total trips.

Thus, impacts on San Joaquin's overall circulation system resulting from implementation of the proposed 2014 RTP are considered potentially significant for **Impact TRANS-1**. Measures intended to reduce vehicle travel and improve LOS are part of the 2014 RTP. These include increasing transit use ridesharing and other measures to reduce demand on the transportation system; investments in non-motorized transportation; seeking to optimize land use/transportation connection; other travel demand measures

Table 4.7-4
Annual GHG Emissions – 2012 Compared to 2040

Source	2012 (MTCO ₂ e/Year)	2040 Plan (MTCO ₂ e/Year)	2040 No Project (MTCO ₂ e/Year)
Mobile Sources	3,508,974	6,013,068	6,296,640
Energy Use	1,540,053	1,708,438	1,782,639
Water Use	163,233	108,354	157,471
Construction	40,000	50,000	50,000
Total Emissions	5,252,260	7,879,860	8,286,750

As shown in **Table 4.7-4**, growth in San Joaquin County would result in an increase of approximately 2.6 MMTCO₂e of GHG emissions in 2040 as compared to 2012 under the 2014 RTP/SCS. This represents a 50 percent increase from 2012 to 2040. Under the No Project Alternative, emissions would increase by 3.0 MMTCO₂e, or approximately 58 percent. It should be remembered in general that this is a very rough approximation in that it depends on many simplifying assumptions and does not include many types of sources. Also, emissions shown for both scenarios are highly conservative as the emission factors used do not reflect possible or planned improvements in the future from programs such as updated green building standards, advancements in energy efficiency, and increased use of electrical vehicles. Lastly, while the 2014 RTP/SCS includes many strategies for reducing GHG emissions from land use, the RTP does not have any authority over how land is actually developed in San Joaquin County. This analysis is provided only to adhere to the requirements of CEQA, but regardless the project would have a significant impact with regard to this threshold.

Level of Significance Before Mitigation

Significant.

Mitigation Measures

GHG-1: SJCOG shall update future Regional Transportation Plans (including Sustainable Community Strategies) to incorporate policies and measures that build upon successful GHG reduction strategies from the 2014 RTP/SCS and lead to further reduced greenhouse gas (GHG) emissions. Such policies and measures may be derived from the General Plans, local jurisdictions' Climate Action Plans (CAPs), and other adopted policies and plans of its member agencies that include GHG mitigation and adaptation measures or other sources.

activities; however, not all equipment has retrofit components and is therefore technologically infeasible at this time.

Implementation of the Plan would result in an increase in GHG emissions as a result of the estimated mobile source emissions (other than light duty vehicles which would meet the applicable target – see SB 375 discussion) and construction and energy demand associated with residential and commercial buildings. As appropriate, SJCOG will encourage lead agencies to adopt these mitigation measures through its Intergovernmental Review process. However, SJCOG cannot require implementing agencies to adopt these mitigation measures, as it is ultimately the responsibility of a lead agency to determine and adopt mitigation. However, SJCOG cannot require the implementing agency to adopt these mitigation measures because such agencies are ultimately responsible to determine and adopt mitigation. Therefore, this impact remains significant and unavoidable.

Impact GHG-3 Conflict with SB 375 GHG emission reduction targets.

SB 375 requires that local MPOs provide plans to reduce GHG emissions from cars and light trucks compared to 2005 levels. The specific reduction targets are determined by CARB. For San Joaquin County, CARB determined that the 2020 target is a 5 percent reduction from 2005 emissions levels, and the 2035 target is a 10 percent reduction. The 2014 RTP/SCS exceeds these targets, providing reductions of 24.4 percent in 2020 and 23.7 percent in 2035.

The RTP achieves the reductions by a mix of land use strategies, transportation management, economic factors, and road projects. The 2014 RTP/SCS also notes state and regional programs that assist in reaching the reductions targets, such as state funding for transportation management and infrastructure improvement, regional air district programs to replace inefficient or heavily polluting vehicles, regional energy planning, and efficient commuting programs.

Vehicle use and fuel consumption are also influenced by other factors, such as fuel prices and employment. These factors are included in the SB 375 calculations, similarly to the inclusion of the recession by CARB in tracking progress toward AB 32 goals. While these factors are not attributable to a purposeful effort by SJCOG, it is nevertheless allowable as a factor in calculating reductions for SB 375 as detailed by similar recession-based reductions discussed and included by CARB in their draft update to the AB 32 Scoping Plan. On page 99 of the proposed update, CARB provides an overview of emissions trends for the various sectors, as well as a total and per capita rate. Regarding the role of the recession in progress towards AB 32 goals they have this to say, “The recent recession had a major impact on GHG emissions between 2008 and 2009, when emissions decreased by almost 6 percent. Other changes reflect ongoing early implementation of Scoping Plan measures, energy efficiency actions, renewable power

Letter No. B2: American Lung Association/Climate Plan

American Lung Association
Ms. Bonnie Holmes-Gen, Senior Director, Policy and Advocacy
Climate Plan
Autumn Bernstein, Director
April 23, 2014

This letter also contains comments on the RTP. Please refer to the RTP Response to Comments Technical Appendix.

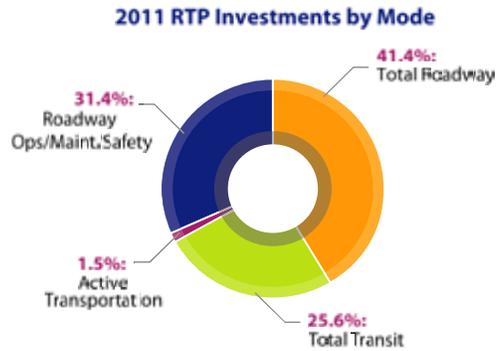
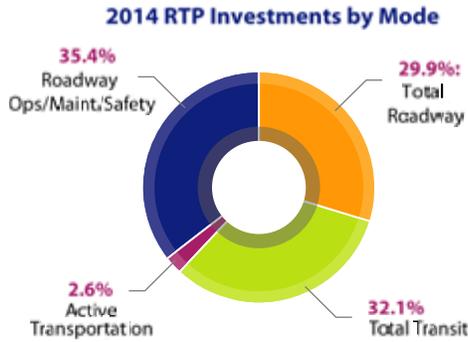
Response B2-1

The commenter suggests overall GHG performance could decline from 2035 to 2040 by pointing to a reduction in the total share of walk/bike trips and an increase in congested hours. Although the Draft EIR indicates the total GHG emissions could increase (See **Response B1-2**), the Plan would continue to meet the targets set by SB 375 and reduce per capita GHG emissions. Numerous factors will influence GHG emissions in the future; these could include future gas prices, increases in transit availability, more efficient cars, electric cars, and so on. In addition, congested vehicle hours could indicate an overall more compact growth pattern (as congestion frequently occurs in compact downtown areas) which in fact could be a positive indicator that land uses have changed to a pattern that could contribute to further GHG reductions. However, as stated above, SJCOG has demonstrated ability to meet (and exceed) the GHG reduction target established by CARB for 2020 and 2035. See also **Response B1-2**.

Response B2-2

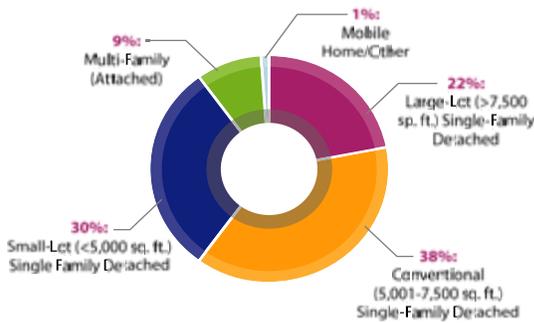
See **Response B1-2**.

SJCOG recognizing the importance of coordinating land use and transportation planning developed the RTP/SCS to enhance existing strategies and policies as well as to identify new strategies consistent with the intent of SB 375. Strategies such as increased funding to transit and active transportation as well as the continued implementation of the Commute Connection Program in the SJCOG region are all supportive of SB 375's goal of reducing vehicle miles traveled. The two charts below (2011 RTP Investment by Mode and 2014 RTP Investment by Mode) illustrate how the investment strategy changes in a manner supportive of SB 375 GHG reductions. As shown, roadway widening investments decrease as a percentage of total RTP investments from the 2011 RTP to the RTP/SCS while transit and active transportation investments increase as a percentage of total RTP investments.

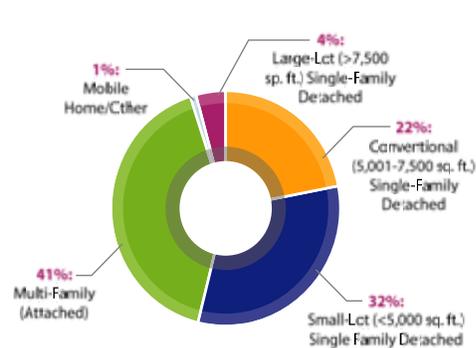


In addition, the two housing choices charts below show how projected land use growth through implementation of the RTP/SCS could change (SJCOG does not have land use authority). As shown by the charts, implementation of the RTP/SCS would result in less large lot single-family detached housing and more small lot attached single-family and multi-family housing. This coupled with over 17,000 less acres of land consumed by growth are indicators that the growth footprint decreases with implementation of the RTP/SCS when compared to the business as usual (BAU) scenario.

BAU



RTP/SCS



As is required by CEQA, SJCOG compared the impacts of the RTP/SCS with current conditions (2012) to determine CEQA related environmental impacts. This is the case for table 4.12-3 which compares the RTP/SCS to existing conditions and does not compare the RTP/SCS to the SB 375 baseline of 2005. SJCOG has added the following table to appendix M of the RTP/SCS.

Plan Impacts and Key Transportation Measures vs. 2005

Indicators and Measures	2005		
	(SB 375 Baseline)	2020 RTP/SCS	2035 RTP/SCS
Total Population	652,339	807,099	1,003,843
Total VMT Per Weekday (Miles in Thousands)	19,609	20,893	26,714
Public Transit Boardings	46,443	100,419	122,449
Bike/Walk (Vehicle Trips)	33,197	36,527	44,081
Single Occupancy (Vehicle mode share)	38.97%	37.93%	37.90%
High Occupancy (HOV) (Vehicle Mode Share)	54.78%	55.95%	56.17%

As illustrated in the table above, transit boardings almost triple from 2005 to 2035. The number of bicycle and walking trips increases from 2005 to 2035. The mode share of single occupancy vehicle trips decreases from 2005 to 2035; while the high occupancy vehicle trip mode share increases from 2005 to 2035. Indicators that per capita greenhouse gas emissions decline from 2005 to 2035.

In addition, as the table above displays, the number of bicycle and walking trips increase from 2005 to 2035 although the mode share, as described in RTP/SCS Appendix M for these same trips declines over the same period. These numbers reflect a conservative estimate of the projected number of bike/walk trips as the SJCOG travel demand modeling does not explicitly model bike/pedestrian improvement projects.



04/14/2014

Diane Nguyen
Deputy Director of Planning, Programming & Projects
San Joaquin Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

RE: Comments on SJCOG Regional Transit Plan / Sustainable Communities Strategy

Dear Ms. Nguyen:

On behalf of Defenders of Wildlife and its more than 180,000 California members, I would like to submit the following comments in regards to Valley Visions San Joaquin, the 2014 San Joaquin Regional Transportation Plan & Sustainable Communities Strategy (2014 RTP/SCS). The plan provides the region with an opportunity to develop transportation options that will support future population growth while moving towards more sustainable methods such as public transportation, biking, and walking.

We appreciate the plan's prioritization of land use patterns that encourage infill and compact development. We do, however, wish to highlight the potential impacts of this plan on open space, agricultural lands, and biological resources as outlined in the Program Environmental Impact Report (PEIR). These resources provide critical support to the region's human and natural communities as well as help to sustain local economies.

According to the PEIR, the 2014 RTP/SCS would consume 18,123 acres of vacant, open space, and agricultural lands. While this is considerably less than the estimated 35,184 acres of land that would be developed without the plan, it still poses significant threats to human and natural communities throughout the region by reducing habitat and the biological resources the areas provide.

As such, we suggest the following actions be taken by the San Joaquin Council of Governments (SJCOG) in order to support the 2014 RTP/SCS and its ability to withstand the growing demands on the region:

1. Establish SCS goals and quantify benefits for avoiding conversion of important agricultural lands, habitat lands, and open spaces based on increasing development efficiencies and identify policies for mitigating conversion that cannot be avoided.

2. Quantify the GHG reduction that would be achieved by meeting the established SCS goals for reducing land conversion as well as the co-benefits of achieving those goals over and above those associated with reduction in vehicle miles traveled. Such benefits include but are not limited

B3-1

B3-2

California Program Office

1303 J Street, Suite 270

Sacramento, CA 95814

Telephone 916-313-5800

to water and energy conservation, public service cost containment, and increases in agricultural output and ecosystem services.

B3-2

3. Assess and develop the ability of current local government policies to meet the SCS land conservation goals and, if necessary, propose policy changes and funding incentives necessary to achieve them.

B3-3

4. Establish a system of benchmarks that local governments can use to track their progress in meeting the SCS goals for avoiding and mitigating the conversion of important agricultural lands, habitat lands, and open space.

Additionally, we request that the 2014 RTP/SCS include a commitment toward the implementation of mitigation measures outlined in the Project Environmental Impact Review in regards to biological resources and wildlife, agricultural lands, and parks and recreation areas. We suggest that this commitment could be fulfilled through an inter-agency committee in conjunction with SJCOG to identify policies for mitigating conversion that cannot be avoided or minimized. Such a committee could also be responsible for executing the four actions outlined above, most notably action #4, establishing a system of benchmarks that local governments can use to track their progress in meeting the SCS goals for avoiding and mitigating the conversion of open lands.

B3-4

Thank you for your consideration of these comments. Your work to implement SB 375 can help reduce climate change and ensure the wildlife habitat and open spaces that make San Joaquin County a unique place remain long into the future.

Sincerely,



Kim Delfino
CA Program Director
Defenders of Wildlife

Letter No. B3: Defenders of Wildlife

Defenders of Wildlife
Ms. Kim Delfino, CA Program Director
1303 J Street, Suite 270
Sacramento, CA 95814

This letter also contains comments on the RTP. Please refer to the RTP Response to Comments Technical Appendix.

Response B3-1

The comment provides general introductory information regarding the Plan and provides factual background information and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue, no further response is required.

Response B3-2

The commenter provides several actions to be taken by SJCOG to support the 2014 RTP/SCS. These actions, as they relate to the Program EIR are discussed below.

1. The Draft Program EIR recognizes the agricultural lands will be converted to urban uses over the lifetime of the Plan (see Section 4.2 Agricultural Resources), and includes mitigation measures to reduce the potential impacts to the extent feasible. For example, Mitigation Measure AG-1 required implementing and local agencies to establish preservation ratios to minimize losses of agricultural lands. However, as stated in **Response B1-4**, above, SJCOG does not have direct land use authority and cannot require local agencies to implement project specific mitigation measures.
2. The Draft Program EIR quantifies GHG emissions associated with the Plan (see Section 4.7 Greenhouse Gas Emissions) in accordance with CEQA Guidelines and CARB requirements. The GHG analysis focuses on the emissions that would occur as a result of the RTP/SCS and also presents a comparison to existing conditions (as required by CEQA) and the No Project Alternative (for informational purposes). Further, Section 6.0, Alternatives, presents GHG emissions as well as the additional “co benefits” suggested by the commenter (i.e., water and energy consumption). This analysis provides the reader with an understanding of how different scenarios would increase or reduce GHG emissions compared to the Plan. Please also refer to **Response B1-6**.
3. This action is beyond the scope of the Draft Program EIR and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue, no further response is required. Please see the RTP Response to Comments for a response to this comment.
4. This action is beyond the scope of the Draft Program EIR. Please see the RTP Response to Comments for a response to this comment. This action is beyond the scope of the Draft Program EIR and does

not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue, no further response is required. Please see the RTP Response to Comments for a response to this comment.

Response B3-4

Please see **Response B1-4** regarding SJCOG's ability to implement mitigation measures. Please also see RTP Responses to Comments for responses to this comment.



April 23, 2014

Chairman Jeff Laugero and Members of the Board of Directors
 San Joaquin Council of Governments
 555 East Weber Avenue
 Stockton, CA 95202-2804

Dear Chairman Laugero and members of the Board:

On behalf of the undersigned health and medical organizations we write to offer our support and recommendations to further enhance the San Joaquin Council of Governments' (SJCOG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). As the Board moves toward a vote to adopt a final plan, we provide recommendations to improve air quality and public health, to increase safe, practical and healthier mobility options for children and seniors and to revitalize our existing communities, especially our most disadvantaged communities.

This plan has the potential to move San Joaquin County in a healthy, new direction. Historical sprawl development has had negative impacts on air quality, chronic illnesses, independence for seniors and young people, social equity, household budgets and many other quality of life factors in the county. The American Lung Association in California's March 2014 *Public Health Crossroads* report found that leaving business-as-usual planning behind and using the new growth coming to San Joaquin County to create more walkable, connected communities could avoid \$47 million in traffic pollution-related health impacts, including over 5,000 asthma attacks and 950 lost work days each year by 2035¹.

Cutting transportation emissions is a vital clean air strategy in San Joaquin County, which is home to the nation's 12th most particulate-polluted metropolitan area². But the benefits of healthier planning provide benefits far beyond air quality. Evidence shows that communities where residents can take part in daily physical activity and active transportation often result in significant reductions in air pollution, cancers, diabetes, heart disease, obesity and stroke, as well as billions in associated health care costs^{3 4}. Planning that promotes good health saves

¹ American Lung Association in California. *Public Health Crossroads: San Joaquin County*. March 2014. www.lung.org/california.

² American Lung Association. *State of the Air 2013*. www.stateoftheair.org.

³ Maizlish, N., et al. *Health Cobenefits and Transportation-Related Reductions in Greenhouse Gas Emissions in the San Francisco Bay Area*. American Journal of Public Health. April 2013. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3673232/>

⁴ Hsi-Hwa Hu, et al. *Neighborhood environment and health behavior in Los Angeles area*. Transport Policy. May 2014. <http://www.sciencedirect.com/science/article/pii/S0967070X14000353>

families in medical care costs, prevents pedestrian and bicyclist injury costs, saves businesses in insurance costs and lost productivity (including lost work days among employees home with sick children) and saves school districts money on lost enrollment days^{5 6}.

Our recommendations are geared toward several specific strategies that the COG approved for this plan and we believe that acting on these recommendations will enhance quality of life for all residents:

Promote health by bringing more active transportation projects online in the near term

We strongly support that this plan placed a priority on improving public health, and appreciate the COG's adoption of a strategy to "Enhance Public Health through Active Transportation Projects." The 78 percent increase in active transportation funds in this plan clearly helps to support this strategy, but the gains made in active transportation remain characterized in the plan as "modest" at 0.68 percent increase over the 2011 plan, and actually drop below 2012 levels by 2040 according to the Environmental Impact Report (Table 4.12-3). Given the significant air pollution and chronic disease rates⁷ in San Joaquin County, we recommend that the COG seek to gain more substantial improvements and clearly defined timelines for these projects to be completed in the near term and to sustain increased active transportation in the long-term. Front-loading these investments, and prioritizing investments within potential future transportation funding measures detailed in the plan would better serve the health and mobility options for residents. These types of projects can also provide more opportunities for neighbors and residents to interact in public, creating more of civic engagement that can help to reduce crime and increase safety and security, another strategy outlined in the RTP/SCS.

B4-1

Prioritize existing communities, downtowns and town centers over suburban development

While the current plan places significant focus on increasing transit service, the land use projections in the plan continue to favor suburban growth that would effectively require residents to drive for all daily errands. Where suburban development will occur, the plan should increase the level (if any) of walkable, mixed-use development to ensure that new developments are not devoid of healthier transportation options to jobs, shopping, schools or other daily needs. Given that the COG has put resources and effort into its inventory of viable Transit Oriented Development/Infill sites, as well as preparing the Smart Growth Incentive Program, more support could be given to infill and existing neighborhoods than is currently outlined in the plan. Given the COG strategy to enhance health through more active transportation programs, and the fact that the share of walking and biking is assumed to drop over time, more of the identified infill sites could be assumed to be developed in

⁵ Maizlish, *ibid*.

⁶ American Lung Association in California, *ibid*.

⁷ San Joaquin Council of Governments. *Staff Report: Basic Public Health Facts*. May 2013. <http://www.sicog.org/AgendaCenter/ViewFile/Agenda/05232013-147>

the current plan and, as future transportation funds become available, the Smart Growth Incentive Program, transit capital, streetscape and active transportation projects should be accelerated for early action to quickly invest in creating safe, vibrant and walkable neighborhoods.

Direct reserve funding to expand existing community transit bus systems

We appreciate that the 2014 plan increases transit funds 28.1 percent over the past plan, and believe that the expansion of the San Joaquin County Regional Transit District's Bus Rapid Transit system is a success story to be highlighted to other jurisdictions. It is clear that the investment in this system needs to be supported with a high level of transit oriented development. We believe that the RTP/SCS can be further aligned with the COG's strategy to "Optimize Public Transportation System to Provide Efficient and Convenient Access for Users at All Income Levels" by re-directing a percentage of the funds being held in reserve for *possible* future commuter rail service out of the county into existing transit bus systems that operate and provide local in-town service needs today. We believe that re-directing some portion of the reserve funding to enhance local bus service for those living and working within the county could also support social equity and trip reduction goals.

Issue progress reports on key measures and strategies presented in the plan and incorporate additional health and equity indicators into future plans

As the COG moves forward with implementation of the plan, it will be important to review progress toward key strategies. While the planning process is a short four-year effort, mid-term progress reporting will help to inform board members and the public on successes and challenges in meeting important benchmarks and regional emission reduction targets. Specifically, the COG could convene the SCS advisory committee annually for updates and discussion of implementation of the SCS strategy outcomes. For example, the committee could evaluate and report on how implementation of the plan is meeting strategies of "Enhancing Public Health through Active Transportation Projects" or "Optimizing Public Transportation System to Provide Efficient and Convenient Access for Users at All Income Levels" in support of the COG's goals. Inclusion of a San Joaquin County Public Health Services representative on the SCS Advisory Committee would provide an opportunity for valuable, ongoing expertise and feedback related to the health impacts of planning decisions as deliberations move forward. In addition, as future plans are developed, COG should continue to review the listing of the health and equity performance indicators developed through a statewide collaboration led by Human Impact Partners, which were not able to be modeled in this initial SCS.

We view the SCS process through the lens that planning decisions have a real impact on the health and vibrancy of our communities and we appreciate your consideration of the above recommendations in this light. We thank you for the important dialogue on the future of San Joaquin County, and look forward to working with you as you consider the final plan.

Sincerely,

Tim Gibbs
Director of Campaign Initiatives
American Cancer Society Cancer Action Network

Will Barrett
Policy Manager
American Lung Association in California

Nancy Perrin
President
California Society for Pulmonary Rehabilitation

Heidi R. Flori, MD, FAAP
President
California Thoracic Society

Praveen Buddiga, MD
Chair, Air Quality Committee
Fresno-Madera Medical Society

Eric Lerner
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Sara Satinsky, MPH, MCRP
Senior Research Associate
Human Impact Partners

Harry Wang, MD,
President, Sacramento Chapter
Physicians for Social Responsibility

Linda Rudolph, MD, MPH
Co-Director, Center for Climate Change & Health
Public Health Institute

Jeremy Cantor, MPH, Program Manager
Sandra Viera, Program Manager
Prevention Institute

Krysta Titel, MPH
Coalition Coordinator
San Joaquin County Asthma & COPD Coalition

Marty Martinez
Northern California Policy Manager
Safe Routes to School National Partnership

Letter No. B4: American Lung Association, et al.

Will Barrett, Policy Manager
American Lung Association
Tim Gibbs, Direction of Campaign Initiatives,
American Cancer Society
Nancy Perrin, President,
California Society for Pulmonary Rehabilitation
Heidi R. Flori, MD, FAAP, President, California Thoracic Society
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Eric Lerner, Climate Director, Health Care Without Harm
Sara Satinsky, MPH, MCRP, Human Impact Partners
Harry Wang, MD, Program Manager, Physicians for Social Responsibility
Linda Rudolph, MD, MPH, Co-Director, Public Health Institute
Prevention Institute
Jeremy Cantor, MPH, Program Manager,
Sandra Viera, Program Manager San Joaquin County Krysta Titel, MPH, Coalition Coordinator, Asthma
& COPD Coalition
Marty Martinez, Northern California Policy Manager, Safe Routes to School National Partnership
April, 23, 2014

This letter also contains comments on the RTP. Please refer to the RTP Response to Comments Technical Appendix.

Response B4-1

The commenter refers to Table 4.12-3 in the Draft EIR and indicates the Plan would result in “modest” gains in active transportation. While it is correct that the percentage of total population riding transit would decrease between 2013 and 2040 as shown in the table, the actual number of transit boardings would increase. This is in part due to the large increase in population expected over the lifetime of the plan. Further, as described in **Response B2-2**, above, these numbers reflect a conservative estimate of the projected number of bike/walk trips as the SJCOG travel demand modeling does not explicitly model bike/pedestrian improvement projects.

Michael F. Babitzke, Inc.
Professional Corporation

April 22, 2014

Michael F. Babitzke
Attorney of Law

US Mail/Hand Delivered

Diane Nguyen, Deputy Director of Planning, Programming and Project Delivery
San Joaquin Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

Re: Comments Due for the Sustainable Communities Strategy, Draft EIR and 2015 FTIP
Conformity Document

Dear Ms. Nguyen,

I am writing this letter on behalf of Neighbors United, Neighbors United is a nonprofit organization in the process of being formed to focus on growth and environmental issues. I anticipate that Neighbors United will be completed by the end of May 2014.

I have reviewed various growth related impact documents available online at the San Joaquin Council of Governments Website (www.sjcog.org).

The information provided causes me concern about the future impacts associated with Manteca's growth and the infrastructure needed to support that growth.

My comments follow:

1. Growth:

Housing starts have increased dramatically over the past several months. A recent Manteca Bulletin newspaper article stated that the Manteca Planning Department has identified 14,310 total housing units that have either been approved or applied for.

Lathrop and Ripon have also seen increased housing start activity.

2. Transportation/Roadways:

Various projects appear to be under way as detailed on the "**Regionally Significant Project Listing**" presented as part of the 2014 Transportation Plan. (**see Exhibit "A" attached/3 pages**)

Completion Date:

1. 2014 Atherton Drive four lane roadway gap closure (Airport to Union)
2. 2014 Louise Ave (widen two to four lanes/Manteca SPRR to East of SR99)

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Page 1 of 14

3. 2017 SR120 at Union Road interchange
4. 2017 Airport Way widening (two to four lanes SR120 to Yosemite)
5. 2023 SR120 at McKinley Avenue interchange
6. 2023 Lathrop road widening (two to four lanes east of UPRR to SR99)
7. 2023 Airport Way (two to four lanes Lathrop Rd. to Roth Rd.)
8. 2023 Atherton Drive (new four lanes road McKinley to west of Airport Way)
9. 2032 Raymus expressway (new four lanes Main Street to SR99/four lanes)
10. 2032 Airport Way widening (two to four lanes Yosemite to Lathrop Rd.)
11. 2032 Raymus Expressway (SR120 to Woodward)
12. 2032 Raymus Expressway (new two lanes Woodward to Main St.)
13. 2032 Atherton Drive (new four lanes Woodward to McKinley Ave)
14. 2040 Airport Way (four to six lanes) (SR120 to Lathrop Rd.)
15. 2040 I-5 Mossdale (SR120 to I-205) (widen nine to twelve lanes)
16. 2040 SR120 (widen four to six lanes) (I-5 to SR99)

The road improvement schedule could prove problematic to Regional Traffic flows in the view of many south county residents.

Improvements to Atherton Drive, Union and McKinley interchanges, the new Raymus Expressway and Airport Way are scheduled for completion several years prior to improvement work scheduled for Hwy 120 and the Hwy 120/I-5 Mossdale interchange.

Further, for westbound traffic, those roadway improvements will only serve as arterial expressways that will all eventually need to access westbound Hwy 120 (SR120 to remain four lanes until 2040). This will more than likely result in massive congestion as more and more commuters exit those arterial expressways and merge onto Hwy 120 heading west to I-205 or I-5 north and south.

It is my belief that this will lead to **mass traffic gridlock, bottle necking and more** at both the east and west ends of the Hwy 120 Bypass. (see Manteca newspaper article dated 11-22-13, **Exhibit "B" attached**)

3. Flooding:

Various properties in the county were flooded in 1997.

In particular, the area south of Manteca had several properties impacted by flood waters.

C1-1

I was previously advised that the Raymus Expressway will be built in conjunction with a flood levee to protect the Expressway and properties located north of the proposed roadway.

That creates concern with many residents south of Manteca and causes them to question the impact that the Raymus Expressway/levee will place on increasing the elevation of flood waters on properties located south of the Expressway/levee in the event of a levee break.

I draw your attention to page 4.13-60 of the DEIR which states:

"A portion of the transportation projects included in the proposed 2014 RTP/SCS could occur within the 100-year flood hazard area, thus increasing the potential to obstruct or exacerbate floodwaters. The construction of projects involving support structures in the floodway could obstruct floodwaters at some locations. Placement of structures within a floodplain can displace floodwaters and alter the base flood elevations in the surrounding areas. Structure can form a backwater effect, resulting in an increase in the flood elevation level upstream and in neighboring areas. Likewise, floodwaters can cause scour effects, resulting in erosion and sedimentation problems downstream from structures. Drainage areas could be altered by highway corridors, in which floodwater could be detained by medians and along the roadside. Proposed bridge supports could block debris in waterways, creating obstructions and further elevating upstream flood levels. The Plan could alter existing drainage patterns or substantially increase the rate or amount of surface runoff in a manner that would result in flooding or produce or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems".

C1-1

It seems likely that some properties that did not experience flood damage in 1997 could be impacted by future San Joaquin River levee breaks due to the displaced flood water affect resulting from development.

For this reason, many south Manteca rural residents believe, that any future flood impacts due to new development should result in San Joaquin County providing compensation to property owners negatively affected by adverse changes to the elevation in floodwaters contacting their property.

4. Fire Services:

For some time now, the Lathrop-Manteca Rural Fire Department has reduced staff or ordered station closures to the Union Road Station #32.

This decision was apparently based on budget shortfalls due to a decreased tax base resulting from many years of unmitigated rural land annexations into the City of Manteca.

I am concerned that further development south of Manteca will further impact the ability of the Lathrop-Manteca Rural Fire Department to maintain and staff the Union Road fire station.

C1-2

5. Protecting Agricultural Resources:

Much has been said about our local urban communities efforts in protecting farm ground.

In fact, many communities have adopted ordinances to protect farm ground from the adverse affects of urbanization.

These ordinances include Right to Farm policies, buffers and other protective measures that were initiated to protect farming areas from the premature expansion of urban development.

My experience has led me to believe that the current Right to Farm protections that have been put in place are inadequate and do not achieve the goal for which they were created.

6. Recreation/Private Property Rights:

It is my belief that walkways and bike paths should not encroach on or inhibit the ability of farming properties to conduct their cultural operations for farming locations bordering urban development.

For this reason, I believe that the Right to Farm protections that already appear to be put in place, need to be enforced in accordance with their intent.

7. Groundwater:

As stated on page 15 of the, Central Valley Regional Water Quality Control Board Brochure dated 2010, that is available as part of the document package posted on the San Joaquin Council of Governments web site:

"Groundwater Strategy:

The Central Valley has the second largest contiguous groundwater basin in the United States and the largest groundwater basin in California. Future population growth expected in the Central Valley will place further demands on water supply and quality. Groundwater is the Central Valley's largest source and storage for water supply and its growing importance in meeting a community's water supply portfolio has placed an increased importance on groundwater quality protection and restoration".

In support of groundwater protection, the Porter Cologne Water Control Act of 1967 requires the State Water Regional Control Board "(SWRCB)" and the nine Regional Water Quality Control Board's "(RWQCB's)" to adopt water quality criteria to protect state waters.

8. Storm Water Runoff:

Page 4.13-22 of the DEIR states that, "lead, zinc, cadmium, and copper are heavy metals commonly found in storm water. Other metals introduced by automobiles include chromium, iron, nickel, and manganese. These metals can enter waterways through storm drains along with sediment, or as atmospheric deposition."

The DEIR also notes that "pesticides, phenols, and polynuclear aromatic hydrocarbons are toxic organic chemicals found in storm water." (see Exhibit "C" attached)

Considering the information above, I am particularly concerned that the Raymus Expressway, as well as other conditions and infrastructures created in conjunction with the roadway

C1-3

C1-4

construction, could lead to unknown conditions or other water discharges and displacements that might allow heavy metals and other toxins to migrate into the ground water.

9. **Natural Water Flows/Irrigation:**

Considering the potential impacts to farming properties that could be affected by the Raymus Expressway, Page 4.13-55 of the DEIR states that: *“Generally with regard to water impacts, the greater the change from existing conditions, the more noticeable the change to the environment. The construction of a new roadway generally has a greater impact on water resources than the widening of an existing one as it would result in the loss of a greater amount of permeable surface. Road widening, however, can have significant local impacts especially when requiring the removal of trees and other important landscape buffers, or when construction of noise barriers or other visual impediments is necessary.*

The development of new transportation facilities may affect water resources, either through direct effects to water sources or through indirect effects to the area surrounding a resource if toxins pollute the area’s water resources. The region contains a fair number of water resources; therefore, the potential for impacts to water resources is significant. Improvements within existing rights-of-way are less likely to affect existing water resources; however, new highway segments near water resources would constitute a significant impact. Also, reducing buffer zones between transportation corridors and reduction of water resources through lane widening could cause significant impacts.” (see Exhibit “D” attached)

With that in mind, it appears significant impacts could be created to farming operations experiencing a dissection of their property and the associated water resources and other adverse environmental impacts that might arise due to new road construction anticipated south of Manteca.

C1-5

10. **Sewer Water Treatment and Discharge:**

It is my opinion that sustainable growth can only be achieved by utilizing a process that neutralizes the adverse environmental impacts that growth places on our community.

This is particularly true in relation to the collection, treatment, and disposal of sewer wastewater and the associated waste solids collected through the treatment process.

Page 4.11. 7-5 of the DEIR states that, *“The Safe Drinking Water Act (SDWA) ensures the quality of American’s drinking water. The law requires actions to protect drinking water at it’s sources: rivers, lakes, reservoirs, springs, and ground water wells, and applies to public water systems serving 25 or more people.”*

In preparation for making comments on any impacts associated with sewage treatment, I reviewed two documents available on the City of Manteca’s website.

1. National Pollution Discharge Elimination System Requirements (“NPDES Requirement Document”)
2. City of Manteca Wastewater Quality Control Facility Master Plan Update (“Master Plan Update”) that was prepared by Nolte Engineering Company dated 2006.

The documents were the most recent available and indicate that the City of Manteca utilizes a Tertiary filtration process to treat sewage waste generated in the urban areas located around the Manteca waste treatment facility.

C1-6

As I understand it, the Tertiary treatment process involves a series of filters, aerators, digesters, clarifiers, and other devices to filter solids out of the stream of water being discharged from the plant.

In addition, the documents indicate that a portion of the Tertiary filtered waste water is also treated by:

- a. UV disinfection
- b. a process involving 2 each-chlorine contact tanks

The information also states that the total capacity of the plant was upgraded in 2007 to 9.87 MGD (9.87 million gallons per day).

Future expansion is discussed with a potential goal of reaching 27 MGD capacity for the plant, an increase of almost three (3) times the current capacity.

Page 1-2 of Nolte's 2006 Master Plan Update indicates that for the current operating permit period (10/8/09 thru 10/1/14), the plant discharges un-disinfected secondary effluent onto **approximately 190 acres of city-owned farmland surrounding the plant**. Flows in excess of crop demands are disinfected and discharged to the San Joaquin River. (see Exhibit "E" attached)

On page 1-1, Nolte's 2006 Master Plan Update states that, "future river discharge requirements are expected to become stricter and may entail additional treatment beyond effluent filtration. In view of these developments, an updated Master Plan "(UMP)" that considers stricter water quality requirements, alternative disposal options, and increased flow is warranted." (see Exhibit "F" attached)

"The objective of the UMP is to determine what steps will be required to increase the treatment capacity from 10 MGD to 27 MGD, while complying with stricter effluent discharge requirements for river discharge."

Nolte's 2006 Master Plan Effluent Disposal Strategies for treated effluent discharge provide details of anticipated effluent disposal plans in Chapter 4, pages 4-1 and 4-2 as detailed below. (see Exhibit "G" attached/total 3 pages)

Specifically, Chapter 4 of Nolte's Master Plan Update states:

"Effluent Disposal Strategies:

*The long-term recommended disposal strategy for the City WQCF is presented below. Treated effluent from the WQCF would be disposed of by three methods: 1) On-site land application; 2) Urban landscape irrigation; and 3) Discharge to the San Joaquin River. **Off-site land application through an expanded agricultural irrigation program is not considered feasible because of the magnitude of the required land acquisition (greater than 5,000 ac) and the potential distances from the plant.** The WQCF currently discharges to the San Joaquin River or on-site land application. A combination of the three disposal methods will be utilized to discharge the buildout flow of 27 mgd. Each disposal strategy, and the amount of treated effluent that can be discharged by that method, are described below and summarized in Table 4-1."*

"4.1 On-Site Land Application

The City currently discharges approximately 1030 ac-ft/yr (0.87 mgd) of undisinfected secondary effluent to 190-ac of City-owned land. An existing 9-ac, 15-Mgal storage pond located on City land immediately west of the WQCF is used in the on-site application system. The City is planning to develop 30-ac of City-owned land for a state of the art softball complex, leaving 160-ac of City-owned land available for on-site land application.”

“The permeability of soils identified at the on-site land application area ranged from moderately rapid to rapid (7). **The hydraulic loading at the WQCF is generally between 65 and 70 inches per year. Assuming an application rate of 65 inches per year on the remaining 160-ac of City-owned land, approximately 0.73 mgd of treated effluent can be disposed of by on-site land application.**”

“4.2 Urban Landscape Irrigation

The Technical memorandum Evaluation of Urban Water Recycling Opportunities from the Manteca Wastewater Quality Control Facility (8) investigates the use of urban landscape irrigation to dispose of treated effluent from the WQCF. The technical memorandum identifies 741-ac of irrigable urban land. This information has subsequently been updated, and a total of **817-ac of irrigable urban land have been identified including parks, school, cemeteries, and golf courses** (9). Assuming an application rate of 54 in/yr, 3.28 mgd of recycled water would be discharged for urban landscape irrigation (see Appendix B).”

“It should be noted that **unrestricted urban irrigation with recycled water requires the production of tertiary disinfected recycled water** as defined by the DHS. This water quality requirement will be satisfied upon completion of the Phase III Project. To reduce the potential for public contact with recycled water, parks, school, and cemeteries are assumed to be irrigated between 10 p.m. and 6 a.m. (This limited window for landscape irrigation is a typical DHS requirement.) The golf courses are assumed to receive water 24-hours per day.”

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“4.3 River Discharges

The City is currently permitted to discharge 8.11 mgd to the San Joaquin River under NPDES Permit No. CA0881558 (2). The permit allows the monthly average discharge to increase to 9.87 mgd in February 2009, provided that additional water quality requirements are satisfied by the WQCF. The increase in flow to 9.87 mgd will be discharged to the San Joaquin River through the existing 36-inch outfall. Due to concerns of thermal impacts to the San Joaquin River, the WQCF will likely be restricted from discharging during reverse flow events. Beyond 9.87 mgd ADWF, a second parallel outfall will be required to convey the balance of WQCF effluent either not land applied on-site or pumped off-site for urban irrigation. A discussion of the routing of the parallel 36-inch land outfall is presented in Appendix C.”

**“Table 4-1
City of Manteca
Wastewater Quality Control Facility Master Plan
Recommended Disposal Strategy at Buildout**

Disposal Option	Average Discharge Rate, mgd	Annual Volume, ac-ft/yr	Percentage of Total Discharge
On-Site Land Application	0.73	870	3%
River Discharge	22.99	25,760	85%
Urban Landscape Irrigation	3.28	3,670	12%
Total	27.00^a	30,300	100%

^a Based on anticipated wastewater flow to Manteca WQCF, see Chapter 3”.

Nolte provides additional comments in Chapter 7, section 7.8, page 7-13 that state:

“Filtered effluent must be disinfected to comply with Title 22 wastewater reuse criteria for unrestricted reuse. Disinfected effluent coliform objectives in accordance with Title 22 requirements are summarized in Table 7-10. For reasons of worker safety, environmental protection, and operational flexibility, an ultraviolet light disinfection system will be used.” (See exhibit “H” attached).

Page F-83 of the NPDES Requirement Document states ***“that UV system specifications are required to ensure that adequate UV dosage is applied to the waste water to inactivate pathogens (e.g. viruses in the waste water).” (see Exhibit “I” attached)***

Nolte also includes, within the Master Plan Update, a **Technical Memorandum** detailing additional options for Urban Water Recycling opportunities. (See 11 page report attached as Exhibit “J”).

In that Technical Memorandum, on page 1, Nolte states that, ***“Due to the implementation of the California Toxics Rule and Total Maximum Daily Limits (TMDLs) for the San Joaquin River, continued river discharge may result in the need for expensive advanced treatment systems (e.g. ultrafiltration and reverse osmosis).”***

Nolte goes on to describe further less expensive land based crop irrigation methods detailing effluent water disposal onto city parks and other designated open space properties.

In all, the report appears to identify 817 irrigable acres that can be utilized to accept 54 inches of water per year.

The report also includes a map that clearly demonstrates the close proximity of additional effluent sewer discharge properties to San Joaquin County residents residing in the general area in and around the Oakwood shores housing development.

I was also informed at an earlier McKinley Expressway (AKA: Raymus Expressway) Manteca Planning Department workshop that the proposed expressway would include sound wall barriers and landscape strips extending over the entire length of the roadway.

That leads me to be concerned that un-disinfected treated sewer water may be planned for disposal along the entire length of the proposed Raymus Expressway.

In addition, it is important to note that page F-74 of the City of Manteca’s NPDES Requirement Document indicates **that effluent monitoring of un-disinfected sewer water suggests the presence of coliform organisms, salts, copper, ammonia, nitrates, nitrites, and mercury as well as other potentially toxic chemicals, PH imbalances, elevated BOD, TSS and more.**

Specifically, my concerns are listed in the form of the following questions:

- a. Will coliform organisms, salts, nitrates and heavy metals migrate into the ground water supplying the wells on properties affected by effluent sewer water discharge?
- b. Since typical farming operations utilize 30” to 36” of water for their farm

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operations on an annual basis, **will the 54” of water recommended on page 4-1 of the Master Plan Update exceed the amount of water the plants can absorb leading to excess water passing through into the water table?**

- c. Are water tables in the flood plain areas south of Manteca too close to the surface to consider for effluent wastewater discharge?
- d. Should all effluent wastewater be disinfected to kill off any chloroform organisms, pathogens or any live viruses present in the waste stream?
- e. Should the City of Manteca consider the installation of a large scale reverse osmosis treatment plant as part of the cities total waste treatment strategy?
- f. What impact to neighboring well and ground water quality has the operation of the current Manteca waste water control facility had on properties down gradient from the plant?
- g. What portion of the 5000 total acres identified on page 4-1 of the Nolte 2006 Master Plan Update will the City of Manteca deem necessary to identify to meet the 27 MGD waste treatment goal identified in the NPDES Requirement Document?
- h. What requirements will the State Water Resources Control Board or FEMA place on 200 year levee requirements for sewer waste water storage and disposal for any potential waste water storage or disposal location operating within the flood plane?
- i. Could rural property owners, residents and farmers south of Manteca be providing some form of subsidization to local developers as a result of absorbing uncompensated impacts that could negatively affect their standard of living and potentially decrease their property values due to effluent waste water discharge?
- j. Should developers pay more in the way of permit fees to provide for the funding necessary to allow the City of Manteca to secure a reverse osmosis waste water filter system as an added feature to the treatment plant?

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Reasons to consider reverse osmosis:

Salinity content existing in the City of Manteca wastewater effluent discharge appears to be a problem and measures taken to lower it are discussed in detail on pages F-47 through F-51 of the City of Manteca National Pollution Discharge Elimination Systems Requirement Document. (see Exhibit “K” attached/total 5 pages).

In that portion of the report, salt concentrations exceeding the allowable limit are shown to persist. **The report goes on to state, that the “operation of a large-scale reverse osmosis treatment plant would result in production of highly saline brine for which an acceptable method of disposal would have to be developed.”**

“The facts regarding the need to construct reverse osmosis to meet the 700 umhos/cm EC standard have not changed. Since adoption of the Manteca Order the Discharger has replaced a portion of its groundwater supplies with lower salinity surface water from the South San Joaquin Irrigation District. Furthermore, the Discharger had removed the food processing

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wastewater from Eckhart Cold Storage from its waste-stream that is discharged to the San Joaquin River. As a result, salt reductions have been achieved in the effluent discharge. However, **the Discharger is still unable to comply with the 700 umhos/cm EC standard required in the Bay-Delta Plan during the irrigation season.**"

Over time, it is my belief that any land based sewer water discharge properties set aside to accept effluent sewage water that contain a high salt content will soon lose their ability to be effectively farmed and could also lead to eventual salt migration to neighboring properties.

This is supported by information included in the NPDES Requirement Document on page F-72 under item 4a which states that: "Total dissolved solids, which were found to be present in the ground water at an average concentration range from 443 mg/l to 893 mg/l have the potential to degrade ground water quality at this site because there is little ability for attenuation in the shallow permeable vadose zone beneath the facility. According to Ayers and Westcot, dissolved solids can cause yield or vegetative growth reductions of sensitive crops if present in excess of 450 mg/l in irrigation water, thereby impairing agricultural use of the water resource". (see Exhibit "L" attached)

Regular upsets occurring to the current waste water treatment system:

It is my belief that the tertiary waste water treatment system currently operating at the Manteca Waste Water Treatment Plant may be utilizing outdated and/or insufficient technology that does not appear to be capable of meeting current and projected health and safety water quality standards in accordance with the groundwater strategy adopted by the Central Valley Regional Water Control Board as described in section #7 on page 4 of this letter.

It is also important to note that the Livermore Water Reclamation Plant website indicates that the Livermore Amador Valley Waste Water Treatment Facility utilizes a combination of tertiary treatment in conjunction with reverse osmosis that allows for ultimate disposal into the San Francisco Bay.

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Most important, the Manteca Waste Water Treatment Facility appears to have been out of compliance several times in the last five years. Complaint #R5-2013-0568, #R5-2011-0533, #R5-2013-0516 indicate that they may have been settled by payment. (see Exhibits M1, M2 and M3 attached).

Other options in the form of alternative control measures are further discussed on pages F-62 and F-63 of the City of Manteca NPDES Requirement Document. (see Exhibit "N" attached/2 pages) Comparable costs are identified in the report for 2009 for both land based sewage water discharge application and the possibility of developing a reverse osmosis water treatment system which would allow many more possibilities for the application of treated sewer water.

2009 Comparable Construction and Treatment costs as estimated in the NPDES:

Land based Tertiary treatment construction costs = \$28.5 million
Plus \$300,000 per year to operate

Reverse osmosis system construction costs = \$93.5 million
Plus \$4.9 million per year to operate

Potential affects on Groundwater:

On pages F-71 through F-73 (see Exhibit “O” attached/3-pages), the NPDES requirement further provides information on the potential for significant and unsustainable ground water degradation by means of historical data obtained from monitoring well sampling at the Manteca Waste Treatment Facility.

On page F-71, the NPDES Requirement Document provides information relating to Basin Plan Water objectives for the purpose of identifying:

1. *“The beneficial uses of the underlying ground water are municipal and domestic supply, industrial service supply, industrial process supply, and agricultural supply.”*
2. *“Basin Plan water quality objectives include narrative objectives for chemical constituents, tastes and odors, and toxicity of groundwater. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life. **The chemical constituent objective states groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use.** The tastes and odors objective prohibits taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses. The Basin Plan also establishes numerical water quality objectives for chemical constituents, bacteria, and radioactivity in groundwaters designated as municipal supply. These include, at a minimum, compliance with MCL’s in Title 22 of the CCR. The bacteria objective prohibits coliform organisms at or above 2.2 MPN/100 ML. The Basin Plan requires that application of the most stringent water quality objective necessary to ensure that the designated beneficial use is not adversely affected; however, as specified in the Basin Plan, the water quality “objectives do not require improvement over naturally occurring background concentrations.” Therefore, this Order contains groundwater limitations for both natural background quality and water quality objectives that are necessary to protect the beneficial uses of the underlying groundwater. Thus, the water quality objectives define the least stringent limits that could apply as groundwater limitations except where natural background quality already exceeds the objective.”*
3. *“For natural background quality, the level of groundwater quality is dependent upon the background conditions. Historical data is not available to determine natural background conditions before any discharges from the Facility. Therefore, Regional Water Board staff rely on present-day sampling from upgradient monitoring locations to represent the range of water quality that otherwise would have been expected at the site before the Facility was operational. The Discharger conducted a groundwater characterization study of the City of Manteca and surrounding area, and submitted the findings on 26 September 2006, Background Hydrogeologic Characterization Report. This report states “one well, BG-1 (MW-AW) has been installed to evaluate background water quality upgradient of the facility. This well is located in the regionally upgradient direction of the Facility (southeast). This well appears to be near the transition area where background groundwater flow from the*

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southeast and groundwater flow from the mounded groundwater under the Facility meet, especially during the irrigations season. Water quality at this well is, however, believed to be dominated by recharge from the regionally upgradient groundwater and from seasonal rainfall.” Historical regional water quality data obtained by Department of Water Resources, USEPA, and US Geological Survey from 23 monitoring wells located within a 33 square mile area is generally similar to results obtained at the Discharger’s background monitoring well MW-AW. Based on this information and findings contained in The Report, Regional Water Board concurs that MW-AW is appropriate to effectively and fully characterize the background groundwater quality conditions within the vicinity of the Facility and the Agricultural Fields.”

4. “Rationale for Groundwater Limitations. The Discharger’s groundwater characterization study (Background Hydrogeologic Characterization Study, 26 September 2006, Condor Earth Technologies, Inc.) also summarized all groundwater data collected to date and **concluded that groundwater quality under beneath and down gradient of the facility appear to be of poorer quality than upgradient groundwater for total dissolved solids, nitrate, and several of the trace metals.**”

- a. “pH, which ranged from 6.7 to 7.4 standard units in the domestic wastewater and from 4.45 to 11.53 in the food processing wastewater, has the ability to degrade groundwater quality at this site because there is little potential for buffering in the shallow permeable vadose zone. According to Ayers and Westcot, **pH less than 6.5 or greater than 8.4 can cause yield or vegetative growth reductions of sensitive crops if present in irrigation water, thereby impairing agricultural use of the water resource.** The applicable water quality objective to protect the agricultural use from discharges of substances that affect pH is the narrative Chemical Constituents objective, which is applied following the “Policy of Application of Water Quality Objectives” in the Basin Plan. A numerical groundwater limitation range of 6.5 to 8.4 for pH, based on Ayers and Westcot, is relevant and appropriate to apply the narrative Chemical Constituents objective to protect unrestricted agricultural use of groundwater in the absence of information to support a less protective limit.”

- b. “Ammonia has the potential to degrade groundwater quality because there is little ability for ammonia attenuation in the shallow permeable vadose zone at this site. According to Amoores and Hautala¹, who evaluated odor of ammonia in water, the odor threshold for ammonia in water is 1.5 mg.L (as NH₄). These authors studied the concentration of chemicals in air that caused adverse odors and then calculated the concentration in water and would be equivalent to that amount in air. Therefore, it is appropriate to use the data contained therein to apply the narrative Tastes and Odors water quality objective. Concentrations that exceed this value can impair the municipal or domestic use of the resource by causing adverse odors. The applicable water quality objective to protect the municipal and domestic use from discharges of odor producing substances is the

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narrative Tasted and Odors objective, which is applied following the "Policy of Application of Water Quality Objectives" in the Basin Plan. A numerical groundwater limitation of 1.5 mg/L for ammonia (as NH₄) based on Amoores and Hautala, is relevant and appropriate to apply the narrative Tastes and Odors objective to protect the municipal and domestic use of groundwater."

5. "Groundwater limitations are required to protect the beneficial uses of the underlying groundwater. Based on groundwater quality data provided by the Discharger, it appears that the Discharger cannot immediately comply with the groundwater" (requirements).

Justification for the potential degradation to ground water:

Finally, the NPDES Requirement Document **attempts to make the argument that the potential degradation to ground water due to land based discharges is justified** for a number of reasons including;

- a. to benefit economic and social development in the City of Manteca and surrounding communities
- b. the land based effluent discharges are protective of the beneficial uses of the San Joaquin River
- c. the benefits of maintaining existing water quality and mass emissions for the constituents analyzed are not commensurate with the costs of additional treatment.

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That leads me to a Manteca Bulletin newspaper article printed on, April 16, 2014, titled "Recycled City Water for Farms?" (see Exhibit "P" attached)

In that article, Dennis Wyatt, writes that "Manteca councilman, Steve DeBrum convinced his colleagues to have staff explore working with the South San Joaquin Irrigation District ("SSJID") to see if 7 million gallons of treated wastewater that the city releases back into the San Joaquin River could instead be diverted for local farm use."

Manteca Bulletin editor, Dennis Wyatt, goes on to state that "Mayor Willie Weatherford believes 100 acres designated for open space as part of the 1471 home Trails of Manteca neighborhood pursued south of Woodward Avenue and west of McKinley Avenue could be used to create a large holding lake for treated waste water. From there, the SSJID could pump it into its delivery system serving farmland south of the city. At the same time, the manmade lake could also help recharge underground water tables that ultimately are tapped by Lathrop and Manteca municipal well systems."

What seems apparent to me now is that mayor Weatherford and certain council members are strongly considering taking steps that could ultimately lead to a large scale plan to store and distribute massive quantities of Tertiary treated sewer water (possibly un-disinfected) to areas south of Manteca that apparently will not meet water quality standards that would allow for discharge into the San Joaquin River.

That makes me further question the ultimate affect that those either disinfected or un-disinfected Tertiary treated sewer water discharges will have not only on the quality of our neighborhood groundwater, but also on our continuing ability to farm due to salt intrusion, initially into the top soil, before those same salts potentially end up migrating into the ground water.

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In closing, I would like to state that I am not against any development project.

I make the comments contained in this letter in the spirit of cooperation, with the hope that a sustainable level of development growth can be achieved that allows protections for the quality of life that neighborhoods south of Manteca currently enjoy.

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Thank you for your attention.

Yours truly,



Michael F. Babitzke
Attorney at Law

cc: City of Manteca Planning Commission
City of Manteca Planning Department

Regionally Significant Project Listing

Jurisdiction/Agency	TIP/RTP Project ID	CIPs Project ID (if available)	Facility Name/Route	Description	Project Limits	Estimated Cost	Conformity Analysis Year (project open to traffic)									
							2014	2017	2020	2023	2025	2027	2035	2040		
Caltrans	SJ07-1015		SFR-4 Extension Ave. to Navy Drive	New alignment from Fresno Ave. to Navy Drive	Fresno Avenue to Navy Drive	\$90,000,000		X								
Caltrans	SJ07-1005		I-5 HOV	Widen from 6 to 8 lanes (inside median) including auxiliary lanes	French Camp Road to Charter Way	\$97,880,000		X								
Caltrans	SJ11-1001		I-5 HOV	Widen from 6 to 8 lanes (inside/outside)	Hammer Lane to North of Eight Mile Road	\$124,620,000										
Caltrans	SJ07-1003		I-205 HOV	Widen from 6 to 8 lanes (inside/outside)	1-580 to Eleventh Street	\$103,689,000										
Caltrans	SJ07-1006		I-5 HOV	Widen 6 to 8 lanes (inside/outside)	SR-120 to French Camp Road	\$193,880,000										
Caltrans	SJ14-1001		I-205 HOV	Widen from 6 to 8 lanes (inside/outside)	Eleventh Street to MacArthur Drive	\$143,450,000										
Caltrans	SJ14-1002		I-205 HOV	Widen from 6 to 8 lanes (inside/outside)	MacArthur Drive to I-5	\$143,184,000										
Caltrans	SJ07-1008	212-0000-0123	I-5 HOV Mossdale	Widen 9 to 12 through lanes	SR-120 to I-205 (P.M. R13, SR15.6)	\$207,970,000										
Caltrans	SJ07-1014		SR-120	Reconstruct interchange (P.M.)	I-5 to SR-99	\$115,191,000										
Lathrop	SJ07-2004	212-0000-0525	I-5 at Lathrop Road	Reconstruct interchange (P.M.)	I-5 at Lathrop Road	\$33,000,000		X								
Lathrop	SJ07-2005		I-5 at Louise Avenue	Reconstruct interchange (P.M.)	I-5 at Louise Avenue	\$33,000,000		X								
Lathrop	SJ11-2006		I-5 at Roth Road	Relocation of intersection at Roth/Harian Road inclusive of signalization; reduction of intersection at Roth/Mantley Road inclusive of signalization; Widen from 2 to 5 lanes from Roth/Harian road intersection to Roth/Mantley Road	I-5 at Roth Road	\$16,900,000		X								
Lodi	SJ11-2015	212-0000-0398	SR-99 at SR-12 West (Kettleman Lane)	Reconstruct interchange and widen to free flowing	SR-99 at SR-12 West (Kettleman Lane)	\$16,164,463							X			
Lodi	SJ07-2006	212-0000-0397	SR-99 at Harney Lane	Reconstruct interchange to provide 6 through lanes on SR 99, 4 lanes on Harney and modify on-ramps and off-ramps	SR-99 at Harney Lane	\$39,183,247										X
Manitaca	SJ07-2012		SR-120 at Union Road	Reconstruct interchange (P.M.)	SR-120 at Union Road	\$22,000,000		X								
Manitaca	SJ07-2009	212-0000-0231	SR-120 at McKinley Avenue	Construct new interchange	SR-120 at McKinley Avenue	\$27,950,000				X						
Ripon	SJ07-2015		SR-99 at Main Street/UJPRR Interchange (Ripon)	Reconstruct interchange of SR 99 and Main Street including reconstruction of Main Street overcrossing of UJPRR and intersection improvements	SR-99 at Main Street/UJPRR Interchange (Ripon)	\$10,000,000		X								
Stockton	SJ11-2002	212-0000-0592	SR-99 at Eight Mile Road	Reconstruct interchange (P.M.)	SR-99 at Eight Mile Road	\$65,900,000		X								

2014 RTP, 2015 FTIP Transportation Project Listing (Appendix B), Updated

Regionally Significant Project Listing

Jurisdiction/Agency	TIP/RTP Project ID	CIP's Project ID (if available)	Facility Name/Route	Description	Project Limits	Estimated Cost	Conformity Analysis: Year (project open to traffic)										
							2014	2017	2020	2023	2025	2032	2035	2040			
Stockton	SJ11-2001	212-0000-0561	SR-99 at Morada	Reconstruct interchange (PM 23.5-24.5)	SR-99 at Morada	\$69,800,000			X	X	X	X	X	X	X		
Stockton	SJ11-2004	212-0000-0309	I-5 at Hammer Lane	Interchange Modification and auxiliary lanes (PM 32.6)	I-5 at Hammer Lane	\$37,200,000				X	X	X	X	X	X		
Stockton	SJ11-2005	212-0000-0309	I-5 at Otto Drive	Construction of a new interchange and auxiliary lanes (PM 33.3/34.2)	I-5 at Otto Drive	\$92,800,000				X	X	X	X	X	X		
Stockton	SJ07-2020	212-0000-0309	I-5 at Eight Mile Road	Modification of interchange (P.M. 34.735-9)	I-5 at Eight Mile Road	\$51,400,000				X	X	X	X	X	X		
Tracy	SJ11-2010	212-0000-0227	I-205/Lammers Rd/Eleventh St	Construct interchange I-205 at Eleventh street realign and widen Eleventh Street to 6-lanes north of Grant Line to Byron Road. Construct Aux lane Hansen to Eleventh; in WB I-205 Eleventh Street to Grant Line Road	Construct interchange I-205 at Eleventh street realign and widen Eleventh Street to 6-lanes north of Grant Line to Byron Road. Construct Aux lane Hansen to Eleventh; in WB I-205 Eleventh Street to Grant Line Road	\$82,580,083		X	X	X	X	X	X	X	X		
Tracy	SJ11-2011		I-205 at Grant Line Road	Modification of existing interchange	I-205 at Grant Line Road	\$32,574,820				X	X	X	X	X	X		
Tracy & Lathrop	SJ11-2012	212-0000-0228	I-205 at Paradise Road/Chrisman	Phase 1: Construct new interchange east-west ramps	I-205 at Paradise Road/Chrisman	\$36,056,267				X	X	X	X	X	X		
Escalon	SJ07-3011	212-0000-0228	SR 120/Brennan Ave	Intersection improvements	SR-120 at Brennan Avenue	\$446,086				X	X	X	X	X	X		
Lathrop	SJ07-3016	112-0000-0158	Louise Avenue	Widen 2 lane to 4 lane	Lathrop SFRK to east side UPRR I-5 to east of UPRR	\$2,074,680		X	X	X	X	X	X	X	X		
Lathrop	SJ07-3015		Lathrop Road	Widen from 2 to 4 lanes		\$2,771,026		X	X	X	X	X	X	X	X		
Lathrop	SJ07-3014		Golden Valley Parkway	Construct new roadway parallel to I-5, 4 lanes from Brookhurst Blvd to Stewart Road	Along Northwest side of I-5 from Brookhurst Blvd to Stewart Road	\$15,000,000			X	X	X	X	X	X	X		
Lathrop	SJ14-3001		Golden Valley Parkway	Construct new roadway parallel to I-5, 4 lanes from Stewart Road to Paradise Road	Along Northwest side of I-5 from Stewart Road to Paradise Road	\$45,000,000			X	X	X	X	X	X	X		
Lodi	SJ07-3019	212-0000-0552	Lockford Street	Widen 2 to 4 lanes	Stockton Street to Cherokee Lane	\$3,600,000		X	X	X	X	X	X	X	X		
Lodi	SJ14-3002		Century Boulevard Gap Closure	Construct new 2-lane roadway and at-grade crossing of UPRR	Church Street and Stockton Street From Lodi Avenue to Elm Street	\$6,000,000			X	X	X	X	X	X	X		
Lodi	SJ07-3017		Hem Lane	Widen 2/3 lanes to 4 lanes		\$2,990,959			X	X	X	X	X	X	X		
Lodi	SJ07-3018		Hamley Lane	Widen from 2/3 lane collector to 4 lane divided arterial	SR-99 to Lower Sacramento Road (2.5 Miles)	\$22,008,760			X	X	X	X	X	X	X		
Lodi	SJ07-3022		Victor Road (SR-112)	Widen from 2 to 4 lanes center dual left turn lane, turn pockets at intersections and median separation with landscape	Between SR-99 to Central California Traction railroad tracks	\$6,000,000			X	X	X	X	X	X	X		
Maricopa	SJ07-3027		Louise Avenue	Widen from 2 to 4 lanes	Maricopa SFRK to East of SR-99	\$1,301,098		X	X	X	X	X	X	X	X		
Maricopa	SJ11-3010		Alhambra Drive	Construct new 4 lane roadway (gap closure)	East of Airport Way to Union Road	\$2,481,200		X	X	X	X	X	X	X	X		
Maricopa	SJ07-3023		Airport Way	Widen from 2 to 4 lanes	SR-120 to Yosemite Ave	\$9,039,644		X	X	X	X	X	X	X	X		

2014 RTP_2015 FTIP Transportation Project Listing (Appendix B)_Updated

Regionally Significant Project Listing

Jurisdiction/Agency	TIP/RTIP Project ID	CTIPs Project ID (if available)	Facility Name/Route	Description	Project Limits	Estimated Cost	Conformity Analysis Year (project open to traffic)									
							2014	2017	2020	2023	2025	2032	2035	2040		
Manteca	SJ11-3008		Alhambra Way	Widen from 2 to 4 lanes	Lathrop Road	\$5,563,978				X	X	X	X	X	X	
Manteca	SJ11-3011		Alhambra Drive	Construct new 4 lane roadway	Mckinley Ave to West of Alhambra Way	\$1,095,144				X	X	X	X	X	X	
Manteca	SJ07-3024		Lathrop Road	Widen from 2 to 4 lanes	From East of UPRR to SR-99	\$3,079,636				X	X	X	X	X	X	
Manteca	SJ11-3014		Raymus Expressway	Construct new 4-lane expressway	Main Street to SR-99	\$9,343,608				X	X	X	X	X	X	
Manteca	SJ14-3003		Alhambra Way	Widen from 2 to 4 lanes	Yosemite Ave. to Lathrop Road	\$6,327,751				X	X	X	X	X	X	
Manteca	SJ11-3013		Raymus Expressway	Construct new 2 lane expressway	SR 120 to Woodward Ave	\$2,801,188				X	X	X	X	X	X	
Manteca	SJ11-3012		Alhambra Drive	Construct new 4 lane roadway	Woodward Ave to McKinley Ave	\$4,321,170				X	X	X	X	X	X	
Manteca	SJ11-3015		Raymus Expressway	Construct new 2 lane expressway	Woodward Ave to Main Street	\$11,115,182				X	X	X	X	X	X	
Manteca	SJ14-3004		Alhambra Way	Widen from 4 to 6 lanes	SR 120 to Lathrop Road	\$12,351,768				X	X	X	X	X	X	
Port of Stockton	SJ11-3065		Navy Drive	Widen Navy Drive from 2- to 4 lanes, include signal and intersection improvements at Navy Drive/Washington street	Just east of BNSF RR (conforms to cross-town extension limits) just north of Washington Street (conforms to Navy Drive Bridge limits)	\$4,633				X	X	X	X	X	X	
Port of Stockton	SJ07-3034	212-0000-0261	Rough and Ready Island Bridge (Navy Dr Bridge)	Replacement of existing bridge (2 to 4 lanes) at Navy Drive to provide secondary access point	Bridge at Navy Drive	\$12,247,222				X	X	X	X	X	X	
Ripon	SJ11-3017		Jack Tone Road, Phase 1	Widen from 2 to 6 lanes	Santos Road to South Clinton Avenue	\$9,500,000				X	X	X	X	X	X	
Ripon	SJ11-3019		Garrison Road Gap Closure	Construct 2-lane extension of Garrison Road.	Maple Avenue to 500 ft east of Asarcia Avenue	\$3,000,000				X	X	X	X	X	X	
Ripon	SJ11-3016	212-0000-0586	Stockton Avenue	Rehabilitate and widen roadway from 2 to 4 lanes	Second Street to Oak Boulevard	\$3,000,000				X	X	X	X	X	X	
Ripon	SJ11-3020		River Road, Phase 1	Widen from 2 to 4 lanes	North Ripon Road to Jack Tone Road	\$5,000,000				X	X	X	X	X	X	
Ripon			Canal Boulevard	Construct 4 lane extension of Canal Boulevard	Jack Tone Road to Olive Expressway	\$4,600,000				X	X	X	X	X	X	
San Joaquin County	SJ11-3026		Lower Sacramento Road	Widen from 2 to 4 lanes; installing concrete median barrier, and installing shoulder wide to accommodate bicyclists	Philey Slough Bridge to Harney Curve	\$12,600,000				X	X	X	X	X	X	
San Joaquin County	SJ11-3025	112-0000-0142	McHenry Avenue Improvements & Bridge Replacement	Widening McHenry Avenue to install a two-way left turn lane and replacing two bridge structures	Stanislaus River Bridge to Jones Avenue	\$28,309,200				X	X	X	X	X	X	
San Joaquin County	SJ11-3027		Eleventh Street	Improve roadway and intersections	Tracy City Limits to I-5	\$19,347,000				X	X	X	X	X	X	
San Joaquin County	SJ11-3028		Cherokee Road	Widen from 2 to 3 lanes, add paved shoulders	SR-99 to Ashley Road	\$3,816,000				X	X	X	X	X	X	
San Joaquin County	SJ11-3029		Howard Road	Passing lanes and channelization	Howard Road	\$15,000,000				X	X	X	X	X	X	
San Joaquin County	SJ11-3030		Matiposa Road	Widen from 2 to 4 lanes	August Road to Jack Tone Road	\$26,255,000				X	X	X	X	X	X	
San Joaquin County	SJ11-3031		Tracy Boulevard	Passing lanes and channelization	I-205 to Howard Road	\$5,000,000				X	X	X	X	X	X	

2014 RTP, 2015 FTIP Transportation Project Listing (Appendix B), Updated

Exhibit "B"

[Print This Article](#)

Driving & dying on Manteca's 120 Bypass

Dennis Wyatt
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November 22, 2013

Driving the Highway 120 Bypass is a thrill a minute.

First, it opened in the 1980s as Manteca's answer to Blood Alley. People taking chances passing on the original two-lane expressway with the occasional passing lane quickly racked up a body count that generated a death on average once every six weeks with the statistical frequency of serious injuries being much shorter.

Retired firefighters and ambulance medical technicians have their own horror stories. They are gut-wrenching. One involved a woman who was pinned against her steering wheel and carried on a coherent, calm conversation with rescuers as they labored for nearly an hour to extricate her. Then, once the pressure was off her body, she died.

Next was the Barrier Era. Caltrans placed a concrete barrier much like you see in the center divider between Manteca and Ripon on Highway 99 down the center line of the then two-lane 120 Bypass. Driving it was an experience. Motorists often complained of a claustrophobic feeling that made them more than anxious driving especially when crossing bridges or elevated sections with concrete barriers directly to the left of the drivers' side and directly to the right of the passengers' side.

The feeling was even more intense at night. You felt as if you were riding Space Mountain at Disneyland thanks to the speed that the reflectors atop the cement barrier passed your eyes. It was a very distracting and apprehensive experience.

The pace of the accidents didn't slow down much although fatalities did. Bizarre accidents still happened especially where two lanes funneled down to one when inattentive and risk-taking drivers weren't watching traffic. It is why such lane configurations have been dubbed "suicide lanes" by wary drivers.

Typical was the Memorial Day mishap about 19 years ago when a trucker driving a fully loaded auto transport was following too closely and not paying enough attention when a slowdown in traffic up ahead forced him to hit the brakes suddenly. He kept the truck from slamming against the concrete divider and the cars in the lane next to him but his stopping was so quick that one of the cars on top of his transport broke loose and rolled off the back, landing on top of a vehicle behind him and crushing the roof flatter than a pancake.

Now we are in the Super Well Designed Era. The carnage continues despite wide, up-to-date travel lanes with ample shoulders, an extremely wide center divider area and arguably the

best three designed interchanges on and off ramps in California.

And the accidents aren't happening predominantly in the fog or at night. They're taking place in the afternoons, mostly on days where visibility isn't a factor.

The short history of the Highway 120 Bypass proves a point a Caltrans engineer made decades ago at a public meeting: There is no such thing as a dangerous road, just dangerous drivers.

California's basic speed law is simple. One can legally drive only as fast as the conditions safely allow. That means traveling 70 mph with just a half a car length between drivers isn't safe. Zipping in between traffic flowing at 65 mph and then abruptly cutting over at the last minute to the lane that exits towards Modesto onto Highway 99 isn't safe nor is barreling 50 mph down the Bypass in zero visibility.

Anyone who has lived in Manteca for any length of time and has driven the Highway 120 Bypass has horror stories of near misses.

Things will only get worse.

First, the southbound transition ramp going onto Highway 99 will no longer start a new lane that runs all the way to south of Turlock. Instead, it will revert back to a merge lane as it did before the freeway was widened to six lanes between Ripon and Manteca in 2001. That will happen soon when the current freeway widening between Stockton and Manteca is completed.

It also doesn't help that as more and more people move to Modesto, Ripon, and Escalon and beyond the traffic count will continue to increase on the Highway 120 Bypass.

The amount of carnage and twisted metal makes no sense as you can't design a much safer four-lane freeway. The advent of smartphones and the accompanying desire to text and manually dial numbers despite laws prohibiting such activities isn't helping the situation.

Engineers can't eliminate human error and bad judgment. That is why people slam into the back of each other, not because of the road.

In a way, it is unfortunate we call them "accidents" since that carries the connotation that they were unavoidable incidents. Except in rare cases of mechanical failure not caused by neglected maintenance which is irresponsible and definitely not accidental, there are no true accidents. Someone was driving too fast or reckless for the conditions. Sure, we can blame the fog, the heavy traffic, rain, darkness or whatever we want as contributing factors, but when push comes to shove it is driver error to blame. And that boils down to two things — either we're in too big of a hurry or we're not paying attention when we're behind the wheel of a weapon that kills more people each year than criminals.

It's time we stopped blaming "conditions" and started zeroing in on the real culprits — you and me. We all need to take driving more seriously. The history of the Highway 120 Bypass proves that.

This column is the opinion of executive editor, Dennis Wyatt, and does not necessarily represent the opinion of The Bulletin or Morris Newspaper Corp. of CA. He can be contacted at dwyatt@mantecabulletin.com or 209-249-3519.

<http://www.mantecabulletin.com/archives/91502/>

the 1972 Clean Water Act. Regulation of point sources since then has dramatically improved the water quality of many rivers and streams throughout the country

In contrast to point source pollution, non-point source pollution, also known as "pollution runoff," is diffuse. Non-point pollution comes from areas (such as contaminated runoff from urban areas) and is significantly influenced by land uses. A driveway or the road in front of a house may be a source of pollution if spilled oil, leaves, pet waste, or other contaminants are washed into a storm drain. Non-point source pollution is now considered one of the major water quality problems in the United States.

The problem of non-point source pollution, specifically runoff pollution is especially acute in urbanized areas where a combination of impermeable surfaces, landscape irrigation, highway runoff, and illicit dumping increase the pollutant loads in stormwater. The California State Water Quality Control Board (SWQCB) has identified the following pollutants found in urban runoff as being of particular concern:

- **Sediment.** Excessive sediment loads in streams can interfere with photosynthesis, aquatic life respiration, growth, and reproduction.
- **Nutrients.** Nitrogen and phosphorus can result in eutrophication of receiving waters (excessive or accelerated growth of vegetation or algae), reducing oxygen levels available for other species.
- **Bacteria and viruses.** Pathogens introduced to receiving waters from animal excrement in the watershed and by septic systems can restrict water contact activities.
- **Oxygen demanding substances.** Substances such as lawn clippings, animal excrement, and litter can reduce dissolved oxygen levels as they decompose.
- **Oil and grease.** Hydrocarbons from automobiles are toxic to some aquatic life.
- **Metals.** Lead, zinc, cadmium, and copper are heavy metals commonly found in stormwater. Other metals introduced by automobiles include chromium, iron, nickel, and manganese. These metals can enter waterways through storm drains along with sediment, or as atmospheric deposition.
- **Toxic pollutants.** Pesticides, phenols, and polynuclear aromatic hydrocarbons (PAHs) are toxic organic chemicals found in stormwater.
- **Floatables.** Trash in waterways increases metals and toxic pollutant loads in addition to undesirable aesthetic impacts.

Groundwater Quality

Localized impairments including total dissolved solids (TDS), sodium chloride, nitrate, and inorganic compounds are common in the County's groundwater, impairing the water quality.

Cumulative Analysis

The RTP addresses transportation projects and land use distribution patterns. These land use distribution patterns identify growth distribution and anticipated land use development to accommodate growth projections. The San Joaquin Regional Travel Demand Model (RTDM) used for this analysis captures pass-through traffic that does not have an origin or destination in the region, but does impact the region, so that too is included in the project analysis. Although a similar level of development is anticipated even without the RTP, this Plan would influence growth, including distribution patterns, throughout San Joaquin County. To address this, the analysis in the Program EIR covers overall impacts of all transportation projects and land development described in the RTP. In addition, this Program EIR considers cumulative impacts from other regional plans (e.g., the Air Quality Management Plan and RTPs of adjacent jurisdictions), which could result in additional impacts inside and outside San Joaquin County.

Determination of Significance

The methodology for determining the significance of water impacts compares the existing conditions to the RTP/SCS conditions, as required by *State CEQA Guidelines* Section 15126.2(a). The known water resources located within the region were evaluated using the criteria set forth by the California Department of Water Resources, FEMA, and the *State CEQA Guidelines*. The research analysis includes water resources of local significance.

Generally, with regard to water impacts, the greater the change from existing conditions, the more noticeable the change to the environment. The construction of a new roadway generally has a greater impact on water resources than the widening of an existing one as it would result in the loss of a greater amount of permeable surface. Road widening, however, can have significant local impacts especially when requiring the removal of trees and other important landscape buffers, or when construction of noise barriers or other visual impediments is necessary.

The development of new transportation facilities may affect water resources, either through direct effects to water sources or through indirect effects to the area surrounding a resource if toxins pollute the area's water resources. The region contains a fair number of water resources; therefore, the potential for impacts to water resources is significant. Improvements within existing rights-of-way are less likely to affect existing water resources; however, new highway segments near water resources would constitute a significant impact. Also, reducing buffer zones between transportation corridors and reduction of water resources through lane widening could cause significant impacts.

*City of Manteca
Wastewater Quality Control Facility Master Plan
Chapter 1: Introduction*

2. An assessment of alternative wastewater disposal options with an emphasis on either urban irrigation or expanded agricultural irrigation program;
3. A description of proposed treatment plant improvements for both river and land-based wastewater disposal strategies; and,
4. A detailed capital improvement plan (CIP) that provides appropriate infrastructure to support growth while ensuring compliance with stricter effluent discharge requirements.

1.3 Facility Operational History

The Manteca WQCF is located on 210 acres of City owned property southwest of downtown Manteca at 2450 West Yosemite Avenue (see Figure 1-1). The WQCF treats typical municipal wastewater generated in the City of Manteca and the neighboring City of Lathrop. The plant also receives seasonal discharges from a local food processor (Eckert Cold Storage).

The Manteca WQCF began operation in 1959. At that time the facility consisted solely of an oxidation pond. Pond effluent was discharged to the surrounding land. In 1970, the first major upgrade to the plant occurred. This upgrade included the construction of preliminary and primary treatment facilities and aerobic sludge digestion. Effluent continued to be discharged to the land for agricultural applications. In 1986-1988, as part of the Clean Water Grant Program, a major expansion to the plant was constructed. This Phase I Expansion Project included the construction of secondary treatment facilities, anaerobic sludge digesters, sludge drying beds, a chlorine disinfection system, and an outfall to the San Joaquin River. Design capacity of the plant following the Phase I project was 5.45 mgd (ADWF). The Phase II Expansion Project in 1992-1993 added a primary sedimentation basin, secondary clarifier, and four sludge drying beds, increasing the facility capacity to 6.95 mgd (ADWF).

1.4 Description of Existing Facilities

Currently, the Manteca WQCF consists of an influent pump station with two mechanical screens, two aerated grit tanks, three primary sedimentation basins, a biotower feed pump station, two biotowers, five fine-bubble activated sludge aeration basins, three secondary clarifiers, a secondary effluent storage pond, and two chlorine contact tanks. Solid handling facilities include two dissolved air flotation units, two anaerobic digesters, one centrifugal dewatering system, and drying beds. Undisinfected secondary effluent is used to irrigate approximately 190 acres of City-owned land surrounding the plant. Flows in excess of crop demands are disinfected and discharged to the San Joaquin River.

Anaerobically digested sludge is dewatered, dried, stored on-site, and then transported to a local landfill. A site plan of the existing treatment plant can be seen in Figure 1-2.

1 Introduction

In support of a new General Plan and updated Public Facilities Implementation Plan (PFIP), an updated wastewater treatment and disposal master plan is required. Background information, the scope of the master plan update, facility operational history, a description of the treatment facility, and a discussion of the Phase III Expansion Project are presented in this chapter.

1.1 Background and Purpose

The Manteca Wastewater Quality Control Facility (WQCF) is a 6.95 million gallons per day (mgd) rated combined biofilter-activated sludge plant. Secondary effluent is land applied during the spring and summer (flood irrigation for agricultural production) and discharged to the San Joaquin River during the winter (October-March). In the future, year-round discharge to the river is anticipated because of the limited capacity of City-owned land for wastewater applications. In conjunction with the development of the City of Manteca Public Facilities Implementation Plan (PFIP), a master plan for the Manteca WQCF was prepared in 1993 [1]. The master plan included an analysis of existing unit processes, an evaluation of expansion options for the facility, a discussion of disposal alternatives, and a description of phased improvements. The Phase III Expansion Project incorporates the recommendations of the 1993 Master Plan and reflects the current needs and operating requirements for the plant. The capacity of the Manteca WQCF will increase from 6.95 mgd to 9.87 mgd (average dry weather flow) following completion of the Phase III expansion project in 2007. This capacity is anticipated to support City-wastewater requirements for approximately 5-10 years.

Beyond the Phase III expansion, the City has identified the need to program future facilities to accommodate average dry weather flows (ADWF) up to 27 mgd (buildout condition). In addition, the existing land outfall to the San Joaquin River will reach capacity following completion of the Phase III expansion project. Any expansion beyond a capacity of 9.87 mgd will require the construction of a second outfall. In addition, future river discharge requirements are expected to become stricter and may entail additional treatment beyond effluent filtration. In view of these developments, an updated master plan (UMP) that considers stricter water quality requirements, alternative disposal options, and increased flows is warranted.

1.2 Scope of Master Plan Update

The objective of the UMP is to determine what steps will be required to increase the treatment capacity from approximately 10 mgd to 27 mgd while complying with stricter effluent discharge requirements for river discharge. More specifically, the UMP includes the following:

1. A summary of probable future water quality requirements for continued discharge to the San Joaquin River;

4 Effluent Disposal Strategies

The long-term recommended disposal strategy for the City WQCF is presented below. Treated effluent from the WQCF would be disposed of by three methods: 1) On-site land application; 2) Urban landscape irrigation; and 3) Discharge to the San Joaquin River. Off-site land application through an expanded agricultural irrigation program is not considered feasible because of the magnitude of the required land acquisition (greater than 5,000 ac) and the potential distance from the plant. The WQCF currently discharges to the San Joaquin River or on-site land application. A combination of the three disposal methods will be utilized to discharge the buildout flow of 27 mgd. Each disposal strategy, and the amount of treated effluent that can be discharged by that method, are described below and summarized in Table 4-1.

4.1 On-Site Land Application

The City currently discharges approximately 1030 ac-ft/yr (0.87 mgd) of undisinfected secondary effluent to 190-ac of City-owned land. An existing 9-ac, 15-Mgal storage pond located on City land immediately west of the WQCF is used in the on-site land application system. The City is planning to develop 30-ac of City-owned land for a state of the art softball complex, leaving 160-ac of City-owned land available for on-site land application.

The permeability of soils identified at the on-site land application area ranged from moderately rapid to rapid [7]. The hydraulic loading at the WQCF is generally between 65 and 70 inches per year. Assuming an application rate of 65 inches per year on the remaining 160-ac of City-owned land, approximately 0.73 mgd of treated effluent can be disposed of by on-site land application.

4.2 Urban Landscape Irrigation

The technical memorandum *Evaluation of Urban Water Recycling Opportunities from the Manteca Wastewater Quality Control Facility* [8] investigates the use of urban landscape irrigation to dispose of treated effluent from the WQCF. The technical memorandum identifies 741-ac of irrigable urban land. This information has subsequently been updated, and a total of 817-ac of irrigable urban land have been identified, including parks, schools, cemeteries, and golf courses [9]. Assuming an application rate of 54 in/yr, 3.28 mgd of recycled water would be discharged for urban landscape irrigation (see Appendix B).

It should be noted that unrestricted urban irrigation with recycled water requires the production of tertiary disinfected recycled water as defined by the DHS. This water quality requirement will be satisfied upon completion of the Phase III Expansion Project. To reduce the potential for public contact with recycled water, parks, schools, and cemeteries are assumed to be irrigated between 10 p.m. and 6 a.m. (This limited window for landscape irrigation is a typical DHS requirement.) The golf courses are assumed to receive water 24-hours per day.

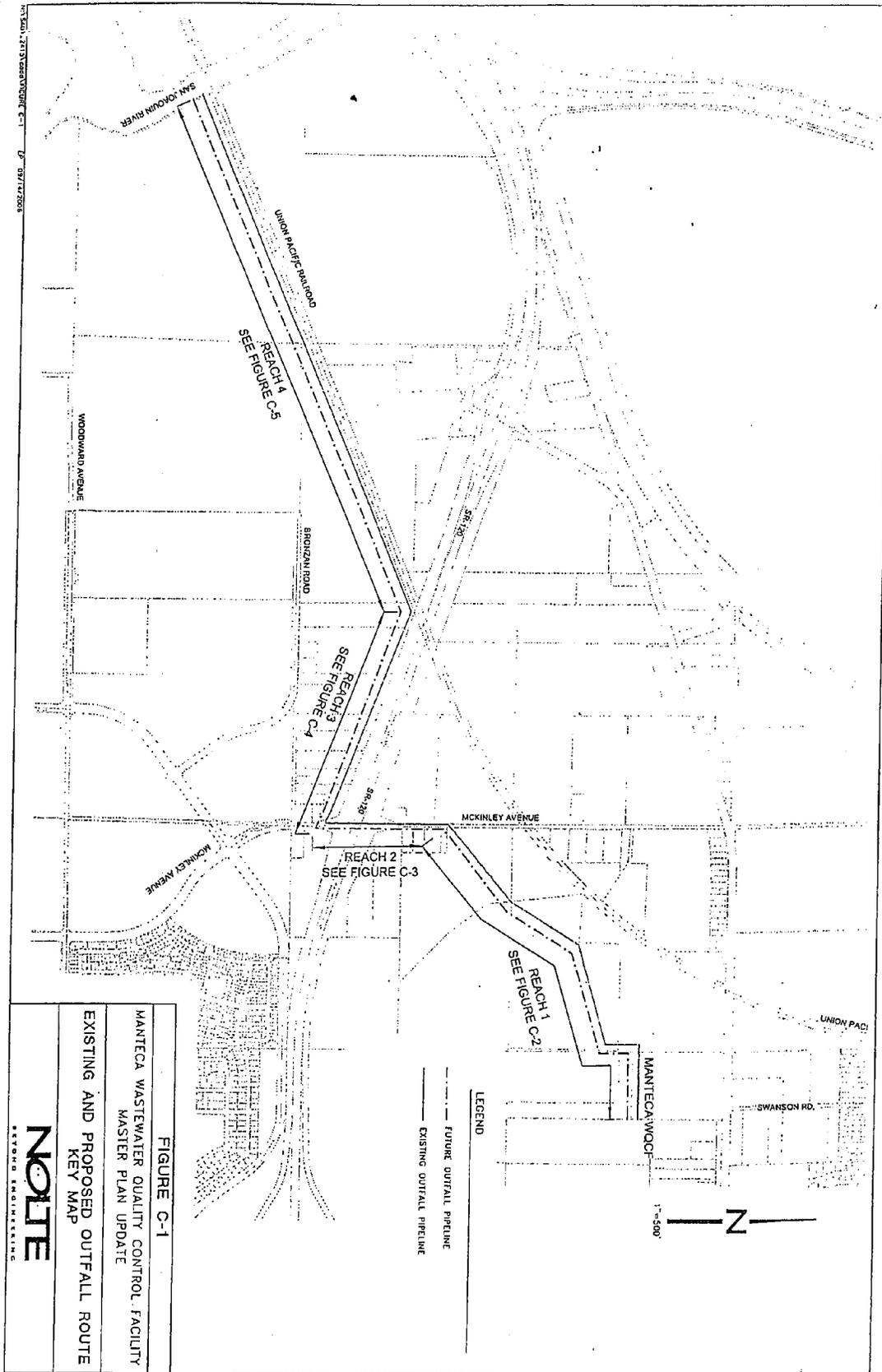
4.3 River Discharge

The City is currently permitted to discharge 8.11 mgd to the San Joaquin River under NPDES Permit No. CA0081558 [2]. The permit allows the monthly average discharge to increase to 9.87 mgd in February 2009, provided that additional water quality requirements are satisfied by the WQCF. The increase in flow to 9.87 mgd will be discharged to the San Joaquin River through the existing 36-inch outfall. Due to concerns of thermal impacts to the San Joaquin River, the WQCF will likely be restricted from discharging during reverse flow events. Beyond 9.87 mgd ADWF, a second parallel outfall will be required to convey the balance of WQCF effluent either not land applied on-site or pumped off-site for urban irrigation. A discussion of the routing of the parallel 36-inch land outfall is presented in Appendix C.

**TABLE 4-1
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY MASTER PLAN
RECOMMENDED DISPOSAL STRATEGY AT BUILDOUT**

Disposal Option	Average Discharge Rate, mgd	Annual Volume, ac-ft/yr	Percentage of Total Discharge
On-Site Land Application	0.73	870	3%
River Discharge	22.99	25,760	85%
Urban Landscape Irrigation	<u>3.28</u>	<u>3,670</u>	<u>12%</u>
Total	27.00 ^a	30,300	100%

^aBased on anticipated wastewater flow to Manteca WQCF, see Chapter 3.



*City of Manteca
Wastewater Quality Control Facility Master Plan
Chapter 7: Recommended Facility Improvements*

are included to add coagulants and polymers prior to the filters. Two rapid mixing tanks and six flocculation tanks will be constructed to provide efficient mixing of chemicals and to form larger size flocs that are easily filterable. As seen in Table 7-10, the rapid mix tanks will be square in shape, 11 ft by 11 ft. The flocculation tanks will also be square in shape, 31.5 ft by 31.5 ft.

**TABLE 7-10
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY MASTER PLAN
DESIGN CRITERIA FOR INCREMENTAL PLANT EXPANSION
RAPID MIX AND FLOCCULATION**

Parameter	Unit	Value	Average Conditions	Peak Conditions
Rapid Mix Tank				
Detention Time	sec		132	60
Number of new tanks	no	2		
Volume per tank	gal	13,400		
Sidewater depth	ft	15		
Required surface area per tank	ft ²	119		
Length	ft	11		
Width	ft	11		
Flocculation Tanks				
Detention Time	min		55	25
Number of new tanks	no	6		
Volume per tank	gal	111,100		
Sidewater depth	ft	15		
Required surface area per tank	ft ²	990		
Length	ft	31.5		
Width	ft	31.5		

7.8 UV Disinfection/Effluent Pumping

Filtered effluent must be disinfected to comply with the Title 22 wastewater reuse criteria for unrestricted reuse. Disinfected effluent coliform objectives in accordance with the Title 22 requirements are summarized in Table 7-10. For reasons of worker safety, environmental protection, and operational flexibility, an ultraviolet light disinfection system will be used. The installation will be a low-pressure high-intensity UV system. The pressure and intensity refer to the type of UV lamps used. Design criteria for the UV disinfection system are summarized in Table 7-11. Sizing of the UV system is based on guidelines published by NWRI as implemented by the California DHS. Four new UV channels (beyond Phase III) are proposed for the

- vii. A description of the Discharger's existing pollution prevention programs.
- viii. An analysis, to the extent feasible, of any adverse environmental impacts, including cross-media impacts or substitute chemicals that may result from the implementation of the pollution prevention program.
- ix. An analysis, to the extent feasible, of the costs and benefits that may be incurred to implement the pollution prevention program.

4. Construction, Operation, and Maintenance Specifications

- a. **Treatment Pond Operating Specifications.** Three treatment or storage ponds are utilized within the Facility: 1) the food processing wastewater storage and treatment pond, 2) the secondary-effluent equalization pond, and 3) the secondary-effluent storage pond. The food processing wastewater storage/treatment pond and the secondary-effluent equalization pond are lined, but the secondary-effluent storage pond is not lined and instead has rip/rap sidings and soil bottom. The operation and maintenance specifications for these ponds in this Order are necessary to protect the public and the beneficial uses of the groundwater, and to prevent nuisance conditions.
- b. **Ultraviolet (UV) Disinfection System Operating Specifications.** UV System specifications are required to ensure that adequate UV dosage is applied to the wastewater to inactivate pathogens (e.g. viruses in the wastewater). UV dosage is dependent on several factors such as UV transmittance, UV power setting, wastewater turbidity, and wastewater flow through the UV system. Monitoring and reporting of these parameters is necessary to determine compliance with minimum dosage requirements established by the California Department of Public Health (DPH) and the National Water Research Institute (NWRI) and American Water Works Association Research Foundation NWRI/AWWRF's "*Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse*" first published in December 2000 and revised as a Second Edition dated May 2003. In addition, a Memorandum dated 1 November 2004 issued by DPH to Regional Board executive offices recommended that provisions be included in permits to water recycling treatment plants employing UV disinfection requiring Dischargers to establish fixed cleaning frequency if quartz sleeves as well as include provisions that specify minimum delivered UV dose that must be maintained (as recommended by the NWRI/AWWRF UV Disinfection Guidelines). Minimum UV dosage and operating criteria are necessary to ensure that adequate disinfection of wastewater is achieved to protect beneficial uses.

5. Special Provisions for Municipal Facilities (POTWs Only)

- a. Pretreatment Requirements.
 - i. The federal CWA section 307(b), and federal regulations, 40 CFR Part 403, require publicly owned treatment works to develop an acceptable industrial pretreatment program. A pretreatment program is required to prevent the introduction of pollutants, which will interfere with treatment plant operations or sludge disposal, and prevent pass through of pollutants that exceed water

CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY
MASTER PLAN UPDATE

UPDATE OF URBAN WATER RECYCLING OPPORTUNITIES

TECHNICAL MEMORANDUM

SEPTEMBER 2004

The purpose of this memorandum is to update urban water recycling opportunities within the City of Manteca (City). Potential urban reuse sites are identified and recycled water demands estimated. A conceptual distribution system is developed to serve these sites.

Background

The use of recycled water for unrestricted urban landscape irrigation represents an alternative for treated wastewater disposal. Effluent from the Manteca Wastewater Quality Control Facility (WQCF) is currently either land applied to approximately 360 acres of City owned/leased parcels or discharged to the San Joaquin River. The volume of effluent from the WQCF will increase as the City population increases. Discharges to existing land application sites are currently constrained. Due to the implementation of the California Toxics Rule and Total Maximum Daily Limits (TMDLs) for the San Joaquin River, continued river discharge may result in the need for expensive advanced treatment systems (e.g. ultrafiltration and reverse osmosis). Urban and agricultural land application of recycled water could augment the City's existing land application practices thus reducing reliance upon surface water discharges. The use of recycled water to meet landscaping demands would have the additional benefit of reducing demand on the City's potable water system. A review of agricultural land application sites was conducted recently in a separate technical memorandum [1]. This memorandum will review urban landscape irrigation sites.

Previous Reclamation Studies

Urban water recycling at the WQCF has been examined previously. The results of these previous studies are summarized below and provide a basis for this current examination of water recycling.

Manteca Effluent to Land Disposal Study, Technical Memorandum No. 3-2, Evaluation of Urban Water Recycling Opportunities from the Manteca Wastewater Quality Control Facility

Urban water recycling opportunities within the City were evaluated in 2002. The evaluation identified one hundred thirteen potential sites, ninety-four of which seemed economically feasible based on proximity to the WQCF and location near other sites. The total area of the ninety-four reuse sites was 935 acres, 711 acres of which were irrigable and could potentially

receive 3,200 ac-ft/yr of recycled water. The projected cost of construction for delivery facilities was \$10.1 million. With the inclusion of operation and maintenance costs, the cost for recycled water delivery was estimated at \$423/ac-ft.

1996 Phase III Pre-Design Water Reuse Investigation

An urban water reuse investigation was conducted at the WQCF in January 1996 [3]. In that investigation potential reuse sites were identified following a windshield survey of the community and a review of future development plans for areas south of State Route 120 (SR-120). The field survey focused upon parks, schoolyards, golf courses, and greenbelts that could be converted from potable water to recycled water for nonpotable demands. Sixty-three reuse sites with a total annual recycled water demand of approximately 2,700 ac-ft/yr were identified. Treatment and storage facilities were sized and costs were estimated to meet a maximum daily recycled water demand of 5.7 mgd. A conceptual recycled water distribution system was also sized and costs were estimated to meet peak hour demands. The investigation concluded that the life cycle cost of supplying recycled water would be approximately \$470/ac-ft.

The 1996 investigation also evaluated the projected recycled water quality from the Manteca WQCF in terms of its suitability for irrigation. Considering multiple water quality parameters, it was concluded that the recycled water would be suitable for landscape irrigation without restrictions.

Current Recycled Water Demands

For this memorandum, water reuse sites have been identified using the General Plan [4] land use diagram and by conducting a windshield survey. Parcels zoned for parks, schools, churches and open space within the City were identified. Additionally, sites identified in previous water recycling evaluations were re-visited and the area along Tidewater Bikeway and Caltrans right-of-ways along SR-120 were included. In total, one hundred sixty possible water recycling sites were located (see Figure 1). However, to be economically feasible, reuse sites should be either close to the WQCF and/or clustered near other sites. Therefore, from the one hundred sixty potential sites, twenty-six sites were eliminated from further consideration on the basis of being either too far or too isolated from other locations. The sites eliminated from consideration were principally located to the east of State Route 99 (SR-99). The remaining one hundred thirty-four reuse sites represent a total area of 1,285 acres, of which 817 acres are assumed to be irrigable. Caltrans right-of-ways along SR-120 accounts for approximately 65 acres and the Tidewater Bikeway accounts for approximately 26 acres. Most of the future water recycling demands are located south of SR-120. The irrigable area for each site was estimated based on the following assumptions:

1. Parks - 90 percent of area is irrigable
2. Schools – 50 percent of area is irrigable
3. Churches – 50 percent of area is irrigable
4. Open Space – 50 percent of area is irrigable

The gross area and projected irrigable area for each reuse site are presented in Table I.

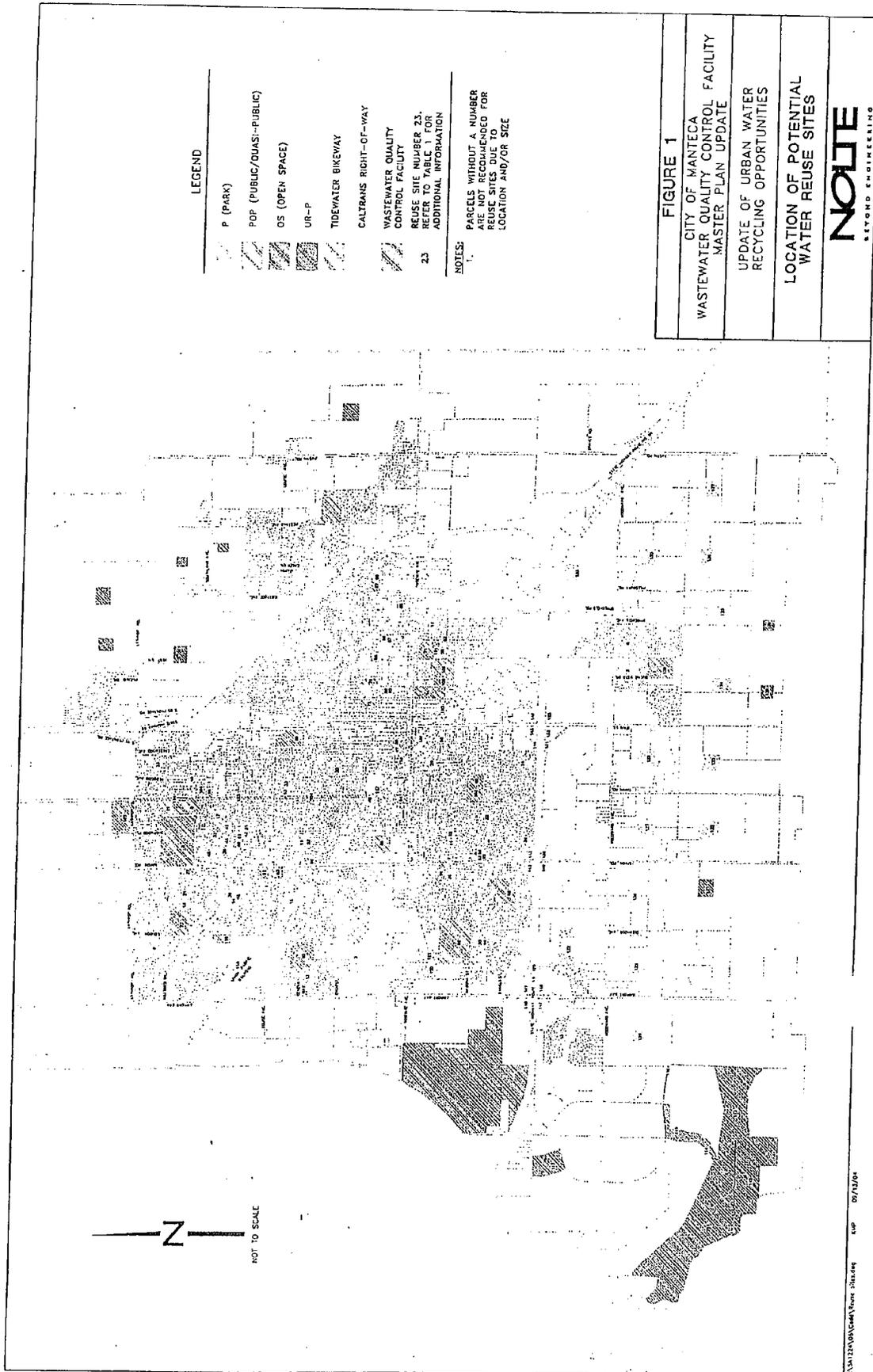


TABLE I
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY
MASTER PLAN UPDATE
UPDATE OF URBAN WATER RECYCLING OPPORTUNITIES
SUMMARY OF RECYCLED WATER DEMANDS AT GENERAL PLAN BUILD-OUT

Reuse Site No.	Land Use Designation	Description	Total Area, acres	Irrigable area ^a , acres	Reclamation Demands		
					Applied Water ^b , ac-ft/yr	Max. day demand ^c	Peak hour delivery ^d
1	Park	Manteca Park Golf Course	75.30	67.85	305.3	0.655	455
2	Public/Quasi-Public	East Union School	57.08	28.54	128.4	0.276	574
3	Park	Manteca Park Golf Course	44.20	39.78	179.0	0.384	267
4	Park	Woodward Community Park	33.43	30.09	135.4	0.291	605
5	Park	Woodward Community Park	17.20	15.48	69.7	0.150	311
6 ^e							
7	Public/Quasi-Public	George McParland School	15.31	7.66	34.4	0.074	154
8	Public/Quasi-Public	Neil Hailey School	14.12	7.06	31.8	0.068	142
9	Park	Chadwick Square	9.00	8.10	36.5	0.078	163
10							
11	Park	Northgate Park	5.45	4.91	22.1	0.047	99
12	Park	Villa Ticino Park	5.59	5.03	22.6	0.049	101
13	Park	Bella Vista Park	5.02	4.52	20.3	0.044	91
14	Park	Yosemite Village Park	4.89	4.40	19.8	0.043	89
15	Park	Doxey Park	4.45	4.01	18.0	0.039	81
16	Park	Curran Grove	4.42	3.98	17.9	0.038	80
17	Park	Park West	4.34	3.91	17.6	0.038	79
18	Park	Mayor's Park	3.99	3.59	16.2	0.035	72
19	Park	Greystone Park	4.00	3.60	16.2	0.035	72
20	Park	Bay Meadows Park	4.00	3.60	16.2	0.035	72
21	Park	Doxey Park	3.99	3.59	16.2	0.035	72
22	Park	Sequoia Park	3.98	3.58	16.1	0.035	72
23	Park	Crestwood Park	3.85	3.47	15.6	0.033	70
24	Park	Colta Park	3.71	3.34	15.0	0.032	67
25	Park	Union West Park	3.69	3.32	14.9	0.032	67
26							
27							
28	Park	Lincoln Park	3.67	3.30	14.9	0.032	66
29	Park	Southside Park	3.31	2.98	13.4	0.029	60
30	Park	Roberts Park	3.29	2.96	13.3	0.029	60
31	Park	Colony Park	3.26	2.93	13.2	0.028	59
32	Park	Park West	3.12	2.81	12.6	0.027	56
33	Park	Franciscan Park	2.61	2.35	10.6	0.023	47
34	Park	Quail Ridge Park	3.05	2.75	12.4	0.027	55
35							
36							
37	Public/Quasi-Public	Church of Jesus Christ of Latter Day Saints	2.66	1.33	6.0	0.013	27
38	Park	Park West	2.36	2.12	9.6	0.021	43
39	Park	St. Francis Park	2.14	1.93	8.7	0.019	39
40	Park	Walnut Place Park	2.02	1.82	8.2	0.018	37
41	Park	Park West	1.80	1.62	7.3	0.016	33
42	Park	St. Francis Park	1.78	1.60	7.2	0.015	32
43	Park	Colony Park	1.76	1.58	7.1	0.015	32
44	Park	Roberts Park	1.78	1.60	7.2	0.015	32
45	Park	Park West	1.69	1.52	6.8	0.015	31
46	Park	William Martin Park	1.56	1.40	6.3	0.014	28
47	Park	Library Park	1.47	1.32	6.0	0.013	27
48	Park	Park West	1.40	1.26	5.7	0.012	25
49	Park	Park West	1.38	1.24	5.6	0.012	25
50	Park	Baccileri Park	1.27	1.14	5.1	0.011	23
51							
52	Park	Greystone Park	1.20	1.08	4.9	0.010	22
53	Park	Franciscan Park	0.95	0.86	3.8	0.008	17
54	Park	St. Francis Park	0.85	0.77	3.4	0.007	15
55							
56							
57							
58	Park	Wilson Park	0.38	0.34	1.5	0.003	7
59	Park	Hilderband Park	0.29	0.26	1.2	0.003	5

TABLE 1
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY
MASTER PLAN UPDATE
UPDATE OF URBAN WATER RECYCLING OPPORTUNITIES
SUMMARY OF RECYCLED WATER DEMANDS AT GENERAL PLAN BUILD-OUT

Reuse Site No.	Land Use Designation	Description	Total Area, acres	Irrigable area ^a , acres	Reclamation Demands		
					Applied Water ^b , ac-ft/yr	Max. day demand ^c ,	Peak hour delivery ^d ,
60	Park	Hilderband Park	0.29	0.26	1.2	0.003	3
61	Park	Park West	0.18	0.16	0.7	0.002	3
62	Park	Yosemite Village Park	0.10	0.09	0.4	0.001	2
63							
64							
65	Public/Quasi-Public	Stella Brockman School	19.52	9.76	43.9	0.094	196
66	Public/Quasi-Public	Senior Center	9.52	4.76	21.4	0.046	96
67							
68	Public/Quasi-Public	Brock Elliott School	18.43	9.22	41.5	0.089	185
69	Public/Quasi-Public	Golden West School	13.41	6.71	30.2	0.065	135
70							
71	Public/Quasi-Public	Lincoln Elementary School	9.95	4.98	22.4	0.048	100
72	Public/Quasi-Public	Manteca Adult School	4.14	2.07	9.3	0.020	42
73							
74	Public/Quasi-Public	Manteca High School	13.64	6.82	30.7	0.066	137
75							
76							
77							
78							
79	Public/Quasi-Public	St. Anthony's Catholic Church	3.06	1.53	6.9	0.015	31
80	Public/Quasi-Public	Sequoia High	5.33	2.67	12.0	0.026	54
81							
82	Public/Quasi-Public	Sierra High School	46.22	23.11	104.0	0.223	465
83	Public/Quasi-Public	Union Cemetary	4.40	2.20	9.9	0.021	44
84	Public/Quasi-Public	Sequoia Annex School	3.78	1.89	8.5	0.018	38
85	Public/Quasi-Public	1st Baptist Church	2.46	1.23	5.5	0.012	25
86	Public/Quasi-Public	St. Paul's United Methodist Church	2.45	1.23	5.5	0.012	25
87	Public/Quasi-Public	St. Paul's United Methodist Church	0.43	0.22	1.0	0.002	4
88	Public/Quasi-Public	Fellowship Baptist Church of Manteca	1.38	0.69	3.1	0.007	14
89	Public/Quasi-Public	Freedom Christian Center	2.55	1.28	5.7	0.012	26
90							
91	Public/Quasi-Public	1st Christian Church	3.81	1.91	8.6	0.018	38
92	Public/Quasi-Public	Manteca Fire Station	1.32	0.66	3.0	0.006	13
93	Public/Quasi-Public	Sequoia Heights Baptist Church	0.74	0.37	1.7	0.004	7
94	Public/Quasi-Public	Sequoia Heights Baptist Church	0.24	0.12	0.5	0.001	2
95	Public/Quasi-Public	Sequoia Heights Baptist Church	1.23	0.62	2.8	0.006	12
96	Public/Quasi-Public	Doctors Hospital of Manteca	0.95	0.48	2.1	0.005	10
97	Public/Quasi-Public	Doctors Hospital of Manteca	2.92	1.46	6.6	0.014	29
98	Public/Quasi-Public	(Northgate Community) Church	2.37	1.19	5.3	0.011	24
99	Public/Quasi-Public	Manteca Adventist School	3.02	1.51	6.8	0.015	30
100	Public/Quasi-Public	Manteca High	4.43	2.22	10.0	0.021	45
101	Public/Quasi-Public	Lincoln Elementary School	3.43	1.72	7.7	0.017	35
102							
103	Public/Quasi-Public	Sequoia High	8.96	4.48	20.2	0.043	90
104							
105							
106	Public/Quasi-Public	United Lutheran Church	3.84	1.92	8.6	0.019	39
107	Public/Quasi-Public	Calvary Community Church	23.98	11.99	34.0	0.116	241
108	Public/Quasi-Public	Manteca High	15.35	7.68	34.5	0.074	154
109							
110							
111	Open Space		204.43	102.22	460.0	0.987	2057
112	Open Space		85.27	42.64	191.9	0.412	858
113	Open Space		71.37	35.69	160.6	0.345	718
114	Open Space		9.23	4.62	20.8	0.045	93
115	Open Space		14.29	7.15	32.2	0.069	144
116	Open Space		1.05	0.53	2.4	0.005	11
117	Open Space		21.84	10.92	49.1	0.105	220
118	Park	Primavera Park	6.98	6.28	28.3	0.061	126

TABLE I
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY
MASTER PLAN UPDATE
UPDATE OF URBAN WATER RECYCLING OPPORTUNITIES
SUMMARY OF RECYCLED WATER DEMANDS AT GENERAL PLAN BUILD-OUT

Reuse Site		Description	Total Area, acres	Irrigable area ^a , acres	Reclamation Demands		
No.	Land Use Designation				Applied Water, ac-ft/yr	Max. day demand ^d ,	Peak hour delivery ^e ,
119	Public/Quasi-Public	George McParland Annex School	4.17	2.09	9.4	0.020	42
120	Park	Gonsalves Park	2.17	1.95	8.8	0.019	39
121	Park	Gonsalves Estates Park	1.13	1.02	4.6	0.010	20
122	Park	Dutra Farms S.E. Park	6.95	6.26	28.1	0.060	126
123	Park		10.49	9.44	42.5	0.091	190
124	Park		5.67	5.10	23.0	0.049	103
125	Park		4.72	4.25	19.1	0.041	85
126	Park		5.73	5.16	23.2	0.050	104
127	Park		9.21	8.29	37.3	0.080	167
128	Park		8.69	7.82	35.2	0.076	157
129	Public/Quasi-Public	Future School	17.65	8.83	39.7	0.085	178
130	Park		10.25	9.23	41.5	0.089	186
131	Park		8.46	7.61	34.3	0.074	153
132	Park		13.65	12.29	55.3	0.119	247
133	Park		8.27	7.44	33.5	0.072	150
134	Park		9.03	8.13	36.6	0.078	164
135	Park		7.16	6.44	29.0	0.062	130
136	Park		9.06	8.15	36.7	0.079	164
137	Park		6.86	6.17	27.8	0.060	124
138	Park		5.32	4.79	21.5	0.046	96
139	Park		3.98	3.58	16.1	0.035	72
140	Open Space	CalTrans Right-of-Way	6.00	3.00	13.5	0.029	60
141	Open Space	CalTrans Right-of-Way	6.00	3.00	13.5	0.029	60
142	Open Space	CalTrans Right-of-Way	3.95	1.98	8.9	0.019	40
143	Open Space	CalTrans Right-of-Way	3.95	1.98	8.9	0.019	40
144	Open Space	CalTrans Right-of-Way	1.12	0.56	2.5	0.005	11
145	Open Space	CalTrans Right-of-Way	4.96	2.48	11.2	0.024	50
146	Open Space	CalTrans Right-of-Way	6.75	3.37	15.2	0.033	68
147	Open Space	CalTrans Right-of-Way	6.00	3.00	13.5	0.029	60
148	Open Space	CalTrans Right-of-Way	6.00	3.00	13.5	0.029	60
149	Open Space	CalTrans Right-of-Way	3.95	1.98	8.9	0.019	40
150	Open Space	CalTrans Right-of-Way	3.95	1.98	8.9	0.019	40
151	Open Space	CalTrans Right-of-Way	1.12	0.56	2.5	0.005	11
152	Open Space	CalTrans Right-of-Way	4.96	2.48	11.2	0.024	50
153	Open Space	CalTrans Right-of-Way	6.75	3.37	15.2	0.033	68
154	Open Space	Tidewater Biketrail	5.98	2.99	13.4	0.029	60
155	Open Space	Tidewater Biketrail	5.84	2.92	13.1	0.028	59
156	Open Space	Tidewater Biketrail	5.86	2.93	13.2	0.028	59
157	Open Space	Tidewater Biketrail	4.12	2.06	9.3	0.020	41
158	Open Space	Tidewater Biketrail	0.98	0.49	2.2	0.005	10
159	Open Space	Tidewater Biketrail	1.87	0.94	4.2	0.009	19
160	Open Space	Tidewater Biketrail	1.54	0.77	3.5	0.007	15
Total			1284.7	817.3	3677.8	7.9	15000.1

^aNon-designated land use sites are not recommended for recycled water service due to location and/or size

^b90% of total area for parks and golf course and 50% of total area for schools, churches, hospitals, cemetery, fire station, senior center and open space

^cBased on a 4.5-feet per year application rate

^dBased on a 0.355 inches per day maximum daily demand (in July)

^eAssuming an 8-hour irrigation period, except for the 24-hour irrigation period for the Manteca Golf Course

Table 1 also identifies the annual, maximum daily, and peak hourly recycled water demand for each site. The total recycled water demand for the one hundred thirty-four reuse sites at General Plan build-out is approximately 3,700 ac-ft/yr (recycled water demand for existing land uses is 1,750 ac-ft/yr). During July, the reuse sites are projected to require a daily recycled water delivery of 7.9 mgd. The peak hour delivery would be approximately 15,000 gpm.

The water applied to each site was estimated by multiplying the site's irrigated acreage by the depth of water required. The annual demand, as indicated in Table 2, was estimated to be approximately 54-in/yr. The maximum daily demand of 0.35-in/day was estimated based on the highest monthly (July) irrigation requirement of 11.0-in/month divided by 31 days. The peak hourly demand, used to size the recycled water distribution system, was based on an irrigation cycle for parks, schools, and the cemetery from 10 p. m. to 6 a. m., a period of eight hours per day. This restricted irrigation window reduces the potential for public contact with recycled water. The golf course was assumed to receive water twenty-four hours per day. The delivery time for these potential customers is longer because it is assumed that ponds for temporary storage of irrigation water would be used at these sites. The peak delivery requirement occurs during the eight-hour period used for irrigation by all customers.

TABLE 2
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY
MASTER PLAN UPDATE
UPDATE OF URBAN WATER RECYCLING OPPORTUNITIES
LANDSCAPE IRRIGATION WATER BALANCE

Month	ET ^a Evapotran- spiration, in	P ₁₀ ^b Precipita- tion, in	CD ^c Crop Demand, in	LR ^d Leaching Req't, in	AW ^e Applied Water, in
Jan	0.92	3.12	-	-	-
Feb	1.49	2.70	-	-	-
Mar	3.05	2.42	0.63	0.06	0.9
Apr	4.72	1.35	3.37	0.34	4.6
May	6.35	0.52	5.83	0.58	8.0
Jun	7.68	0.11	7.57	0.76	10.4
Jul	8.06	0.08	7.98	0.80	11.0
Aug	6.83	0.07	6.76	0.68	9.3
Sep	5.31	0.25	5.06	0.51	7.0
Oct	3.30	0.91	2.39	0.24	3.3
Nov	1.42	2.07	-	-	-
Dec	0.61	2.88	-	-	-
Total	49.74	16.48	39.59	3.96	54.4

^a ET_o: Evapotranspiration rates computed from Figure 5-11, *Irrigation with Reclaimed Municipal Wastewater* [5].

^b P₁₀: One in ten year precipitation values from *California Rainfall Summary*, Manteca gage station [6].

^c CD: Crop Demand = (ET-P₁₀) positive values.

^d LR: Leaching Requirement = 0.10*(CD).

^e AW: Applied Water = (CD+LR)/0.80.

Recycled Water System Facilities

In this section, recycled water storage, pumping, and distribution system facilities are described.

Storage System

At General Plan build-out, the average dry weather flow to the WQCF is 27 mgd which is greater than the projected recycled water delivery requirement of 15,000 gpm. The daily recycled water demand schedule will require some operational storage, however. Typical operational storage requirements are approximately one-half of the maximum daily demand or 4.0 MG (50 percent of 7.9 mgd).

Delivery (Pumping and Conveyance)

A recycled water pump station has been sized to meet peak delivery schedules with the largest pump removed from service. A delivery pressure of 60 psi is assumed for landscape irrigation customers except where onsite storage ponds are available such as at the golf course. Pipe sizes for the recycled water distribution system were selected based on a criterion of headloss no greater than 8 feet per 1,000 feet, using a Hazen-Williams coefficient of 120. Peak hour deliveries to each potential irrigation site were used to size the pipelines. The layout of the distribution system is presented in Figure 2.

It can be seen in Figure 2 that the recycled water distribution system consists of a large loop encircling the majority of the City with one branch line to the north and a second branch line to the south. The recycled water pipeline has been routed to provide access to the majority of the reuse sites. Use of a looped system improves pressure distribution and provides redundancy in the event of a pipe failure. The existing 12-inch Stage II force main on Woodward Road could be converted to a 12-inch recycled water pipeline if the timing is appropriate.

The head losses associated with flow through each pipe were used to determine the overall system head loss and pumping requirement. The greatest headloss (45 psi) occurs along the route from the WQCF to the eastern sites on Woodward Road. Assuming a minimum endpoint delivery pressure of 60 psi, the initial pressure at the WQCF is approximately 105 psi. To maintain a pumping pressure of 105 psi at 15,000 gpm requires approximately 654 horsepower (assuming pump efficiency of 75 percent). Proposed design criteria for the recycled water delivery system are presented in Table 3.

TABLE 3
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY
MASTER PLAN UPDATE
UPDATE OF URBAN WATER RECYCLING OPPORTUNITIES
DESIGN CRITERIA FOR RECYCLED WATER DELIVERY SYSTEM

Item	Units	Value
<u>Recycled Water Pump Station</u>		
Peak delivery flow	gpm	15,000
Maximum operating head	psi	105
Total connected horsepower at build-out	hp	654
<u>Recycled Water Distribution Pipe System</u>		
Discharge pressure	psi	60
Pipe material	type	plastic
Headloss	ft/1000 ft	8
Hazen-Williams coefficient	C	120
Maximum velocity (at peak flow)	ft/s	5
Minimum velocity (at peak flow)	ft/s	3
30-in pipe	ft	8,200
24-in pipe	ft	19,200
20-in pipe	ft	12,000
18-in pipe	ft	6,200
16-in pipe	ft	11,200
12-in pipe	ft	12,200
Total Length of pipe	ft	69,000

Summary

Based on the General Plan build-out land use, one hundred thirty-four sites within the City comprising 817 acres, have been identified as candidates for receiving recycled water. These sites could potentially use 3,700 ac-ft/yr of recycled water, which represents 33 percent of the annual Phase III wastewater flow of 11,230 ac-ft/yr (10 mgd). Treatment, storage, and distribution facilities would be necessary to meet this demand.

REFERENCES

- [1] *Evaluation of Agricultural Irrigation with Recycled Water*, prepared by Nolte Associates, July 2004.
- [2] *Manteca Effluent, to Land Disposal Study, Technical Memorandum No. 3-2, Evaluation of Urban Water Recycling Opportunities from the Manteca Wastewater Control Facility*, prepared by Nolte Associates, February 2002.

- [3] *Water Reuse Investigation Preliminary Design Report, TM No.4 - Manteca Wastewater Quality Control Facility (WQCF) Phase III Expansion*, prepared by Nolte and Associates, January 1996.
- [4] City of Manteca General Plan 2023 Policy Document, adopted October 6, 2003.
- [5] *Irrigation with Reclaimed Municipal Wastewater – A Guidance Manual*, prepared by the California State Water Resources Control Board, July 1984.
- [6] California Rainfall Summary, prepared by the California Department of Water Resources, 1981.

Exhibit "K"

a daily average. Failure of the filtration system such that virus removal is impaired would normally result in increased particles in the effluent, which result in higher effluent turbidity. Turbidity has a major advantage for monitoring filter performance, allowing immediate detection of filter failure and rapid corrective action. Coliform testing, by comparison, is not conducted continuously and requires several hours, to days, to identify high coliform concentrations. Thus, monitoring turbidity is a good operational check to ensure the treatment system was functioning properly and could meet the limits for total coliform organisms. Therefore, to ensure compliance with DPH recommended Title 22 disinfection criteria, this Order contains operational turbidity specifications to be met prior to disinfection (See Special Provisions VI.C.4.a Turbidity Operational Requirements in the Limitations and Discharge Requirements section of this Order). To be consistent with current DPH guidance the operational requirements for turbidity have been established as 2 NTU as a daily average, an instantaneous maximum of 10 NTU, and shall not exceed 5 NTU more than 5 percent of the time.

This Order contains effluent limitations and a tertiary level of treatment, or equivalent, necessary to protect the beneficial uses of the receiving water. The Regional Water Board has previously considered the factors in CWC section 13241 in establishing these requirements.

- (d) **Plant Performance and Attainability.** Analysis of the effluent data shows that the MEC of 90 MPN/ 100ml is less than the applicable WQBELs. The Regional Water Board concludes, therefore, that immediate compliance with these effluent limitations is feasible.

viii. Salinity

- (a) **WQO.** The Basin Plan contains a chemical constituent objective that incorporates state MCLs, contains a narrative objective, and contains numeric water quality objectives for electrical conductivity, total dissolved solids, sulfate, and chloride. The State Water Board's Bay-Delta Plan establishes salinity water quality objectives as electrical conductivity at various compliance points in the Sacramento-San Joaquin Delta to protect beneficial uses. The USEPA Ambient Water Quality Criteria for Chloride recommends acute and chronic criteria for the protection of aquatic life. There are no USEPA water quality criteria for the protection of aquatic life for electrical conductivity, total dissolved solids, and sulfate

Table F-12. Salinity Water Quality Criteria/Objectives

Parameter	Secondary MCL	Bay-Delta Plan ¹	Effluent	
			Average	Maximum
EC (µmhos/cm)	900, 1600, 2200	700 (1 Apr – 31 Aug) 1000 (1 Sep – 31 Mar)	731	827
TDS (mg/L)	500, 1000, 1500	N/A	450	500
Sulfate (mg/L)	250, 500, 600	N/A	57	68

Chloride (mg/L)	250, 500, 600	N/A	132	140
-----------------	---------------	-----	-----	-----

¹ Compliance with the Bay-Delta Plan water quality objectives are determined at three monitoring locations in the South Sacramento-San Joaquin Delta, but apply throughout the general geographic area.

- (1) **Chloride.** The secondary MCL for chloride is 250 mg/L, as a recommended level, 500 mg/L as an upper level, and 600 mg/L as a short-term maximum. The USEPA Ambient Water Quality Criteria for Chloride recommends acute and chronic criteria of 860 mg/L and 230 mg/L, respectively.
- (2) **Electrical Conductivity.** The secondary MCL for EC is 900 µmhos/cm as a recommended level, 1600 µmhos/cm as an upper level, and 2200 µmhos/cm as a short-term maximum. The State Water Board's Bay-Delta Plan establishes water quality objectives that apply to waters of the San Francisco Bay system and the legal Sacramento-San Joaquin Delta. As specified at page 10, "unless otherwise indicated, water quality objectives cited for a general area, such as for the southern Sacramento-San Joaquin Delta, are applicable for all locations in that general area and compliance locations will be used to determine compliance with the cited objectives." The Bay-Delta Plan's salinity objectives for the southern Sacramento-San Joaquin Delta are to protect agricultural irrigation uses, and seasonally varies from 700 µmhos/cm (1 April to 31 August) to 1000 µmhos/cm (1 September to 31 March). These objectives apply to the Facility's discharge.
- (3) **Sulfate.** The secondary MCL for sulfate is 250 mg/L as a recommended level, 500 mg/L as an upper level, and 600 mg/L as a short-term maximum.
- (4) **Total Dissolved Solids.** The secondary MCL for TDS is 500 mg/L as a recommended level, 1000 mg/L as an upper level, and 1500 mg/L as a short-term maximum.

(b) RPA Results.

- (1) **Chloride.** Chloride concentrations in the effluent ranged from 109 mg/L to 140 mg/L, with an average of 132 mg/L. Background concentrations in San Joaquin River ranged from 9 mg/L to 150 mg/L, with an average of 69 mg/L, for 5 samples collected by the Discharger from 27 April 2004 through 30 December 2008. These levels do not exceed the secondary MCL or the USEPA Ambient Water Quality Criteria. Therefore, there is no reasonable potential for chloride.
- (2) **Electrical Conductivity.** A review of the Discharger's self-monitoring reports after operation of tertiary filtration/UV disinfection show a maximum monthly average EC concentration of 783 µmhos/cm (MEC) during the months April through August (irrigation season) and a MEC of 827 µmhos/cm during the months September through March (non-

irrigation season). The maximum 30-day average background receiving water EC was 949 $\mu\text{mhos/cm}$ (non-irrigation season) and 763 $\mu\text{mhos/cm}$ (irrigation season). These levels do not exceed the secondary MCL or the non-irrigation season objective in the Bay-Delta Plan; however, these levels exceed the irrigation season (April through August) Bay-Delta Plan salinity objective. Therefore, based on the data cited, the discharge demonstrates reasonable potential to exceed the objective.

(3) **Sulfate.** Sulfate concentrations in the effluent ranged from 43 mg/L to 68 mg/L, with an average of 57 mg/L. Background concentrations in San Joaquin River ranged from 11 mg/L to 170 mg/L, with an average of 75 mg/L. These levels do not exceed the secondary MCL. Therefore, there is no reasonable potential for sulfate.

(4) **Total Dissolved Solids.** The average TDS effluent concentration was 450 mg/L with concentrations ranging from 396 mg/L to 500 mg/L. The background receiving water TDS was measured once at a value of 411 mg/L. These levels do not exceed the secondary MCL. Therefore, there is no reasonable potential for TDS.

(c) **WQBELs.** Previous Order No. R5-2004-0028 originally contained seasonal EC limits of 700 and 1000 $\mu\text{mhos/cm}$, based on the Bay-Delta Plan objectives. The Discharger petitioned the Order to the State Water Board, in part, regarding the EC limits. In Order WQ 2005-0005 for the City of Manteca (Manteca Order), the State Water Board revised the seasonal EC effluent limits to only 1000 $\mu\text{mhos/cm}$ on a year-round basis. The State Water Board based the revision, in part, on the following findings:

"...although discharge of treated wastewater to the Delta or its tributaries under an NPDES permit can affect EC in the southern Delta, previous State Board decisions and water quality control plans do not discuss treated effluent discharges as a source of salinity in the southern Delta."

"In the present case, the record indicates that the 700 $\mu\text{mhos/cm}$ EC receiving water objective for April through August in the southern Delta frequently is not met, and that requiring the City to comply with an effluent limitation of 700 $\mu\text{mhos/cm}$ EC would not significantly change the EC of water in the southern Delta area. In addition, the State Board's 1991 and 1995 Delta Plans, Revised Water Right Decision 1641, and State Board Resolution No. 2004-0062 all establish that the intended implementation program for meeting the 700 $\mu\text{mhos/cm}$ EC objective was based primarily upon providing increased flows, possible construction of salinity barriers, and reducing the salt load entering the San Joaquin River from irrigation return flows and groundwater."

"The causes and potential solutions to the salinity problems in the southern Delta are highly complex subjects that have received and are

continuing to receive an unprecedented amount of attention from the State Board in the exercise of its coordinated authority over water rights and water quality. The southern Delta water quality objectives for EC referenced by the Regional Board were established in the State Board's 1995 Delta Plan. Although the ultimate solutions to southern Delta salinity problems have not yet been determined, previous actions establish that the State Board intended for permit effluent limitations to play a limited role with respect to achieving compliance with the EC water quality objectives in the southern Delta."

"...the existing record supports the conclusions that: (1) assuring compliance with the 700 μ mhos/cm EC limitation in the City's permit for April through August would probably require construction and operation of a reverse osmosis treatment plant for at least a portion of the City's effluent at a very large cost; and (2) because of the relatively high salinity of the receiving water and the relatively small portion of flow provided by the City's discharge, the City's use of reverse osmosis would have relatively little effect on the EC of water in the river. In addition, the State Board takes official notice [California Code of Regulations, Title 23 Section 648.2], of the fact that operation of a large-scale reverse osmosis treatment plant would result in production of highly saline brine for which an acceptable method of disposal would have to be developed. Consequently, any decision that would require use of reverse osmosis to treat the City's municipal wastewater effluent on a large scale should involve thorough consideration of the expected environmental effects."

The facts regarding the need to construct reverse osmosis to meet the 700 μ mhos/cm EC standard have not changed. Since adoption of the Manteca Order the Discharger has replaced a portion of its groundwater supplies with lower salinity surface water from the South San Joaquin Irrigation District. Furthermore, the Discharger has removed the food processing wastewater from Eckhart Cold Storage from its waste-stream that is discharged to the San Joaquin River. As a result, salt reductions have been achieved in the effluent discharge. However, the Discharger is still unable to comply with the 700 μ mhos/cm EC standard required in the Bay-Delta Plan during the irrigation season.

Other facts supporting the State Water Board's conclusions have changed since adoption of the Manteca Order. The State Water Board updated the Bay-Delta Plan in 2006. The update re-affirmed the seasonal standards and updated the implementation program to include regulation of treated effluent discharges to the South Delta. Furthermore, the State Water Board held in Order WQ 2009-0003 for the City of Tracy that the Clean Water Act requires compliance with existing water quality objectives pending the development of long-term or interim regulatory solutions such as revisions to existing water quality standards, a TMDL, variances, site specific objectives, or an offset policy. (p. 10 and p. 17.) Therefore, to ensure compliance with the Bay-Delta Plan and to be consistent with the most recent State Water Board Order WQ 2009-003 (City of Tracy), this

Order contains seasonal effluent limits of 700 µmhos/cm from April through August and 1000 µmhos/cm from September through March.

(d) Plant Performance and Attainability. Since adoption of previous Order No. R5-2004-0028, the Discharger replaced a portion of its groundwater supplies with lower salinity surface water from the South San Joaquin Irrigation District. As a result, salt reductions were achieved in the effluent discharge. Nevertheless, as shown in the following table, analysis of the effluent data shows that the post upgrade MEC of 783 µg/L is greater than applicable WQBELs, and therefore, appear to put the Discharger in immediate non-compliance with the EC effluent limitation.

Parameter	Effluent					
	2006		2007		2008	
	Avg	Max	Avg	Max	Avg	Max
EC, µmhos/cm	904	1107	809	917	732	827
TDS, mg/L	554	617	481	554	459	500
Chloride, mg/L	137	140	N/A ¹	136	N/A	109
Sulfate, mg/L	N/A	58	N/A ¹	52	N/A	43

Based on the data cited and subsequent analysis, a compliance time schedule for compliance with the effluent limitations is established in TSO No. R5-2009-0096 in accordance with CWC section 13300. The TSO also requires preparation and implementation of a pollution prevention plan in compliance with CWC section 13263.3.

ix. Temperature

- (a) WQO.** The Thermal Plan requires that, "*The maximum temperature shall not exceed the natural receiving water temperature by more than 20°F.*"
- (b) RPA Results.** The discharge of municipal wastewater is an elevated temperature waste and has reasonable potential to cause or contribute to an excursion above Thermal Plan requirements.
- (c) WQBELs.** To ensure compliance with the Thermal Plan, an effluent limitation for temperature is included in this Order.
- (d) Plant Performance and Attainability.** Analysis of the effluent and receiving water data indicates that the discharge can meet the Thermal Plan requirements at the current permitted capacity of 9.87 mgd. However, based on thermal modeling conducted by the Discharger (*City of Manteca Thermal Plan Exception Analysis Final Report*, February 2006) (Thermal Exception Report) the expanded discharge of 17.5 mgd may at times not meet the Thermal Plan requirements. The Thermal Exception Report assessed impacts of the discharge on fishery resources within the vicinity of the discharge, and based on modeling results, field investigations, and a migratory fish species impact assessment, the study

results obtained at the Discharger's background monitoring well MW-AW. Based on this information and findings contained in The Report, Regional Water Board concurs that MW-AW is appropriate to effectively and fully characterize the background groundwater quality conditions within the vicinity of the Facility and the Agricultural Fields.

4. Rationale for Groundwater Limitations. The Discharger's groundwater characterization study (*Background Hydrogeologic Characterization Study, 26 September 2006*, Condor Earth Technologies, Inc.) also summarized all groundwater data collected to date and concluded that "groundwater quality under beneath and down gradient of the facility appear to be of poorer quality than upgradient groundwater for total dissolved solids, nitrate, and several of the trace metals." However, since this report, the Discharger has implemented several management practices (e.g. nitrification-denitrification facilities, biosolids now sent off-site for disposal, etc.). Thus the Discharger cannot fully evaluate actual impacts on groundwater due to current land application practices without completion of additional studies. Nevertheless, this Order contains numeric and narrative land discharge specifications and reclamation specifications (Section IV), narrative and numeric groundwater limitations (Section V), Special Studies (Section VI.C), and monitoring and reporting requirements (Attachment E) to protect the quality of the underlying groundwater and the applicable uses. Additionally, this Order does not allow an increased volume of waste or an increase in wastewater discharge to land compared to the discharges allowed in Order No. R5-2004-0028. The following provides Regional Water Board's rationale for the groundwater limits contained in this Order:

- a. **Salinity.** Total dissolved solids, which were found to be present in the groundwater at an average concentration range from 443 mg/L to 893 mg/L, have the potential to degrade groundwater quality at this site because there is little ability for attenuation in the shallow permeable vadose zone beneath this Facility. According to Ayers and Westcot, dissolved solids can cause yield or vegetative growth reductions of sensitive crops if present in excess of 450 mg/L in irrigation water, thereby impairing agricultural use of the water resource. However, a site-specific study must be performed to determine the appropriate TDS level to protect the agricultural beneficial use in the vicinity of the Facility. The Discharger is required to conduct a site-specific salinity study in Section VI.C.2c. of this Order. Additionally, an updated independent scientific investigation of irrigation salinity needs in the southern Delta was recently completed, and the findings and conclusion are currently under review. If applicable water quality objective to protect the agricultural use from discharges of total dissolved solids and electrical conductivity are adopted, or should the site-specific study conclusively determine an appropriate TDS level to protect the agricultural beneficial use within the vicinity of the Facility, then, this Order will be reopened and a numerical groundwater limitation for TDS and EC will be applied.
- b. **Nitrate,** which was found to be present in the groundwater at an average concentration range from 0.04 mg/L to 24.9 mg/L as nitrogen, has the potential to degrade groundwater quality because there is little ability for attenuation in the shallow permeable vadose zone beneath the Facility. Furthermore, groundwater

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2013-0568

MANDATORY PENALTY

IN THE MATTER OF

CITY OF MANTECA
WOODWARD AVENUE UTILITY AND STREET IMPROVEMENT PROJECT
SAN JOAQUIN COUNTY

This Complaint is issued to the City of Manteca (hereafter Discharger) pursuant to California Water Code (Water Code) section 13385, which authorizes the imposition of Administrative Civil Liability, and Water Code section 13323, which authorizes the Executive Officer to issue this Complaint. This Complaint alleges that the Discharger violated provisions of Waste Discharge Requirements (WDRs) Orders R5-2008-0081 (NPDES No. CAG995001) and R5-2008-0082 (NPDES No. CAG995002).

The Executive Officer of the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) finds the following:

1. Beginning in 2011, the City of Manteca constructed sewer and storm water pipeline infrastructure improvements along Woodward Avenue. As part of this process, the Discharger constructed 25 extraction wells to pump and discharge groundwater associated with the construction activities. The project also included discharging dechlorinated potable water from hydrostatic testing of the newly installed pipelines. Groundwater and dechlorinated potable water was discharged to the local irrigation drainage which is tributary to French Camp Slough and the San Joaquin River, within the Sacramento-San Joaquin Delta, a water of the United States.
2. On 12 June 2008, the Central Valley Water Board adopted *Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Waters, Order R5-2008-0081* (Low Threat General Order). On this same date, the Board also adopted *Waste Discharge Requirements for Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater From Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water, Order R5-2008-0082* (Limited Treat General Order).
3. The Discharger applied for coverage under the Low Threat General Order, and on 24 June 2011, the Executive Officer issued Notice of Applicability (NOA) R5-2008-0081-098 for coverage under the Low Threat General Order. On 17 February 2012, this NOA was rescinded and replaced by NOA R5-2008-0082-025 for coverage under the Limited Treat General Order. On 26 February 2013, Board staff issued a Notice of Termination upon completion of the Project.
4. This Complaint addresses administrative civil liability for effluent violations that occurred between 24 June 2011 and 26 February 2013. These violations are specifically identified

in Attachment A to this Complaint as subject to mandatory minimum penalties. Attachment A is attached hereto and incorporated herein by reference.

5. On 8 July 2013, Central Valley Water Board staff issued the Discharger a Notice of Violation and draft Record of Violations (ROV) for effluent limitation violations that occurred between 24 June 2011 and 26 February 2013. On 30 July 2013, the Discharger responded to the ROV, agreed with the violations and requested minor corrections. Board staff made the applicable corrections. Board staff also reassessed the violations and added the 5 October 2011 one-hour average total chlorine residual violation, as listed in Attachment A to the Complaint.
6. Water Code section 13385(h) and (i) require assessment of mandatory penalties and state, in part, the following:

Water Code section 13385(h)(1) states:

Notwithstanding any other provision of this division, and except as provided in subdivisions (j), (k), and (l), a mandatory minimum penalty of three thousand dollars (\$3,000) shall be assessed for each serious violation.

Water Code section 13385 (h)(2) states:

For the purposes of this section, a "serious violation" means any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more or for a Group I pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more.

Water Code section 13385 subdivision (i)(1) states, in part:

Notwithstanding any other provision of this division, and except as provided in subdivisions (j), (k), and (l), a mandatory minimum penalty of three thousand dollars (\$3,000) shall be assessed for each violation whenever the person does any of the following four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations:

- A) Violates a waste discharge requirement effluent limitation.
- B) Fails to file a report pursuant to Section 13260.
- C) Files an incomplete report pursuant to Section 13260.
- D) Violates a toxicity effluent limitation contained in the applicable waste discharge requirements where the waste discharge requirements do not contain pollutant-specific effluent limitations for toxic pollutants.

7. Water Code section 13323 states, in part:

Any executive officer of a regional board may issue a complaint to any person on whom administrative civil liability may be imposed pursuant to this article. The complaint shall

allege the act or failure to act that constitutes a violation of law, the provision authorizing civil liability to be imposed pursuant to this article, and the proposed civil liability.

8. WDRs Order R5-2008-0081, Effluent Limitations IV.A.1. includes, in part, the following effluent limitations:
- a. The discharge of pollutants from dewatering and other low threat discharges shall not exceed the following effluent limitations:

Parameter	Units	Effluent Limitations		
		Average Monthly	Weekly Average	Maximum Daily
Total Suspended Solids	mg/L	10	15	30

9. WDRs Order R5-2008-0081, Effluent Limitations IV.A.1. includes, in part, the following effluent limitations:
- b. **Total Residual Chlorine.** Effluent total residual chlorine shall not exceed:
- i. 0.011 mg/L, as a 4-day average; and
 - ii. 0.019 mg/L, as a 1-hour average.
10. WDRs Order R5-2008-0082, Effluent Limitations V.B.4., include, in part, the following effluent limitation:
4. The pH of all limited threat discharges within the Sacramento and San Joaquin River Basins (except Goose Creek) shall at all times be within the range of 6.5 and 8.5.
11. According to the Discharger's self-monitoring reports, the Discharger committed six (6) serious Group I violations of the above effluent limitations contained in WDRs Order R5-2008-0081. These violations are defined as serious because measured concentrations of Group I constituents exceeded maximum prescribed levels in WDRs Order R5-2008-0081 by 40 percent or more. The mandatory minimum penalty for these serious violations is **eighteen thousand dollars (\$18,000)**.
12. According to the Discharger's self-monitoring reports, the Discharger committed two (2) serious Group II violations of the above effluent limitations contained in WDRs Order R5-2008-0081. These violations are defined as serious because measured concentrations of Group II constituents exceeded maximum prescribed levels in WDRs Order R5-2008-0081 by 20 percent or more. The mandatory minimum penalty for these serious violations is **six thousand dollars (\$6,000)**.
13. According to the Discharger's self-monitoring reports, the Discharger committed eleven (11) non-serious violations of the above effluent limitation contained in Orders R5-2008-0081 and R5-2008-0082. All eleven non-serious violations are subject to mandatory penalties under Water Code section 13385 subdivision (i)(1) because these violations were preceded by three or more similar violations within a 180-day period. The

mandatory minimum penalty for this non-serious violation is **thirty three thousand dollars (\$33,000)**.

14. The total amount of the mandatory penalties assessed for the alleged effluent violations is **fifty seven thousand dollars (\$57,000)**. As stated herein, a detailed list of the alleged effluent violations is included in Attachment A. This Complaint addresses administrative civil liability for violations that are specifically identified in Attachment A.
15. Issuance of this Administrative Civil Liability Complaint to enforce Water Code Division 7, Chapter 5.5 is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code section 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).

THE CITY OF MANTECA IS HEREBY GIVEN NOTICE THAT:

1. The Executive Officer of the Central Valley Water Board proposes that the Discharger be assessed an Administrative Civil Liability in the amount of **fifty seven thousand dollars (\$57,000)**.
2. A hearing on this matter will be held at the Central Valley Water Board meeting scheduled on **5/6 December 2013**, unless the Discharger does one of the following by **8 October 2013**:
 - a) Waives the hearing by completing the attached form (checking off the box next to Option 1) and returning it to the Central Valley Water Board, along with payment for the proposed civil liability of **fifty seven thousand dollars (\$57,000)**; or
 - b) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests to engage in settlement discussions by checking off the box next to Option #2 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed; or
 - c) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests a delay by checking off the box next to Option #3 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed.
3. If a hearing on this matter is held, the Central Valley Water Board will consider whether to affirm, reject, or modify the proposed Administrative Civil Liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.

4. If this matter proceeds to hearing, the Executive Officer reserves the right to amend the proposed amount of civil liability to conform to the evidence presented, including but not limited to, increasing the proposed amount to account for the costs of enforcement (including staff, legal and expert witness costs) incurred after the date of the issuance of this Complaint through completion of the hearing.

PAMELA C. CREEDON, Executive Officer

10 September 2013

DATE

Attachment A: Record of Violations

**WAIVER FORM
FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT**

By signing this waiver, I affirm and acknowledge the following:

I am duly authorized to represent the City of Manteca (hereafter Discharger) in connection with Administrative Civil Liability Complaint R5-2013-0568 (hereafter Complaint). I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served. The person who has been issued a complaint may waive the right to a hearing."

(OPTION 1: Check here if the Discharger waives the hearing requirement and will pay in full.)

- a. I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board.
- b. I certify that the Discharger will remit payment for the proposed civil liability in the full amount of **fifty seven thousand dollars (\$57,000)** by check that references "ACL Complaint R5-2013-0568" made payable to the *State Water Pollution Cleanup and Abatement Account*. Payment must be received by the Central Valley Water Board by **8 October 2013**.
- c. I understand the payment of the above amount constitutes a proposed settlement of the Complaint, and that any settlement will not become final until after a 30-day public notice and comment period. Should the Central Valley Water Board receive significant new information or comments during this comment period, the Central Valley Water Board's Executive Officer may withdraw the complaint, return payment, and issue a new complaint. I also understand that approval of the settlement will result in the Discharger having waived the right to contest the allegations in the Complaint and the imposition of civil liability.
- d. I understand that payment of the above amount is not a substitute for compliance with applicable laws and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.

(OPTION 2: Check here if the Discharger waives the 90-day hearing requirement in order to engage in settlement discussions.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint, but I reserve the ability to request a hearing in the future. I certify that the Discharger will promptly engage the Central Valley Water Board Prosecution Team in settlement discussions to attempt to resolve the outstanding violation(s). By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing so that the Discharger and the Prosecution Team can discuss settlement. It remains within the discretion of the Central Valley Water Board to agree to delay the hearing. Any proposed settlement is subject to the conditions described above under "Option 1."

(OPTION 3: Check here if the Discharger waives the 90-day hearing requirement in order to extend the hearing date and/or hearing deadlines. Attach a separate sheet with the amount of additional time requested and the rationale.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint. By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing and/or hearing deadlines so that the Discharger may have additional time to prepare for the hearing. It remains within the discretion of the Central Valley Water Board to approve the extension.

(Print Name and Title)

(Signature)

(Date)

**ATTACHMENT A
ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2013-0568**

**City of Manteca
Woodward Avenue Utility and Street Improvement Project
RECORD OF VIOLATIONS (24 June 2011 - 26 February 2013) MANDATORY PENALTIES
(Data reported under Monitoring and Reporting Programs R5-2008-0081 and R5-2008-0082)**

	<u>Date</u>	<u>Parameter</u>	<u>Units</u>	<u>Limit</u>	<u>Measured</u>	<u>Period</u>	<u>Remarks</u>	<u>CIWQS</u>
<i>Violations under NPDES Order R5-2008-0081</i>								
1	19-Aug-11	Total Suspended Solids	mg/L	30	62	Daily Maximum	1	949442
2	20-Aug-11	Total Suspended Solids	mg/L	15	62	Weekly Average	1	949443
3	31-Aug-11	Total Suspended Solids	mg/L	10	62	Monthly Average	1	949447
4	17-Sep-11	Total Suspended Solids	mg/L	15	20	Weekly Average	4	949445
5	30-Sep-11	Total Suspended Solids	mg/L	10	12.9	Monthly Average	4	949450
6	5-Oct-11	Total Residual Chlorine	mg/L	0.019*	0.19	1-hour Average	2	952463
7	5-Oct-11	Total Residual Chlorine	mg/L	0.011*	0.19	4-day Average	2	950765
8	4-Jan-12	Total Suspended Solids	mg/L	30	67	Daily Maximum	1	949845
9	7-Jan-12	Total Suspended Solids	mg/L	15	67	Weekly Average	1	949846
10	31-Jan-12	Total Suspended Solids	mg/L	10	34	Monthly Average	1	949847
<i>Violations under NPDES Order R5-2008-0082</i>								
11	15-May-12	pH	S.U.	6.5	6.3	Instantaneous Minimum	4	949892
12	16-May-12	pH	S.U.	6.5	6.4	Instantaneous Minimum	4	949893
13	17-May-12	pH	S.U.	6.5	6.1	Instantaneous Minimum	4	949894
14	18-May-12	pH	S.U.	6.5	6.3	Instantaneous Minimum	4	949895
15	18-May-12	pH	S.U.	6.5	6.4	Instantaneous Minimum	4	949896
16	20-May-12	pH	S.U.	6.5	6.4	Instantaneous Minimum	4	949897
17	20-May-12	pH	S.U.	6.5	6.2	Instantaneous Minimum	4	949898
18	21-May-12	pH	S.U.	6.5	6.4	Instantaneous Minimum	4	949899
19	25-May-12	pH	S.U.	6.5	6.4	Instantaneous Minimum	4	949900

Remarks:

1. Serious Violation: For Group I pollutants that exceed the effluent limitation by 40 percent or more.
2. Serious Violation: For Group II pollutants that exceed the effluent limitation by 20 percent or more.
3. Non-serious violation falls within the first three violations in a 180-day period, thus is not subject to mandatory minimum penalties.
4. Non-serious violation subject to mandatory minimum penalties.

**ATTACHMENT A
ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2013-0568**

<u>VIOLATIONS AS OF:</u>	<u>2/26/2013</u>
Group I Serious Violations:	6
Group II Serious Violations:	2
Non-Serious Violations Not Subject to MMPs:	0
Non-serious Violations Subject to MMPs:	11
<u>Total Violations Subject to MMPs:</u>	<u>19</u>

Mandatory Minimum Penalty = (6 Group I Violations + 2 Group II Violation+ 11 Non-Serious Violations) x \$3,000 = \$57,000

* WDRs Provision VIII includes, in part, the following: "...Any excursion above the 1-hour average or 4-day average effluent limitation and greater than or equal to a reporting level of 0.08 mg/L is a violation..."

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2011-0533

MANDATORY PENALTY
IN THE MATTER OF

CITY OF MANTECA
WATER QUALITY CONTROL FACILITY
SAN JOAQUIN COUNTY

This Complaint is issued to the City of Manteca (hereafter Discharger) pursuant to California Water Code (CWC) section 13385, which authorizes the imposition of Administrative Civil Liability, and CWC section 13323, which authorizes the Executive Officer to issue this Complaint. This Complaint is based on findings that the Discharger violated provisions of Waste Discharge Requirements (WDRs) Orders R5-2004-0028 and R5-2009-0095 (NPDES No. CA0081558).

The Executive Officer of the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) finds the following:

1. The Discharger owns and operates the City of Manteca Water Quality Control Facility (WQCF), which provides sewerage service to the City of Manteca and portions of the City of Lathrop in San Joaquin County. Treated domestic, commercial and industrial wastewater is discharged to the San Joaquin River.
2. On 19 March 2004, the Central Valley Water Board issued WDRs Order R5-2004-0028 to regulate discharges of waste from the WQCF. On 5 August 2005, the Board adopted Resolution R5-2005-0110, amending WDRs Order R5-2004-0028. On 16 May 2005, the State Water Resources Control Board (State Water Board) issued Water Quality Order WQ-2005-0005 which amended Order R5-2004-0028. On 8 October 2009, effective 27 November 2009, the Board issued WDRs Order R5-2009-0095 rescinding Order R5-2004-0028, except for enforcement purposes. On 8 October 2009, the Board also issued Cease and Desist Order (CDO) R5-2009-0096. CDO R5-2009-0096 provided a time schedule to comply with final effluent limitations for electrical conductivity by 30 September 2014. On 16 November 2010, the Superior Court of California, County of Sacramento, stayed the electrical conductivity effluent limitations as of the effective date of WDRs Order R5-2009-0095. On 24 January 2011, the Executive Officer rescinded CDO R5-2009-0096. These actions removed the electrical conductivity limitation from WDR Order R5-2009-0095.
3. On 10 November 2009, the Executive Officer of the Central Valley Water Board issued Administrative Civil Liability Complaint (ACLC) R5-2009-0568 for mandatory minimum penalties for effluent violations (identified in Attachment A to ACLC R5-2009-0568) that occurred from 1 January 2008 through 31 July 2009. The Discharger paid the civil liability and the Board considers those effluent violations specifically listed in Attachment A to ACLC R5-2009-0568 to be resolved.

4. This Complaint addresses administrative civil liability for effluent violations that occurred during the period from 1 August 2009 through 30 November 2010. These violations are specifically identified in Attachment A to this Complaint as subject to mandatory minimum penalties. Attachment A to this Complaint is attached hereto and incorporated herein by this reference.
5. On 26 January 2011, Central Valley Water Board staff issued the Discharger a draft Record of Violations. The Discharger responded on 11 February 2011 and agreed with the violations.
6. CWC section 13385(h) and (i) require assessment of mandatory penalties and state, in part, the following:

CWC section 13385(h)(1) states:

Notwithstanding any other provision of this division, and except as provided in subdivisions (j), (k), and (l), a mandatory minimum penalty of three thousand dollars (\$3,000) shall be assessed for each serious violation.

CWC section 13385 (h)(2) states:

For the purposes of this section, a "serious violation" means any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more or for a Group I pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more.

CWC section 13385 subdivision (i)(1) states, in part:

Notwithstanding any other provision of this division, and except as provided in subdivisions (j), (k), and (l), a mandatory minimum penalty of three thousand dollars (\$3,000) shall be assessed for each violation whenever the person does any of the following four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations:

- A) Violates a waste discharge requirement effluent limitation.
- B) Fails to file a report pursuant to Section 13260.
- C) Files an incomplete report pursuant to Section 13260.
- D) Violates a toxicity effluent limitation contained in the applicable waste discharge requirements where the waste discharge requirements do not contain pollutant-specific effluent limitations for toxic pollutants.

7. CWC section 13323 states, in part:

Any executive officer of a regional board may issue a complaint to any person on whom administrative civil liability may be imposed pursuant to this article. The complaint shall allege the act or failure to act that constitutes a violation of law, the provision authorizing civil liability to be imposed pursuant to this article, and the proposed civil liability.

8. WDRs Order R5-2009-0095 Final Effluent Limitations IV.A.1.a, include, in part, the following effluent limitations:
- a. Effective immediately, the discharger shall maintain compliance with the following limitations at Discharge Point No. 001....:

Table 6. Effluent Limitations (9.87 mgd)

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum	Instantaneous Minimum
Ammonia, (Total as N)	mg/L	1.4	--	3.4	--	--

9. According to the Discharger's self-monitoring reports, the Discharger committed one (1) serious Group I violation of the above effluent limitations contained in WDRs Order R5-2009-0095 during the period beginning 1 August 2009 and ending 30 November 2010 as identified in Attachment A. This violation is defined as serious because the measured concentration of a Group I constituent exceeded the maximum prescribed level in WDRs Order R5-2009-0095 by 40 percent or more. The mandatory minimum penalty for this serious violation is three thousand dollars (\$3,000).
10. According to the Discharger's self-monitoring reports, the Discharger committed one (1) non-serious violation of the above effluent limitations contained in Order R5-2009-0095 during the period beginning 1 August 2009 and ending 30 November 2010 as identified in Attachment A. The non-serious violation is not subject to mandatory penalties under CWC section 13385 subdivision (i)(1) because this violation was not preceded by three or more similar violations within a six-month period.
11. The total amount of the mandatory penalty assessed for the cited effluent violations is three thousand dollars (\$3,000). As stated herein, a detailed list of the cited effluent violations is included in Attachment A. This Complaint addresses administrative civil liability for violations that are specifically identified in Attachment A as subject to mandatory minimum penalties.
12. Issuance of this Administrative Civil Liability Complaint to enforce CWC Division 7, Chapter 5.5 is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code section 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).

THE DISCHARGER IS HEREBY GIVEN NOTICE THAT:

1. The Executive Officer of the Central Valley Water Board proposes that the Discharger be assessed an Administrative Civil Liability in the amount of three thousand dollars (\$3,000).
2. A hearing on this matter will be held at the Central Valley Water Board meeting scheduled on 8/9/10 June 2011, unless the Discharger does one of the following by 13 April 2011:

- a) Waives the hearing by completing the attached form (checking off the box next to Option 1) and returning it to the Central Valley Water Board, along with payment for the proposed civil liability of three thousand dollars (\$3,000); or
 - b) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests to engage in settlement discussions by checking off the box next to Option #2 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed; or
 - c) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests a delay by checking off the box next to Option #3 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed.
3. If a hearing on this matter is held, the Central Valley Water Board will consider whether to affirm, reject, or modify the proposed Administrative Civil Liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.
 4. If this matter proceeds to hearing, the Executive Officer reserves the right to amend the proposed amount of civil liability to conform to the evidence presented, including but not limited to, increasing the proposed amount to account for the costs of enforcement (including staff, legal and expert witness costs) incurred after the date of the issuance of this Complaint through completion of the hearing.

Original signed by Frederick Moss for
PAMELA C. CREEDON, Executive Officer

14 March 2011

DATE

Attachment A: Record of Violations

WAIVER FORM
FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT

By signing this waiver, I affirm and acknowledge the following:

I am duly authorized to represent the City of Manteca (hereafter Discharger) in connection with Administrative Civil Liability Complaint R5-2011-0533 (hereafter Complaint). I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served. The person who has been issued a complaint may waive the right to a hearing."

(OPTION 1: Check here if the Discharger waives the hearing requirement and will pay in full.)

- a. I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board.
- b. I certify that the Discharger will remit payment for the proposed civil liability in the full amount of three thousand dollars (\$3,000) by check that references "ACL Complaint R5-2011-0533" made payable to the *State Water Pollution Cleanup and Abatement Account*. Payment must be received by the Central Valley Water Board by 13 April 2011.
- c. I understand the payment of the above amount constitutes a proposed settlement of the Complaint, and that any settlement will not become final until after a 30-day public notice and comment period. Should the Central Valley Water Board receive significant new information or comments during this comment period, the Central Valley Water Board's Executive Officer may withdraw the complaint, return payment, and issue a new complaint. I also understand that approval of the settlement will result in the Discharger having waived the right to contest the allegations in the Complaint and the imposition of civil liability.
- d. I understand that payment of the above amount is not a substitute for compliance with applicable laws and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.

(OPTION 2: Check here if the Discharger waives the 90-day hearing requirement in order to engage in settlement discussions.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint, but I reserve the ability to request a hearing in the future. I certify that the Discharger will promptly engage the Central Valley Water Board Prosecution Team in settlement discussions to attempt to resolve the outstanding violation(s). By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing so that the Discharger and the Prosecution Team can discuss settlement. It remains within the discretion of the Central Valley Water Board to agree to delay the hearing. Any proposed settlement is subject to the conditions described above under "Option 1."

(OPTION 3: Check here if the Discharger waives the 90-day hearing requirement in order to extend the hearing date and/or hearing deadlines. Attach a separate sheet with the amount of additional time requested and the rationale.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint. By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing and/or hearing deadlines so that the Discharger may have additional time to prepare for the hearing. It remains within the discretion of the Central Valley Water Board to approve the extension.

(Print Name and Title)

(Signature)

(Date)

ATTACHMENT A
ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2011-0533

City of Manteca
Water Quality Control Facility
RECORD OF VIOLATIONS (1 August 2009 – 30 November 2010) MANDATORY PENALTIES
(Data reported under Monitoring and Reporting Program R5-2004-0028 and R5-2009-0095)

	<u>Date</u>	<u>Violation Type</u>	<u>Units</u>	<u>Limit</u>	<u>Measured</u>	<u>Period</u>	<u>Remarks</u>	<u>CIWQS</u>
<i>Violations of Order R5-2009-0095</i>								
1	7-Sep-10	Ammonia	mg/L	3.4	5.4	Max Daily	1	882902
2	30-Sep-10	Ammonia	mg/L	1.4	1.7	Monthly	3	882903

Remarks:

1. Serious Violation: For Group I pollutants that exceed the effluent limitation by 40 percent or more.
2. Serious Violation: For Group II pollutants that exceed the effluent limitation by 20 percent or more.
3. Non-serious violation falls within the first three violations in a six-month period, thus is not subject to mandatory minimum penalties.
4. Non-serious violation subject to mandatory penalties.

<u>VIOLATIONS AS OF:</u>	<u>11/30/2010</u>
Group I Serious Violations:	1
Group II Serious Violations:	0
Non-Serious Violation Not Subject to MMPs:	1
Non-serious Violations Subject to MMPs:	0
<u>Total Violations Subject to MMPs:</u>	<u>1</u>

Mandatory Minimum Penalty = (1 serious Violation + 0 Non-Serious Violations) x \$3,000 = \$3,000

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ACL COMPLAINT R5-2013-00516

ADMINISTRATIVE CIVIL LIABILITY
IN THE MATTER OF
CITY OF MANTECA
WASTEWATER QUALITY CONTROL FACILITY
SAN JOAQUIN COUNTY

This Complaint is issued to the City of Manteca (Discharger) pursuant to California Water Code (Water Code) section 13385, which authorizes the imposition of Administrative Civil Liability, and Water Code section 13323, which authorizes the Executive Officer to issue this Complaint. This Complaint is based on evidence that the Discharger violated provisions of Waste Discharge Requirements Order (WDRs) Order R5-2009-0095 (NPDES No. CA0081558).

The Executive Officer of the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) alleges the following:

BACKGROUND

1. The Discharger owns and operates the City of Manteca Water Quality Control Facility (WQCF), which provides sewerage service to the City of Manteca and portions of the City of Lathrop in San Joaquin County. The WQCF discharges treated domestic, commercial and industrial wastewater to the San Joaquin River.
2. On 8 October 2009, effective 27 November 2009, the Board issued WDRs Order R5-2009-0095 rescinding Order R5-2004-0028, except for enforcement purposes. The WDRs prescribe effluent limitations and include discharge prohibitions prohibiting the discharge of wastewater to the San Joaquin River that does not meet the requirements for disinfected tertiary treated effluent.

SPILL EVENTS

3. On 22 October 2012, the Discharger reported¹ a spill of approximately 496,500 gallons of un-disinfected tertiary treated effluent to the San Joaquin River. The spill occurred over a ninety minute period of time. The Discharger states that the spill was a result of an electrical short-circuit at one of the six air conditioner units for the proprietary ultra-violet disinfection system (UV system). Per the Discharger, the short-circuit caused a complete shutdown of the tertiary treatment system electrical power, including the final effluent outfall automatic valves that divert improperly treated wastewater to the secondary effluent storage pond. In response to the spill, the Discharger states that:
 - a. On 22 October 2012, the Discharger responded and manually re-routed the disinfected effluent to the secondary effluent storage pond; began troubleshooting the UV system and restored full operations approximately ninety minutes after the initial failure was discovered; and began inspecting the other five UV system air conditioning units to assure that similar conditions for short-circuiting were not present and, if present, were corrected. The City stated that no similar conditions were detected.

¹ Finding 3 is summarized from the Discharger's 26 October 2012 written report.

- b. On 23 October 2012, a conference call was held with the Discharger's supervisory control and data acquisition (SCADA) controls contractor. The parties created a corrective action plan to improve SCADA failsafe features to mitigate a recurrence of a similar condition. The plan included directing the UV System vendor to program an instantaneous diversion when an alarm is sent from the UV System to the SCADA system.
 - c. On 13/14 November 2012, the UV System vendor completed the programming update, thereby improving communications between the UV system and the SCADA system.
 4. On 30 November 2012, the Discharger reported² a spill of approximately 294,300 gallons of un-disinfected tertiary treated effluent to the San Joaquin River. The spill occurred over a one hour period of time. The Discharger states that the spill was a result of an electrical short-circuit at another one of the UV system's six air conditioner units. Per the Discharger, the short-circuit caused a complete shut down of the tertiary system electrical power, including the final effluent outfall automatic valves that divert improperly treated wastewater to the secondary effluent storage pond. Although the Discharger had previously stated that the issue had been fixed by the UV system vendor, the problem re-occurred within a short period of time.
 5. The Discharger investigated and found the electrical sensitivity settings for the electrical circuit protection devices were such that all power feeding the entire UV System would be cut off if an electrical short occurred in a minor sub-system. Per the Discharger, both AC unit failures caused an electrical short thereby cutting off all power, including power to the communication system between the UV System and the SCADA system. The City corrected the problem on 4 December 2012.

REGULATORY CONSIDERATIONS

6. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Resources Control Board.
7. Pursuant to WDRs Order No. R5-2009-0095, the WQCF discharges disinfected tertiary level treated effluent from Discharge Point No.001 to the San Joaquin River. The San Joaquin River is a water of the State and of the United States, within the Sacramento-San Joaquin Delta.
8. The Basin Plan designates the beneficial uses of the San Joaquin River as municipal and domestic supply; agricultural supply, including irrigation and stock watering; industrial process supply; industrial service supply; water contact recreation, including canoeing and rafting; non-contact water recreation; warm freshwater habitat; cold fresh water habitat; migration of aquatic organisms, warm and cold; spawning, reproduction, and/or early development, warm; wildlife habitat; and navigation.
9. Administrative civil liabilities may be sought and imposed for violations of a Discharger's NPDES permit and/or applicable Board orders pursuant to the procedures described in Water Code section 13323. This Administrative Civil Liability Complaint alleges the Discharger's acts and/or

² Findings 4 and 5 are summarized from the Discharger's 5 December 2012 written report.

failure to act constitutes a violation of WDRs R5-2009-0095 and seeks administrative civil liabilities under Water Code section 13385.

10. Issuance of this Administrative Civil Liability Complaint to enforce Water Code Division 7, Chapter 5.5 is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.), in accordance with California Code of Regulations, title 14, sections 15307, 15308, 15321(a)(2) and all applicable law.

CALCULATION OF CIVIL LIABILITIES UNDER WATER CODE SECTION 13385

11. Section 301 of the Clean Water Act (33 U.S.C. § 1311) and Water Code section 13376 prohibit discharge of pollutants to surface waters except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.
12. Water Code section 13385 states, in relevant part:
 - (a) Any person who violates any of the following shall be liable civilly in accordance with this section:
 - (2) A waste discharge requirement ... issued pursuant to [Water Code, Division 7, Chapter 5.5]...
 - (4) An order or prohibition issued pursuant to Section 13243...
13. Water Code section 13243 states:

A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.
14. WDR Order R5-2009-0095 was issued pursuant to Chapter 5.5, and specifies the conditions under which waste may be discharged. The discharges to surface water described in paragraphs in 3 and 4 are violations of Discharge Prohibition III.1 of WDRs Order R5-2009-0095, and thus render the Discharger liable under Water Code section 13385, subdivision (a)(2) and (a)(4).
15. Water Code section 13385 states, in relevant part:
 - (c) Civil liability may be imposed administratively by the state board or a regional board...in an amount not to exceed the sum of both of the following:
 - (1) Ten thousand dollars (\$10,000) for each day in which the violation occurs.
 - (2) Where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.
 - (e) ...At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.
16. **Maximum Civil Liability for Discharge to Surface Waters:** Per Water Code section 13385, civil liability imposed administratively by the Central Valley Water Board may not exceed \$10,000 for each day in which the violation occurs, plus \$10 per gallon for each gallon of waste discharged over 1,000 gallons per spill event. The Discharger spilled 790,800 gallons of tertiary treated un-disinfected wastewater over two spill events. Therefore, at \$10 per gallon for discharges in

excess of 1,000 gallons, and at \$10,000 per day for each day of the discharge, the maximum administrative civil liability that may be assessed pursuant to Water Code section 13385 is **seven million nine hundred and eight thousand dollars (\$7,908,000)**.

17. **Minimum Civil Liability for Discharge to Surface Waters:** Pursuant to Water Code section 13385(e), civil liability, at a minimum, must be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation. The Discharger received little to no economic benefit from the spills, as the cost to troubleshoot the problem, reprogram the SCADA system, and reset the electrical breakers was minimal. Therefore, staff did not further assess the economic benefit in determining the liability.

PROPOSED ADMINISTRATIVE CIVIL LIABILITY

18. Pursuant to Water Code section 13385, subdivision (e), in determining the amount of any civil liability imposed under Water Code section 13385(c), the Board is required to take into account the nature, circumstances, extent, and gravity of the violations, whether the discharges are susceptible to cleanup or abatement, the degree of toxicity of the discharges, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violations, and other matters that justice may require.
19. On 17 November 2009, the State Water Board adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy (Enforcement Policy). The Enforcement Policy was approved by the Office of Administrative Law and became effective on 20 May 2010. The Enforcement Policy establishes a methodology for assessing administrative civil liability that addresses the factors that must be considered when imposing an administrative civil liability under Water Code section 13385(e). The entire Enforcement Policy can be found at:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final11179.pdf
20. This administrative civil liability was derived from the use of the penalty methodology in the Enforcement Policy, as explained in detail in Attachment A. The proposed civil liability takes into account such factors as the Discharger's culpability, history of violations, ability to pay and continue in business, and other factors as justice may require.
21. As described in paragraph 16, the maximum administrative civil liability for the above violations is \$7,908,000. However, based on consideration of the above facts and after applying the penalty methodology, the Executive Officer of the Central Valley Water Board proposes that civil liability be imposed administratively on the Discharger in the amount of **\$87,492**, which includes the recovery of enforcement staff costs. The specific factors considered in this administrative civil liability are detailed in Attachment A.
22. Notwithstanding the issuance of this Complaint, the Central Valley Water Board retains the authority to assess additional civil liabilities for violations of the requirements of the Discharger's waste discharge requirements and/or applicable orders for which civil liabilities have not yet been assessed, or for violations that may subsequently occur.

CITY OF MANTECA IS HEREBY GIVEN NOTICE THAT:

1. The Executive Officer of the Central Valley Water Board proposes that the Discharger be assessed an Administrative Civil Liability in the amount of **eighty seven thousand four hundred ninety two dollars (\$87,492)**. The amount of the proposed liability is based upon an analysis of the factors cited in Water Code section 13385 and the Enforcement Policy, accounts for \$7,500 in staff costs.
2. A hearing on this matter will be conducted at the Central Valley Water Board meeting scheduled on **30/31 May 2013**, unless one of the following occurs by **29 March 2013**:
 - a) The Discharger waives the hearing by completing the attached form (checking the box next to Option #1) and returning it to the Central Valley Water Board, along with payment for the proposed civil liability of **eighty seven thousand four hundred ninety two dollars (\$87,492)**; or
 - b) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests to engage in settlement discussions by checking the box next to Option #2 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed; or
 - c) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests a delay by checking the box next to Option #3 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed.
3. If a hearing is held, the Central Valley Water Board will consider whether to affirm, reject, or modify the proposed Administrative Civil Liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.
4. If this matter proceeds to hearing, the Executive Officer reserves the right to amend the proposed amount of civil liability to conform to the evidence presented, including but not limited to, increasing the proposed amount to account for the costs of enforcement (including staff, legal and expert witness costs) incurred after the date of the issuance of this Complaint through completion of the hearing.

Original Signed by Andrew Altevogt for

PAMELA C. CREEDON, Executive Officer

4 March 2013

Date

Attachment A: Penalty Calculations

MoF/NM/WSW: 21 February 2013

**WAIVER FORM
FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT**

By signing this waiver, I affirm and acknowledge the following:

I am duly authorized to represent the City of Manteca (Discharger) in connection with Administrative Civil Liability Complaint R5-2013-0516 (hereafter Complaint). I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served. The person who has been issued a complaint may waive the right to a hearing."

(OPTION 1: Check here if the Discharger waives the hearing requirement and will pay in full.)

- a. I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board.
- b. I certify that the Discharger will remit payment for the proposed civil liability in the full amount of **eighty seven thousand four hundred ninety two dollars (\$87,492)** by check that references "ACL Complaint R5-2013-0516" made payable to the *State Water Pollution Cleanup and Abatement Account*. Payment must be received by the Central Valley Water Board by **29 March 2013**.
- c. I understand the payment of the above amount constitutes a proposed settlement of the Complaint, and that any settlement will not become final until after a 30-day public notice and comment period. Should the Central Valley Water Board receive significant new information or comments during this comment period, the Central Valley Water Board's Executive Officer may withdraw the complaint, return payment, and issue a new complaint. I also understand that approval of the settlement will result in the Discharger having waived the right to contest the allegations in the Complaint and the imposition of civil liability.
- d. I understand that payment of the above amount is not a substitute for compliance with applicable laws and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.

(OPTION 2: Check here if the Discharger waives the 90-day hearing requirement in order to engage in settlement discussions.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint, but I reserve the ability to request a hearing in the future. I certify that the Discharger will promptly engage the Central Valley Water Board Prosecution Team in settlement discussions to attempt to resolve the outstanding violation(s). By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing so that the Discharger and the Prosecution Team can discuss settlement. It remains within the discretion of the Central Valley Water Board to agree to delay the hearing. Any proposed settlement is subject to the conditions described above under "Option 1."

(OPTION 3: Check here if the Discharger waives the 90-day hearing requirement in order to extend the hearing date and/or hearing deadlines. Attach a separate sheet with the amount of additional time requested and the rationale.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint. By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing and/or hearing deadlines so that the Discharger may have additional time to prepare for the hearing. It remains within the discretion of the Central Valley Water Board to approve the extension.

(Print Name and Title)

(Signature)

(Date)

The Regional Water Board concurs with this scientific approach.

iii. **Alternative Control Measures.** APU 90-004 requires the consideration of "feasible alternative control measures" as part of the procedures for a complete antidegradation analysis. The Discharger considered several alternatives that would reduce or eliminate the lowering of water quality resulting from the proposed 7.63 mgd discharge increase. The Antidegradation Analysis assessed maintaining existing water quality in the San Joaquin River and the Delta with an increase in discharge through evaluating 1) effluent-to-land disposal, 2) additional wastewater treatment by microfiltration and reverse osmosis (MF/RO), or 3) no increase in discharge capacity. These plant expansion alternatives are summarized below:

- The land application of secondary treated effluent would offset projected reductions in San Joaquin River water quality as a result of the proposed project; however, operational costs are estimated at \$28.5 million to construct and an additional \$300,000 per year to operate. The Antidegradation Analysis further states that an economic impacts model estimates that these costs would have adverse socioeconomic effects (e.g. job losses). In addition, land application may elevate salinity and boron levels found in the Central Valley groundwater.
- The implementation of MF/RO would also offset estimated reductions in San Joaquin River water quality; however, the treatment facility would cost an estimated \$93.5 million to construct and an additional \$4.9 million per year to operate. The economic impacts model also estimates job losses due to this project, and the Antidegradation Analysis presents issues regarding the brine and crystallized residuals disposal.
- No Project Alternative, which is not to increase the discharge capacity.

None of the alternatives evaluated would substantially reduce or eliminate significant water quality impacts of the proposed action, because the proposed action would not significantly degrade water quality. Some of the alternatives may result in water quality effects elsewhere, or other environmental impacts, that are worse than those identified for the proposed action

- iv. Socioeconomic Evaluation.** The objective of the socioeconomic analysis was to determine if the lowering of San Joaquin River water quality within the Sacramento-San Joaquin Delta is in the maximum interest of the people of the state. The socioeconomic evaluation within the Antidegradation Analysis provides an in-depth analysis of: 1) cost and benefits and 2) socio-economic impacts of alternatives for maintaining existing water quality, and 3) balance of environmental benefits and socio-economic considerations. The Antidegradation Analysis also provided results from modeling of the economic impacts on the community.

Given the current infrastructure, future development in the cities of Manteca and Lathrop and surrounding communities, would rely on the Discharger and its Facility for wastewater collection, treatment, and recycled water services. The plant expansion of 7.63 mgd and increase surface water discharge would accommodate planned and approved growth in these cities. Should the incremental changes in San Joaquin River water quality characterized herein be disallowed, such action would: (1) force future developments in the Discharger's service area to find alternative methods for disposing of wastewater; (2) require adding a reverse-osmosis treatment processes to a significant portion of flow, and possibly other plant upgrades, to eliminate the small water quality changes; or (3) prohibit planned and approved development within and adjacent to the Discharger's service area. On balance, allowing the minor degradation of water quality is in the best interest of the people of the area and the state, compared to these other options; and is necessary to accommodate important economic or social development in the area.

- v. Justification for Allowing Degradation.** Potential degradation identified in the Antidegradation Analysis and due to this Order is justified by the following considerations:

- The increase in permitted discharge capacity is necessary to accommodate important economic and social development in the City of Manteca and surrounding communities, and is consistent with the Discharger's General Plan. Failure to approve the increase, or alternatively requiring the Discharger to implement control measures that would maintain existing water quality and mass emissions in the San Joaquin River, would have significant adverse economic and social impacts on the City of Manteca and surrounding communities and their citizens and businesses.
- The Facility will discharge Title 22 tertiary treated effluent that will result in minimal water quality degradation, and meet or exceed the highest statutory and regulatory requirements which meets or exceeds best practical treatment or control (BPTC).
- The Order is fully protective of the beneficial uses of the San Joaquin River within the Sacramento-San Joaquin Delta. The anticipated water quality changes in the San Joaquin River will not reduce or impair its

substances, color, chemical constituents, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, suspended sediment, settleable substances, suspended material, tastes and odors, temperature, toxicity, and turbidity.

B. Groundwater

1. The beneficial uses of the underlying ground water are municipal and domestic supply, industrial service supply, industrial process supply, and agricultural supply.
2. Basin Plan water quality objectives include narrative objectives for chemical constituents, tastes and odors, and toxicity of groundwater. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life. The chemical constituent objective states groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use. The tastes and odors objective prohibits taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses. The Basin Plan also establishes numerical water quality objectives for chemical constituents, bacteria, and radioactivity in groundwaters designated as municipal supply. These include, at a minimum, compliance with MCLs in Title 22 of the CCR. The bacteria objective prohibits coliform organisms at or above 2.2 MPN/100 mL. The Basin Plan requires the application of the most stringent water quality objective necessary to ensure that the designated beneficial use is not adversely affected; however, as specified in the Basin Plan, the water quality "objectives do not require improvement over naturally occurring background concentrations." Therefore, this Order contains groundwater limitations for both natural background quality and water quality objectives that are necessary to protect the beneficial uses of the underlying groundwater. Thus, the water quality objectives define the least stringent limits that could apply as groundwater limitations except where natural background quality already exceeds the objective.
3. For natural background quality, the level of groundwater quality is dependant upon the background conditions. Historical data is not available to determine natural background conditions before any discharges from the Facility. Therefore, Regional Water Board staff rely on present-day sampling from upgradient monitoring locations to represent the range of water quality that otherwise would have been expected at the site before the Facility was operational. The Discharger conducted a groundwater characterization study of the City of Manteca and surrounding area, and submitted the findings on 26 September 2006, *Background Hydrogeologic Characterization Report*. This report states "One well, BG-1 [MW-AW] has been installed to evaluate background water quality upgradient of the facility. This well is located in the regionally upgradient direction of the Facility (southeast). This well appears to be near the transition area where background groundwater flow from the southeast and ground water flow from the mounded groundwater under the Facility meet, especially during the irrigations season. Water quality at this well is, however, believed to be dominated by recharge from the regionally upgradient groundwater and from seasonal rainfall." Historical regional water quality data obtained by Department of Water Resources, USEPA, and US Geological Survey from 23 monitoring wells located within a 33 square mile area is generally similar to

results obtained at the Discharger's background monitoring well MW-AW. Based on this information and findings contained in The Report, Regional Water Board concurs that MW-AW is appropriate to effectively and fully characterize the background groundwater quality conditions within the vicinity of the Facility and the Agricultural Fields.

4. Rationale for Groundwater Limitations. The Discharger's groundwater characterization study (*Background Hydrogeologic Characterization Study, 26 September 2006, Condor Earth Technologies, Inc.*) also summarized all groundwater data collected to date and concluded that "groundwater quality under beneath and down gradient of the facility appear to be of poorer quality than upgradient groundwater for total dissolved solids, nitrate, and several of the trace metals." However, since this report, the Discharger has implemented several management practices (e.g. nitrification-denitrification facilities, biosolids now sent off-site for disposal, etc.). Thus the Discharger cannot fully evaluate actual impacts on groundwater due to current land application practices without completion of additional studies. Nevertheless, this Order contains numeric and narrative land discharge specifications and reclamation specifications (Section IV), narrative and numeric groundwater limitations (Section V), Special Studies (Section VI.C), and monitoring and reporting requirements (Attachment E) to protect the quality of the underlying groundwater and the applicable uses. Additionally, this Order does not allow an increased volume of waste or an increase in wastewater discharge to land compared to the discharges allowed in Order No.R5-2004-0028. The following provides Regional Water Board's rationale for the groundwater limits contained in this Order:

- a. Salinity.** Total dissolved solids, which were found to be present in the groundwater at an average concentration range from 443 mg/L to 893 mg/L, have the potential to degrade groundwater quality at this site because there is little ability for attenuation in the shallow permeable vadose zone beneath this Facility. According to Ayers and Westcot, dissolved solids can cause yield or vegetative growth reductions of sensitive crops if present in excess of 450 mg/L in irrigation water, thereby impairing agricultural use of the water resource. However, a site-specific study must be performed to determine the appropriate TDS level to protect the agricultural beneficial use in the vicinity of the Facility. The Discharger is required to conduct a site-specific salinity study in Section VI.C.2c. of this Order. Additionally, an updated independent scientific investigation of irrigation salinity needs in the southern Delta was recently completed, and the findings and conclusion are currently under review. If applicable water quality objective to protect the agricultural use from discharges of total dissolved solids and electrical conductivity are adopted, or should the site-specific study conclusively determine an appropriate TDS level to protect the agricultural beneficial use within the vicinity of the Facility, then, this Order will be reopened and a numerical groundwater limitation for TDS and EC will be applied.
- b. Nitrate,** which was found to be present in the groundwater at an average concentration range from 0.04 mg/L to 24.9 mg/L as nitrogen, has the potential to degrade groundwater quality because there is little ability for attenuation in the shallow permeable vadose zone beneath the Facility. Furthermore, groundwater

- c. pH, which ranged from 6.7 to 7.4 standard units in the domestic wastewater and from 4.45 to 11.53 in the food processing wastewater, has the ability to degrade groundwater quality at this site because there is little potential for buffering in the shallow permeable vadose zone. According to Ayers and Westcot, pH less than 6.5 or greater than 8.4 can cause yield or vegetative growth reductions of sensitive crops if present in irrigation water, thereby impairing agricultural use of the water resource. The applicable water quality objective to protect the agricultural use from discharges of substances that affect pH is the narrative Chemical Constituents objective, which is applied following the "Policy of Application of Water Quality Objectives" in the Basin Plan. A numerical groundwater limitation range of 6.5 to 8.4 for pH, based on Ayers and Westcot, is relevant and appropriate to apply the narrative Chemical Constituents objective to protect unrestricted agricultural use of groundwater in the absence of information to support a less protective limit.
 - d. Ammonia has the potential to degrade groundwater quality because there is little ability for ammonia attenuation in the shallow permeable vadose zone at this site. According to Amoores and Hautala¹, who evaluated odor of ammonia in water, the odor threshold for ammonia in water is 1.5 mg/L (as NH₄). These authors studied the concentration of chemicals in air that caused adverse odors and then calculated the concentration in water that would be equivalent to that amount in air. Therefore, it is appropriate to use the data contained therein to apply the narrative Tastes and Odors water quality objective. Concentrations that exceed this value can impair the municipal or domestic use of the resource by causing adverse odors. The applicable water quality objective to protect the municipal and domestic use from discharges of odor producing substances is the narrative Tastes and Odors objective, which is applied following the "Policy of Application of Water Quality Objectives" in the Basin Plan. A numerical groundwater limitation of 1.5 mg/L for ammonia (as NH₄), based on Amoores and Hautala, is relevant and appropriate to apply the narrative Tastes and Odors objective to protect the municipal and domestic use of groundwater.
5. Groundwater limitations are required to protect the beneficial uses of the underlying groundwater. Based on groundwater quality data provided by the Discharger, it appears that the Discharger cannot immediately comply with the groundwater

¹ Amoores, J.E. and E. Hautala, *Odor as an Aid to Chemical Safety: Odor Thresholds Compared with Threshold Limit Values and Volatilities for 214 Industrial Chemicals in Air and Water Dilution*, Journal of Applied Toxicology, Vol. 3, No. 6, (1983).

Exhibit "P"

BOY IS ON THE ROLL

Jary Union Pacific locomotive runs once again

See NATION, Page B5

IS SCHOOL BOARD MATH CORRECT?

Do 21,064 more homes really mean 9 schools equating \$410 million price tag?

See DENNIS WYATT, Page A4

www.MantecaBulletin.com

MANTECA BULLETIN

LOCAL NEWS MEANS THE WORLD TO US

WEDNESDAY, APRIL 16, 2014

Vol. 106, No. 90 PRICE 50¢

8/1/54
TODAY
82/53

Recycled city water for farms?

Manteca leaders want to explore the possibility

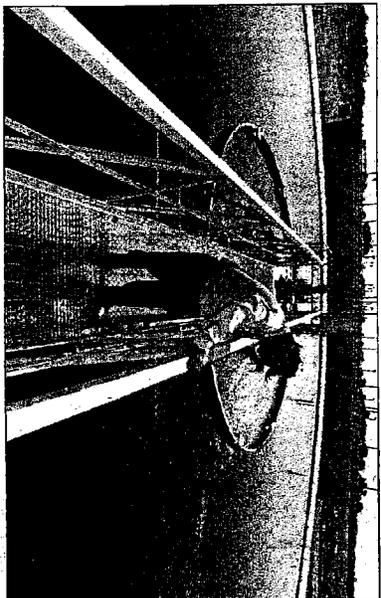
By DENNIS WYATT
THE BULLETIN

River could instead be diverted for local farm use. Mayor Willie Weatherford believes 100 acres designated for open space as part of the 1,471-home Traits of Manteca neighborhood being pursued south of Woodward Avenue could be used to create a large holding lake for treated wastewater. From there, the SSJID could pump it into

its delivery system serving farmland south of the city. At the same time, the manmade lake could also help recharge underground water tables that ultimately are tapped by Lathrop and Manteca municipal well systems. "The water is just going into the river," DeBrunn noted. The city's treatment plant processes enough water to

support 90,000 people—the current population of Manteca and Lathrop that send wastewater to the facility. City ratepayers pay nearly \$2 million a year to treat it—including \$1.2 million in power costs. It is simply given away free to downstream users. State law gives cities the ability to sell "rights" to the fresh water they create from the treatment of wastewater.

SEE WATER, PAGE A8



Manteca's treated wastewater one day could go to South County farms.

Manteca Councilman Steve DeBrunn convinced his colleagues Tuesday to have staff explore working with the South San Joaquin Irrigation District to see if 7 million gallons of treated wastewater the city releases back into the San Joaquin

WATER

FROM PAGE A1

Other valley cities have taken advantage of the law to either sell recycled water for agricultural irrigation or trade it for upstream water.

Manteca could get anywhere from \$100,000 to \$400,000 a year selling that water by the acre foot depending upon the market and water conditions.

But that isn't where the real money is.

If Manteca-Lathrop reuses the water it would continue to assure economic prosperity in drought periods or as continued growth and demand outstrips available water supplies.

Treated wastewater is now at such a high quality for cutting edge plants such as the one serving Manteca that some Californians are already drinking and showering using treated wastewater.

That's been the case in San Diego since 2012 when a pilot treatment plant went into operation that put a portion of San Diego's treated wastewater through one additional treatment process. The \$13 million plant now produces a million gallons of water a day for municipal use to support the equivalent needs of 12,825 people. By 2020, San Diego expects to have 7 percent of all municipal water for drinking as well as other residential and com-

mercial uses come from the city's wastewater treatment plants.

Treated wastewater has been used for years on crops such as lettuce in the Salinas Valley, for manufacturing processes that require highly clean water, and to irrigate golf courses in Palm Springs.

Orange County has used a slightly different approach. They are injecting treated wastewater directly into the underground aquifer that communities in the region pump water from for domestic use. The recharging already accounts for 20 percent of the aquifer's water.

DeBrum sees the water being returned to the San Joaquin River as the equivalent of Manteca tossing away money. He also believes the city should make every effort to help make sure there is adequate water for local agriculture given how SSJID has worked to secure and protect water rights for municipal use.

Weatherford believes the SSJID would be open to such an arrangement.

Turlock in January started exploring selling some of its highly treated wastewater to the Del Puerto Water District for farm use.

Lodi in 2009 inked a deal with the Northern California Power Authority to buy recycled wastewater for a natural gas power plant. It represents \$1 million annually for the city.

To contact Dennis Wyatt, email dwyatt@mantecabulletin.com

Letter No. C1: Michael F. Babitzke, Inc.

Mr. Michael F. Babitzke

April 22, 2014

This letter also contains comments on the RTP. Please refer to the RTP Response to Comments Technical Appendix.

Response C1-1

The comment relates to a specific project within the RTP. The Draft EIR evaluates projects at the program level and does not provide specific detail on any one project. Project specific mitigation will be developed as individual projects move forward. SJCOG will encourage project sponsors to implement necessary mitigation measures as feasible and appropriate; however, SJCOG does not have the authority to impose specific measures on projects contained within the RTP.

Response C1-2

The Draft EIR evaluates the potential impact of the RTP/SCS including land use changes and transportation projects on fire protection services. Such impacts are appropriately evaluated at the program level and as such do not contain jurisdictional or project specific measures. Mitigation measure FIRE-1 could reduce potential impacts on fire protection services within individual jurisdictions to a less than significant level. However, SJCOG does not have authority to impose such mitigation measures on individual jurisdictions. Therefore, the potential for the need for additional fire protection services within the region was found to be significant and unavoidable.

Response C1-3

The commenter does not include any specific comment on the Draft EIR but rather expresses an opinion on Right to Farm protections within the region. No response is necessary.

Response C1-4

The commenter does not include any specific comment on the Draft EIR but rather expresses an opinion on Right to Farm protections within the region. No response is necessary.

Response C1-5

The commenter does not include any specific comment on the Draft EIR but rather expresses an opinion on groundwater within the region. No response is necessary.

Response C1-6

The comment relates to a specific project within the RTP. The Draft EIR evaluates projects at the program level and does not provide specific detail on any one project. Project specific mitigation will be developed

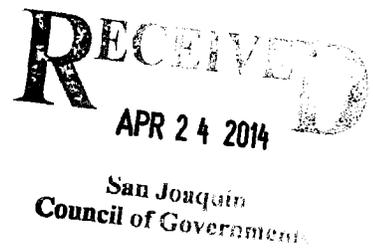
as individual projects move forward. SJCOG will encourage project sponsors to implement necessary mitigation measures as feasible and appropriate; however, SJCOG does not have the authority to impose specific measures on projects contained within the RTP.

Response C1-7

The comment relates to a specific project within the RTP. The Draft EIR evaluates projects at the program level and does not provide specific detail on any one project. Project specific mitigation will be developed as individual projects move forward. SJCOG will encourage project sponsors to implement necessary mitigation measures as feasible and appropriate; however, SJCOG does not have the authority to impose specific measures on projects contained within the RTP.

Response C1-8

The comment relates to a specific project within the RTP. The Draft EIR evaluates projects at the program level and does not provide specific detail on any one project. Project specific mitigation will be developed as individual projects move forward. SJCOG will encourage project sponsors to implement necessary mitigation measures as feasible and appropriate; however, SJCOG does not have the authority to impose specific measures on projects contained within the RTP.



April 21, 2014

Diane Nguyen, Deputy Director of Planning, Programming and Project Delivery
San Joaquin Council of Government
555 E. Weber Ave.
Stockton, CA 95202

Re: Comments Due for the Sustainable Communities Strategy, Draft EIR and 2015 FTIP Conformity Document

Dear Ms. Nguyen

My name is Arnold Rothlin. I have been farming and Dairy Farming my Manteca land for 59 years. I have been thru three floods, two of them major. The first one, occurring in December of 1950, again flooding in May 1955 and the most recent in January of 1997. All three floods broke within 100 yards of each other.

The floods of 1955 and 1997 were major floods. During both of these major floods I was able to escape damage to my home and dairy facility by building a levee. During the most recent flood in 1997, we were given 10 hours to either move the dairy operation or build a levee to protect ourselves. With the help of neighbors and friends, I was able to build a levee to withstand the floodwaters. At that time, I had 15 inches of water at the levee in the front of my property and at the lowest part of my ranch 5 feet of water. We had to run a generator 24 hours a day for 6 days to supply power for the dairy operation and my home. Milk would be picked up every day by a tanker coming in from the lowest part of the water level.

If the proposed expressway is built with an additional levee, the water will not be able to flow where it normally would go. This additional levee will cause water levels to rise on my farm and in the surrounding areas, making it impossible to protect my home and dairy.

Respectfully,
Arnold Rothlin

Arnold Rothlin
23400 So. Airport Way
Manteca, CA 95337

C2-1

Letter No. C2: **Arnold Rothlin**

Mr. Arnold Rothlin

April 21, 2014

Response C2-1

The comment relates to a specific project within the RTP. The Draft EIR evaluates projects at the program level and does not provide specific detail on any one project. Project specific mitigation will be developed as individual projects move forward. SJCOG will encourage project sponsors to implement necessary mitigation measures as feasible and appropriate; however, SJCOG does not have the authority to impose specific measures on projects contained within the RTP.



April 16, 2014

San Joaquin
Council of Governments

Diane Nguyen, Deputy Director of Planning, Programming and
Project Delivery
San Joaquin Council of Government
555 E. Weber Avenue
Stockton, CA 95202

Re: Comments Due for the Sustainable Communities Strategy, Draft EIR
and 2015 FTIP Conformity Document

Dear Ms. Nguyen

In response to the Councils proposed development plan presented at
the recent Manteca Planning Commission's meeting, (McKinley
Ave./Antone Raymus Expressway), We have some concerns regarding
this proposal.

1. 100 & 200 Year flood zone
2. Rural Property owners' quality of life and property
3. Encroachment of prime farmland. The "Right to Farm". Farming,
dairies and other businesses require use of flood irrigation and
pesticides
4. Storm drainage resulting from roadway leading to contamination
of soil
5. Sewer (treated disinfected and or un-disinfected sewer leaching
into wells and ground) eventually leading to contamination of soil
and ground water. West Nile virus is an ever-pressing problem.
6. Wild life, urban development leads to loss of wild life
7. Traffic, rural property owners not accustomed to heavy traffic.
Rural area traffic consists not only of light residential but farm
traffic (tractors, harvesting equipment and spraying equipment)
8. Air pollution resulting from the heavy traffic and traffic
congestion
9. Crime, with increased traffic comes crime in an area where crime
is relatively low

C3-1

Concerned residents of this rural area are not interested in monetary gain, just simply preserving prime farmland and maintaining their rural lifestyle in the manner they wish to preserve and have become accustomed to.

C3-1

Sincerely

John + Sharon Van Zeeuwen

*22079 Oleander
Montecito, California 95337*

Address _____

RECEIVED
MAY 19 2014

April 16, 2014

**San Joaquin
Council of Governments**

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C3-1

Sincerely

Address Richard L. King

RECEIVED
MAY 19 2014

April 16, 2014

San Joaquin
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C3-1

Concerned residents of this rural area are not interested in monetary gain, just simply preserving prime farmland and maintaining their rural lifestyle in the manner they wish to preserve and have become accustomed to.

C3-1

Sincerely

Betty McDonald

Address 22221 Oleander Lane
Monterey, Ca 95337



April 16, 2014

**San Joaquin
Council of Governments**

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San Joaquin Council of Government
555 E. Weber Avenue
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Concerned residents of this rural area are not interested in monetary gain, just simply preserving prime farmland and maintaining their rural lifestyle in the manner they wish to preserve and have become accustomed to.

C3-1

Sincerely

Jois Davis

Address 22263 Oleander Ave
Manteca, CA 95337

Letter No. C3: Form Letter Regarding Raymus Expressway

Multiple Signatures

Response C3-1

The comment relates to a specific project within the RTP. The Draft EIR evaluates projects at the program level and does not provide specific detail on any one project. Project specific mitigation will be developed as individual projects move forward. SJCOG will encourage project sponsors to implement necessary mitigation measures as feasible and appropriate; however, SJCOG does not have the authority to impose specific measures on projects contained within the RTP.

Manteca Public Hearing Comments from April 24, 2014	
<p>Kristine Williams, San Joaquin Bike Coalition</p>	<p>The San Joaquin Bike Coalition would like to see additional MK funds put toward projects that promote active transportation and transit opportunities and see greater priority devoted to projects promoting sustainable transportation options.</p>
<p>Will Barrett, American Lung Association</p>	<p>Mr. Barrett stated they like the direction the plan is taking and believe that the health, air quality and climate benefits of the plan could be maximized and the shortfalls of the plan can be avoided going into the future through suggested revisions contained in their comment letter.</p>
<p>Trevor Atkinson, Campaign for Common Ground</p>	<p>Mr. Atkinson stated through the work of SCS Coalition, COG staff has received suggestions from organizations offering ways that the RTP/SCS can be improved for the benefits of the residents in San Joaquin County. Mr. Atkinson stated he sincerely hopes that COG staff and members of the Board will consider all of these ideas in the spirit of seeking the ultimate plan for San Joaquin County and all of its diverse population.</p>
<p>Carey Knecht, Climate Plan</p>	<p>Mr. Atkinson gave a brief background of Campaign for Common Ground which started out in 2003 and stated Campaign for Common Ground has refocused its efforts on the need and opportunity for downtown revitalization. Mr. Atkinson commented on the 2008 agreement settlement between the City of Stockton and the Sierra Club and said that infill development needs to start the process if downtown Stockton is going to be revitalized.</p> <p>Ms. Knecht stated it would be helpful to look beyond the 2035 target date.</p> <p>Ms. Knecht would like to see a summary of how the GHG reductions are achieved.</p> <p>Ms. Knecht would like to see an explanation on the confusing results about declining in walking and biking mode share.</p> <p>Ms. Knecht commented on the Newspaper article “Changing Times Requires Us to Change” which talks about the importance of walkable communities.</p>
<p>Katelyn Roedner, Catholic Charities</p>	<p>Ms. Roedner commented on the handout provided to the board suggesting revisions to the RTP/SCS. She stated the closes to her heart are the equity pieces and how this plan is going to benefit those in our community, the poorest and the most vulnerable among us.</p> <p>Ms. Roedner stated to not only think about the businesses and growing families but also the low income communities in our County.</p>

<p>David Garcia, The Cort Group</p>	<p>Mr. Garcia stated the emphasis on walking, biking and transportation is greatly needed and the shift away from traditional suburban development patterns.</p> <p>Mr. Garcia commented on the argument against more transportation and housing options which ignores the health-, social, environmental benefits. He stated, "When we speak about freedom to choose who are we talking about, there can't be no freedom of choice if there is only one to choose from."</p>
<p>Moteczuma Sanchez</p>	<p>Mr. Sanchez recently made a documentary on telling the story on why Stockton is in the current condition and shape that it is in. Mr. Sanchez feels that a lot of the current issues and problems parallels to the past and are the results of decisions made in the past. Mr. Sanchez commended the board members for choosing Scenario C for the plan.</p>
<p>David Varela, Stockton Unified School District Trustee</p>	<p>Mr. Varela commented that we have an opportunity to make something happen for our communities throughout the county. This plan will create safe pathways for the schools and our students and to consolidate those areas where families are centered and easier for the school district to give them services that they need. I commend you for this plan and thank you this is moving in the right direction. I hope you can add more safer lanes for schools, pathway and bike ways for our students to travel.</p>
<p>Jeremy Terhune, Defenders of Wildlife</p>	<p>Mr. Terhune commented on the letter submitted from his Defenders of Wildlife's office written by Kim Delfino. Mr. Terhune stated the letter outlined important things regarding the PEIR, some oversights, and to make sure that we do a great job protecting farmland and agriculture.</p>
<p>William Mitchell, San Joaquin County Public Health Department</p>	<p>Mr. Mitchell stated the department's interest in development goals that speak to Public Health priorities, especially more compact walkable communities with increased opportunities for active transportation. The plans vital connections to healthy living will bring positive public health benefits and recommend you consider those suggested adjustments to this plan and in future planning cycles to maximize support for compact walkable neighborhoods.</p>

<p>Mr. Beckman stated an overwhelming majority of people regularly choose a single family detach house with their own private back yard. The RTP/SCS does not reflect fully those choices.</p> <p>Mr. Beckman stated that COG staff has made it clear that COG does not have land use authority and that the RTP/SCS is not an exercise of land use authority.</p> <p>Mr. Beckman commented on the legislation that was acted on 30 years ago [the California Environmental Quality Act] and had amazing unattended consequences. Mr. Beckman stated he is fearful that SB375 is going to have a similar impact.</p> <p>Mr. Beckman stated Scenario B accurately reflects choices, Scenario C is aggressive and claim to be achievable. Mr. Beckman encouraged the members to look at the choices that people make and that they are not making the same choices as in Scenario C.</p>	<p>John Beckman, Building Industry Association</p>
<p>Ms. Madueno commented on Café Coop stating they are young entrepreneurs, your professionals and vibrant people who want to live, work and advance here. They are the future of our valley. It has been quoted that Cities and Counties cannot attract young professionals and even our immigrants.</p> <p>Ms. Madueno commented on people she knows that have moved away for jobs, but if they had an opportunity to live and work in the Valley they would.</p> <p>Ms. Madueno reminded the board members they represent all of us and as a leader should be setting the path for making all of this for everybody in the community.</p>	<p>Virginia Madueno</p>
<p>Mr. Hatch stated in general it's a good plan, there are great aspirational statements in the plan and it's trying to provide more choices so that the only option is not a single family detached home. A lot of people want a single family detached home, however there are some that cannot afford a single family home and may not be interested. Some people are looking for smaller homes, smaller lot attached homes and condos, but are not readily available, and that's why we are losing some of the well-educated young people. Mr. Hatch stated we are not attracting some of the young people because we do not have the diversity of housing stock that's necessary to attract for economic development or retain the talent that we have. We need something that we don't have and that's the key. Mr. Hatch stated this plan does not reduce choices it expands choices and it goes a long way.</p>	<p>Randy Hatch</p>

The comments here are summaries of the oral testimonies provided at this public hearing.

Letter No. C4 Public Hearing Comments

Response C4-1

The commenter refers to a letter submitted by Defenders of Wildlife. Responses to the referenced letter are provided in **Response B3**, above, and the RTP Technical Appendix.

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

PURPOSE

The Mitigation Monitoring Program (MMP) has been prepared in conformance with Section 21081.6 of the California Environmental Quality Act. It is the intent of this program to (1) verify satisfaction of the required mitigation measures of the EIR; (2) provide a methodology to document implementation of the required mitigation; (3) provide a record of the Monitoring Program; (4) identify monitoring responsibility; (5) establish administrative procedures for the clearance of mitigation measures; (6) establish the frequency and duration of monitoring; and (7) utilize existing review processes wherever feasible.

INTRODUCTION

The Mitigation Monitoring Program describes the procedures that will be used to implement the mitigation measures adopted in connection with the approval of the project and the methods of monitoring such actions. A Monitoring Program is necessary only for impacts which would be significant if not mitigated. The following consists of a monitoring program table noting the responsible entity for mitigation monitoring, the timing, and a list of all project-related mitigation measures.

**Table 4.0-1
Mitigation Monitoring and Reporting Program Matrix**

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
Impact – Aesthetics				
AES-1: Impacts to aesthetic resources should be minimized through cooperation, information sharing, and SJCOG's ongoing regional planning efforts.	Ongoing over the life of the plan	SJCOG		
AES-2: Implementing and local agencies should identify and protect panoramic views and significant landscape features or landforms and implement project-specific mitigation as applicable. If it is determined that a project would significantly obstruct scenic views, implementing and local agencies should consider alternative designs that seek to avoid and/or minimize obstruction of scenic views to the extent feasible. Project-specific design measures may include reduction in height of improvements or width of improvements to reduce obstruction of views, or relocation of improvements to reduce obstruction of views	Ongoing over the life of the plan	Implementing and local agencies		
AES-3: Implementing and local agencies should protect panoramic views and views of significant landscape features or landforms and implement project-specific mitigation as applicable. Implementing local agencies should consider taking the following (or equivalent) actions: <ul style="list-style-type: none"> require that the scale and massing of new development in higher-density areas provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights; ensure building heights stepped back from sensitive adjoining uses to maintain appropriate transitions in scale and to protect scenic views; avoid siting electric towers, solar power facilities, wind power facilities, communication transmission facilities and/or above ground lines along scenic roadways and routes, to the maximum feasible extent; 	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AES-3: (continued)</p> <ul style="list-style-type: none"> prohibit projects and activities that would obscure, detract from, or negatively affect the quality of views from designated scenic roadways or scenic highways; and comply with other local general plan policies and local control related to the protection of panoramic or scenic views or views of significant landscape features or landforms. 				
<p>AES-4: Implementing and local agencies should design projects to be visually compatible with surrounding areas that possess high aesthetic value. Implementing and local agencies should design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development. The design of projects should minimize intrusion into important viewsheds and use contour grading to better match surrounding terrain. To the maximum extent feasible, landscaping should be designed to add significant natural elements and visual interest to soften hard edges. Projects should, to the extent feasible, avoid large cuts and fills when the visual environment (natural or urban) would be substantially disrupted.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>AES-5: Implementing and local agencies should establish development standards for visually sensitive areas, and, prior to approval of individual projects, to apply such development standards to maintain compatibility with surrounding natural areas, including site coverage, building height and massing, building materials and color, landscaping, site grading, etc.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>AES-6: Implementing and local agencies should ensure that sites should be kept in a blight/nuisance-free condition. Any existing blight or nuisance should be abated within 60 to 90 days of approval, unless an earlier date is specified elsewhere.</p>	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AES-7: Implementing and local agencies should design measures to reduce glare, light, and shadow. As part of planning, design, and engineering for projects, implementing and local agencies should ensure that projects proposed near light-sensitive uses avoid substantial spillover lighting. Design measures could include the following:</p> <ul style="list-style-type: none"> • Luminaries will be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent private properties and undeveloped open space. Fixtures that project light upward or horizontally will not be used. • Luminaries will be directed away from habitat and open space areas adjacent to the project site. • Luminaries will provide good color rendering and natural light qualities. Low-pressure sodium and high-pressure sodium fixtures that are not color corrected will not be used. Intensity will be approximately 10 lux for roadway intersections. • Luminary mountings will be downcast and the height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light onto adjacent private properties and undeveloped open space. Light poles will be 20 feet high or shorter. Luminary mountings will have non-glare finishes. • Exterior lighting features should be directed downward and shielded in order to confine light to the boundaries of the subject project. Where more intense lighting is necessary for safety purposes, the design should include landscaping to block light from sensitive land uses, such as residences. 	Ongoing over the life of the plan	Implementing and local agencies		
Impact – Agricultural Resources				
<p>AG-1: Implementing and local agencies should establish preservation ratios to minimize loss of prime, unique, and statewide importance farmland, such as the preservation of 1 acre of unprotected agricultural land being permanently conserved for each acre of open space developed.</p>	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AG-2: Implementing and local agencies should encourage urban development, in place of development in rural and sensitive areas. Local jurisdictions should seek funding to prepare specific plans and related environmental documents to facilitate mixed-use development, and to allow these areas to serve as receiver sites for transfer of development rights away from environmentally sensitive lands and rural areas outside established urban growth boundaries</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>AG-3: Implementing and local agencies should identify and minimize impacts to agricultural resources through project design.</p> <p>Prior to the design approval of RTP/SCS projects, the implementing agency should assess the project area for agricultural resources and constraints. For federally funded projects, implementing and local agencies are required to follow the rules and regulations of Farmland Protection Policy Act including determining the impact by completing the Farmland Conversion Impact Rating form (AD-1006). For non-federally funded projects, implementing and local agencies should assess projects for the presence of important farmlands (prime farmland, unique farmland, farmland of statewide importance), and if present, perform a Land Assessment and Site Evaluation (LESA).</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>AG-4: Implementing and local agencies should minimize and avoid agricultural resources located within the limits of a proposed project.</p> <p>If significant agricultural resources are identified within the limits of a project, implementing and local agencies should consider alternative designs that seek to avoid and/or minimize impacts to the agricultural resources. Design measures could include, but are not limited to, reducing the footprint of a roadway or development or relocating/realigning a project to avoid important and significant farmlands. If a project cannot be designed without complete avoidance of important or significant farmlands, implementing and local agencies should compensate for unavoidable conversion impacts in accordance with the Farmland Protection Policy Act and local and regional standards, which may include enrolling off-site agricultural lands under a Williamson Act contract or other conservation easement, or paying mitigation fees.</p>	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AG-5: Projects located within the Delta Plan area should apply appropriate mitigation in accordance with the Delta Plan. Examples of applicable mitigation measures could include:</p> <ul style="list-style-type: none"> • Design proposed project to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land. For project that will result in permanent conversion of farmland, preserve in perpetuity other farmland through acquisition of an agricultural conservation easement, or contributing funds to a land trust or other entity qualified to preserve farmland in perpetuity (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the farmland to be converted, to compensate for permanent loss). • Redesign project features to minimize fragmenting or isolating farmland. Where a project involves acquiring land or easements, ensure that the remaining non-project area is of a size sufficient to allow viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management. • Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted. • Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land. 	Ongoing over the life of the plan	Implementing and local agencies		
<p>AG-6: Implementing and local agencies should establish preservation ratios to minimize loss of forest land, and timberland, such as 1 acre of unprotected forest land and timber land to be permanently conserved for each acre of open space developed as a result of individual projects.</p>	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AG-7: Implementing and local agencies should implement design features in RTP/SCS projects to minimize impacts. Implementing agencies should consider corridor realignment, buffer zones and setbacks, and berms and fencing where feasible, to avoid forest lands and timberlands and to reduce conflicts between transportation uses and forest and timberlands</p>	Ongoing over the life of the plan	Implementing and local agencies		
Impact – Air Quality				
<p>AIR-1: The SVAPCD will encourage implementing and local agencies to require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project and apply the following:</p> <ul style="list-style-type: none"> • Prepare a plan for approval by the applicable air district demonstrating that the heavy-duty (equal to or greater than 50 horsepower) off-road equipment to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction. A Construction Mitigation Calculator (MS Excel) may be downloaded from the Sacramento Metropolitan Air Quality Management District web site to perform the fleet average evaluation http://www.airquality.org/ceqa/index.shtml. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology (Carl Moyer Guidelines), after-treatment products, voluntary off-site mitigation projects, provide funds for air district off-site mitigation projects, and/or other options as they become available. The air district should be contacted to discuss alternative measures. • Ensure that all construction equipment is properly tuned and maintained. • Minimize idling time to 5 minutes – saves fuel and reduces emissions. • Provide an operational water truck on-site at all times. Apply water to control dust as needed to prevent dust impacts off-site. • Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators. 	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AIR-1 (continued)</p> <ul style="list-style-type: none"> • Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. • As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain California Air Resources Board (ARB) Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the ARB or the District to determine registration and permitting requirements prior to equipment operation at the site 				
<p>AIR-2: Implementing and local agencies should implement measures adopted by ARB designed to attain federal air quality standards for PM 2.5. CARB’s strategy includes the following elements:</p> <ul style="list-style-type: none"> • Set technology forcing new engine standards; • Reduce emissions from the in-use fleet; • Require clean fuels, and reduce petroleum dependency; • Work with USEPA to reduce emissions from federal and state sources; and • Pursue long-term advanced technology measures. <p>Proposed new transportation-related SIP measures include:</p> <p>On-road Sources</p> <ul style="list-style-type: none"> • Improvements and Enhancements to California’s Smog Check Program • Expanded Passenger Vehicle Retirement • Modifications to Reformulated Gasoline Program • Cleaner In-Use Heavy-Duty Trucks • Ship Auxiliary Engine Cold Ironing and Other Clean Technology • Cleaner Ship Main Engines and Fuel • Port Truck Modernization 	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AIR-2: (continued)</p> <ul style="list-style-type: none"> • Accelerated Introduction of Cleaner Line-Haul Locomotives • Clean Up Existing Commercial Harbor Craft <p>Off-road Sources</p> <ul style="list-style-type: none"> • Cleaner Construction and Other Equipment • Cleaner In-Use Off-Road Equipment • Agricultural Equipment Fleet Modernization • New Emission Standards for Recreational Boats • Off road recreational vehicle expanded emissions standards 				
<p>AIR-3: SJCOG shall pursue the following activities in reducing the impact associated with health risk within 500 feet of freeways and high-traffic volume roadways:</p> <ul style="list-style-type: none"> • Participate in ongoing statewide deliberations on health risks near freeways and high-traffic volume roadways. This involvement includes inputting to the statewide process by providing available data and information such as the current and projected locations of sensitive receptors relative to transportation infrastructure; • Work with air agencies including ARB and SJVAPCD to support their work in monitoring the progress on reducing exposure to emissions of PM10 and PM2.5 for sensitive receptors, including schools and residents within 500 feet of high-traffic volume roadways; • Work with stakeholders to identify planning and development practices that are effective in reducing health impacts to sensitive receptors; and • Share information on all of the above efforts with stakeholders, member cities, counties and the public. 	Ongoing over the life of the plan	SJCOG		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AIR-4: Implementing and local agencies should comply with the CARB recommendations to achieve an acceptable interior air quality level for sensitive receptors, project sponsors can and should identify appropriate measures, to be incorporated into project building design for residential, school and other sensitive uses located within 500 feet (or other appropriate distance as may be identified by CARB) of freeways, heavily travelled arterials, railways and other sources of Diesel particulate Matter and other known carcinogens. The appropriate measures should include one or more of the following methods as may be appropriate:</p> <ul style="list-style-type: none"> a. The project sponsor should retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with the California Air Resources Board and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to stationary air quality pollutants prior to issuance of a demolition, grading, or building permit. The HRA should be submitted to the Lead Agency for review and approval. The sponsor should implement the approved HRA recommendations, if any. If the HRA concludes that the air quality risks from nearby sources are at or below acceptable levels, then additional measures are not required. b. The project sponsor should implement the following features that have been found to reduce the air quality risk to sensitive receptors and should be included in the project construction plans. These should be submitted to the appropriate agency for review and approval prior to the issuance of a demolition, grading, or building permit and ongoing. <ul style="list-style-type: none"> i. Do not locate sensitive receptors near distribution center’s entry and exit points. ii. Do not locate sensitive receptors in the same building as a perchloroethylene dry cleaning facility. iii. Maintain a 50-foot buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year). 	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AIR-4: (continued)</p> <ul style="list-style-type: none"> iv. Install, operate, and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the MERV 13. The HV system should include the following features: Installation of a high efficiency filter and/or carbon filter-to-filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85 percent supply filters should be used. v. Retain a qualified HV consultant or HERS rater during the design phase of the project to locate the HV system based on exposure modeling from the mobile and/or stationary pollutant sources. vi. Maintain positive pressure within the building. vii. Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air. viii. Achieve a performance standard of at least four air exchanges per hour of recirculation ix. Achieve a performance standard of 0.25 air exchanges per hour of in unfiltered infiltration if the building is not positively pressurized. c. Project sponsor should maintain, repair and/or replace HV system or prepare an Operation and Maintenance Manual for the HV system and the filter. The manual should include the operating instructions and maintenance and replacement schedule. This manual should be included in the CC&Rs for residential projects and distributed to the building maintenance staff. In addition, the sponsor should prepare a separate Homeowners Manual. The manual should contain the operating instructions and maintenance and replacement schedule for the HV system and the filters. It should also include a disclosure to the buyers of the air quality analysis findings. 				

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>AIR-4: (continued)</p> <p>d. To the maximum extent practicable the Lead Agency can and should ensure that private (individual and common) exterior open space, including playgrounds, patios, and decks, should either be shielded from stationary sources of air pollution by buildings or otherwise buffered to further reduce air pollution exposure for project occupants.</p>				
<p>AIR-5: Implementing and local agencies should, as applicable and feasible, investigate (using for example procedures and guidelines for PM hotspot analysis consistent with USEPA (2010) PM guidance) the relationship between (1) any increases in PM10 and PM2.5 within 500 feet of freeways in their jurisdiction, and (2) existing sensitive receptors in that area that do not have adequate air filtration to reduce such impacts to a less than significant level. To the extent that existing sensitive receptors are identified that do not have adequate air filtration, local jurisdictions may establish a program by which project sponsors can mitigate significant increases in PM10 and PM2.5 (e.g., by providing a retrofit program for older higher emitting vehicles, anti-idling requirements or policies, controlling fugitive dust, routing traffic away from populated zones, replacing older buses with cleaner buses, and paying in to a fund established to retrofit sensitive receptors with HEPA filters when sensitive receptors are located within 500 feet of freeways and high-traffic volume roadways that generate substantial diesel particulate emissions).</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>AIR-6: Implementing and local agencies should, as applicable and feasible, plant appropriate vegetation to reduce PM10/PM2.5 when constructing a sensitive receptor within 500 feet of freeways and high-traffic volume roadways generating substantial diesel particulate emissions.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>AIR-7: Implementing and local agencies for major transportation projects (especially those that generate substantial diesel particulate emissions) in the region, if health risks are shown to increase significantly at sensitive receptors within 500 feet of a transportation facility, should consider applicable mitigation. Examples include planting appropriate vegetation and retrofitting existing sensitive uses with air filtration to reduce potential health risk impacts to a less than significant level.</p>	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
Impact – Biological Resources				
<p>BIO-1: Implementing and local agencies should retain a qualified botanist to document the presence or absence of special-status plants before project implementation. Implement the following steps to document special- status plants:</p> <ul style="list-style-type: none"> • Review Existing Information. The botanist shall review the most current existing information to develop a list of special-status plants that have a potential to occur in the specific project area. Sources of information consulted shall include CDFW’s CNDDDB, previously prepared environmental documents, city and county general plans, HCPs and NCCPs, and the CNPS electronic inventory. • Coordinate with Agencies. The botanist shall coordinate with the appropriate agencies (CDFW, USFWS, Caltrans) to discuss botanical resource issues and determine the appropriate level of surveys necessary to document special-status plants. • Conduct Field Studies. The botanist shall evaluate existing habitat conditions for each project and determine what level of botanical surveys may be required. The type of botanical survey shall depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type. Depending on these factors and the proposed construction activity, one or a combination of the following levels of survey may be required: • Habitat Assessment. A habitat assessment will be conducted to determine whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and determine whether return surveys are necessary. If no suitable habitat is present, no additional surveys shall be required. • Species-Focused Surveys. Species-focused surveys (or target species surveys) shall be conducted if suitable habitat is present for special-status plants. The surveys shall focus on special-status plants that could grow in the region, and would be conducted during a period when the target species are evident and identifiable. 	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-1: (continued)</p> <ul style="list-style-type: none"> Floristic Protocol-Level Surveys. Floristic surveys that follow the CNPS Botanical Survey Guidelines shall be conducted in areas that are relatively undisturbed and/or have a moderate to high potential to support special-status plants. The CNPS Botanical Survey Guidelines require that all species be identified to the level necessary to determine whether they qualify as special-status plants, or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable. To account for different special-status plant identification periods, one or more series of field surveys may be required in spring and summer months. Special-status plant populations identified during the field surveys shall be mapped and documented as part of CEQA and NEPA process, as applicable. As part of the processes, the implementing agency should prepare alternative designs that seek to avoid and/or minimize impacts to the special-status plants. If the project cannot be designed without complete avoidance, the implementing agency shall coordinate with the appropriate regulatory agency (i.e., USFWS, NMFS, CDFG, USACE) to obtain regulatory permits and implement project-specific mitigation prior to any construction activities. In addition, the implementing agency can choose to compensate for the loss of area occupied by special-status plants through participation in the SJMSCP. 				

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-2: If special-status plants are identified in their project area, the implementing and local agencies that are the proponents of specific projects included in the proposed RTP/SCS shall implement the following measures to avoid and minimize impacts on special-status plants:</p> <ul style="list-style-type: none"> • Redesign or modify their project to avoid direct and indirect impacts on special status plants, if feasible. • Protect special-status plants near their project site by installing environmentally sensitive area fencing (orange construction barrier fencing) around special-status plant populations. The environmentally sensitive area fencing shall be installed at least 20 feet from the edge of the population. The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Coordinate with the appropriate resource agencies and local experts to determine whether transplantation is feasible. If the agencies concur that transplantation is a feasible mitigation measure, the botanist shall develop and implement a transplantation plan through coordination with the appropriate agencies. The special-status plant transplantation plan shall involve identifying a suitable transplant site; moving the plant material and seed bank to the transplant site; collecting seed material and propagating it in a nursery; and monitoring the transplant sites to document recruitment and survival rates. 	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-3: Implementing and local agencies should retain a qualified wildlife biologist to document the presence or absence of suitable habitat for special-status wildlife in the highway project study area. The following steps shall be implemented to document special-status wildlife and their habitats for each highway project:</p> <ul style="list-style-type: none"> • Review Existing Information. The wildlife biologist shall review existing information to develop a list of special-status wildlife species that could occur in the project area. The following information shall be reviewed as part of this process: the USFWS special-status species list for the project region, CDFW's CNDDDB, previously prepared environmental documents, city and county general plans, HCPs and NCCPs (if applicable), and USFWS issued biological opinions for previous projects. • Coordinate with State and Federal Agencies. The wildlife biologist shall coordinate with the appropriate agencies (CDFW, USFWS, and Caltrans) to discuss wildlife resource issues in the project region and determine the appropriate level of surveys necessary to document special-status wildlife and their habitats. • Conduct Field Studies. The wildlife biologist shall evaluate existing habitat conditions and determine what level of biological surveys may be required. The type of survey required shall depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type. Depending on the existing conditions in the project area and the proposed construction activity, one or a combination of the following levels of survey may be required: • Habitat Assessment. A habitat assessment determines whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and to determine whether return surveys are necessary. If no suitable habitat is present, no additional surveys shall be required. 	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-3: (continued)</p> <ul style="list-style-type: none"> Species-Focused Surveys. Species-focused surveys (or target species surveys) shall be conducted if suitable habitat is present for special-status wildlife and if it is necessary to determine the presence or absence of the species in the project area. The surveys shall focus on special-status wildlife species that have the potential to occur in the region. The surveys shall be conducted during a period when the target species are present and/or active. Protocol-Level Wildlife Surveys. The project proponent shall comply with protocols and guidelines issued by responsible agencies for certain special-status species. USFWS and CDFW have issued survey protocols and guidelines for several special-status wildlife species that could occur in the project region, including (but not limited to) the California red-legged frog, blunt-nosed leopard lizard, desert tortoise and San Joaquin kit fox. The protocols and guidelines may require that surveys be conducted during a particular time of year and/or time of day when the species is present and active. Many survey protocols require that only a USFWS permitted or CDFW-approved biologist perform the surveys. The project proponent shall coordinate with the appropriate state or federal agency biologist before the initiation of protocol-level surveys to ensure that the survey results would be valid. Because some species can be difficult to detect or observe, multiple field techniques may be used during a survey period and additional surveys may be required in subsequent seasons or years as outlined in the protocol or guidelines for each species. Implementing agencies that chose to participate in the SJMSCP shall conduct surveys in accordance with the guidelines set forth in the SJMSCP. <p>Special-status wildlife or suitable habitat identified during the field surveys shall be mapped and documented as part of the CEQA and NEPA documentation, as applicable.</p>				

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-4: Implementing and local agencies should implement the following measures to avoid and minimize impacts on special-status wildlife and their habitats:</p> <ul style="list-style-type: none"> • Redesign or modify the project to avoid direct and indirect impacts on special-status wildlife or their habitats, if feasible. • Protect special-status wildlife and their habitat near the project site by installing environmentally sensitive area fencing around habitat features, such as seasonal wetlands, burrows, and nest trees. The environmentally sensitive area fencing or staking shall be installed at a distance from the edge of the resource determined through coordination with state and federal agency biologists (USFWS and CDFW). Implementing agencies that choose to participate in the SJMSCP shall consult and coordinate with SJCOG. The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Restrict construction-related activities to the non-breeding season for special-status wildlife species that could occur in the project area. Timing restrictions may vary depending on the species and could occur during any time of the year. Coordinate with the appropriate resource agencies to determine whether a monitoring plan for special-status wildlife is necessary as part of all highway projects. If a monitoring plan is required, it shall be developed and implemented in coordination with appropriate agencies and shall include <ul style="list-style-type: none"> – a description of each of the protected wildlife species and any suitable habitat for special-status species that could occur at the project site; – the locations of known occurrences of special-status wildlife species within 1.0 mile of the project site; – the location and size of no-disturbance zones in and adjacent to environmentally sensitive areas for wildlife; 	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-4: (continued)</p> <ul style="list-style-type: none"> - directions on the handling and relocating of special-status wildlife species found on the project site that are in immediate danger of being destroyed; and notification and reporting requirements for special-status species that are identified on the project site. 				
<p>BIO-5: Implementing and local agencies should retain a qualified biologist to document the location, type, extent, and habitat functions and values for riparian communities that occur in the site-specific project area and could be affected by their project. This information shall be mapped and documented as part of CEQA and NEPA documentation, as applicable.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>BIO-6: If riparian communities are present in the project area, implementing and local agencies should avoid or minimize impacts on riparian communities by implementing the following measures:</p> <p>If riparian communities are present in the project area, avoid or minimize impacts on riparian communities by implementing the following measures:</p> <ul style="list-style-type: none"> • Redesign or modify the project to avoid direct and indirect impacts on riparian communities, if feasible. • Protect riparian communities near the project site by installing environmentally sensitive area fencing at least 20 feet from the edge of the riparian vegetation. Depending on site-specific conditions, this buffer may be narrower or wider than 20 feet. The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. 	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-6: (continued)</p> <ul style="list-style-type: none"> Minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire shrub. Shrub vegetation shall be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration of the species. Cutting shall be limited to a minimum area necessary within the construction zone. This type of removal shall be allowed only for shrub species (all trees shall be avoided) in areas that do not provide habitat for sensitive species (e.g., willow flycatcher). To protect migratory birds, no woody riparian vegetation shall be allowed beginning March 15 and ending September 15, as required under the Migratory Bird Treaty Act. 				
<p>BIO-7: If riparian vegetation is removed as part of their project, implementing and local agencies should compensate for the loss of riparian vegetation to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (including CDFW, USFWS, USACE, and National Marine Fisheries Service [NMFS]). Compensation shall be provided at a minimum 1:1 ratio (1 acre restored or created for every 1 acre removed) and may be a combination of on-site restoration/creation, off-site restoration, or mitigation credits. Develop a restoration and monitoring plan that describes how riparian habitat shall be enhanced or recreated and monitored over a minimum period of time, as determined by the appropriate state and federal agencies. Implement the restoration and monitoring plan. Alternatively, compensation and monitoring requirements can be met through participation in the SJMSCP</p>	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-8: Implementing and local agencies should identify wetlands using both USACE and USFWS/CDFW definitions of wetlands. USACE jurisdictional wetlands shall be delineated using the methods outlined in the USACE 1987 Wetlands Delineation Manual and the Arid West Manual. The jurisdictional boundary for other waters of the United States shall be identified based on:</p> <p>The shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3[e]).</p> <p>This information shall be mapped and documented as part of the CEQA and NEPA documentation, as applicable, and in wetland delineation reports.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>BIO-9: Implementing and local agencies should avoid and minimize impacts on wetlands and other waters of the United States (creeks, streams, and rivers) by implementing the following measures:</p> <ul style="list-style-type: none"> • Redesign or modify the project to avoid direct and indirect impacts on wetland habitats. • Protect wetland habitats that occur near the project site by installing environmentally sensitive area fencing at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands that are considered special-status shrimp habitat). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Avoid installation activities in saturated or ponded wetlands during the wet season (spring and winter) to the maximum extent possible. Where such activities are unavoidable, protective practices, such as use of padding or vehicles with balloon tires, shall be used. 	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>BIO-9: (continued)</p> <ul style="list-style-type: none"> • Where determined necessary by resource specialists, use geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, or geotextile fabric) in saturated conditions to minimize damage to the substrate and vegetation. • Stabilize exposed slopes and stream banks immediately on completion of installation activities. Other waters of the United States shall be restored in a manner that encourages vegetation to reestablish to its pre-project condition and reduces the effects of erosion on the drainage system. • In highly erodible stream systems, stabilize banks using a non-vegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products. • During construction, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high-water mark of drainages in a manner that minimizes disturbance of the drainage bed and bank. <p>These measures shall be incorporated into contract specifications and implemented by the construction contractor. In addition, the project proponent shall ensure that the contractor incorporates all state and federal permit conditions into construction specifications. If the implementing agency chooses to participate in the SJMSCP, all SJMSPC conditions shall also be incorporated into construction specifications.</p>				

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
BIO-10: If the implementing agency chooses to participate in the SJMSCP, all SJMSCP conditions shall also be incorporated into construction specifications. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (including CDFW, USFWS, and USACE). The compensation shall be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of on-site restoration/creation, off-site restoration, or mitigation credits. A restoration and monitoring plan shall be developed and implemented if on-site or off-site restoration or creation is chosen. The plan shall describe how wetlands shall be created and monitored over a minimum of five years (or as required by the regulatory agencies). Alternatively, compensation and monitoring requirements can be met through participation in the SJMSCP.	Ongoing over the life of the plan	Implementing and local agencies		
BIO-11: Prior to design approval of RTP/SCS projects that contain movement habitat, the implementing agency should incorporate economically viable design measures, as applicable and necessary, to allow wildlife or fish to move through the transportation corridor, both during construction activities and post construction. Such measures may include appropriately spaced breaks in a center barrier, or other measures that are designed to allow wildlife to move through the transportation corridor. If the project cannot be designed with these design measures due to traffic safety, etc., the implementing agency shall coordinate with the appropriate regulatory agency (i.e., USFWS, NMFS, CDFW) to obtain regulatory permits and implement alternative project-specific mitigation prior to any construction activities.	Ongoing over the life of the plan	Implementing and local agencies		
BIO-12: Implementing agencies should ensure that projects comply with general plans, policies, ordinances, and conservation plans (including any HCPs, NCCPs, and other local, regional, and state plans). Review of these documents and compliance with their requirements shall be demonstrated in project-level environmental documentation. Ensure that projects comply with all policies, ordinances, and plans that exist at the time of project-level review, regardless of whether they existed during the program-level analysis.	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
Impact – Cultural Resources				
<p>CR-1: Implementing and local agencies should require historical resource studies and to identify and implement project-specific mitigation.</p> <p>As part of planning, design, and engineering for projects, implementing and local agencies should ensure that historic resources are treated in accordance with applicable federal, state, and local laws and regulations. When a project has been identified as potentially affecting a historical resource, a historical resources inventory should be conducted by a qualified architectural historian that meets the Secretary of the Interior’s Professional Qualifications Standards. The study should comply with <i>State CEQA Guidelines</i> section 15064.5(b), and, if federal funding or permits are required, with section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 USC Sec. 470 et seq.). As applicable, the study should consist of the following elements:</p> <ul style="list-style-type: none"> • a records search at the Southern San Joaquin Valley Information Center (California State University, Bakersfield); • contact with local historical societies, museums, or other interested parties as appropriate to help determine locations of known significant historical resources; • necessary background, archival and historic research; • a survey of built environment/architectural resources that are 50 years old or older that may be directly or indirectly impacted by project activities; and • recordation and evaluation of built environment/architectural resources that are 50 years old or older that may be directly or indirectly impacted by project activities; • buildings should be evaluated under CRHR and/or NRHP Criteria as appropriate and recorded on California Department of Parks and Recreation 523 forms. <p>These elements should be compiled into a Historical Survey Report that should be submitted to the Southern San Joaquin Valley Information Center (California State University, Bakersfield) and should also be used for SHPO consultation if the project is subject to NHPA section 106</p>	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>CR-1: (continued)</p> <p>If architectural resources are deemed as potentially eligible for the California Register of Historic Resources or the National Register of Historic Places, implementing and local agencies should consider avoidance through project redesign as feasible and appropriate. If avoidance is not feasible, implementing or local agencies should ensure that historic resources are formally documented through the use of large-format photography, measured drawings, written architectural descriptions, and historical narratives. The documentation should be entered into the Library of Congress, and archived in the California Historical Resources Information System. In the event of building relocation, implementing and local agencies should ensure that any alterations to significant buildings or structures conform to the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.</p>				
<p>CR-2: Impacts to cultural resources should be minimized through cooperation, information sharing, and ongoing regional planning efforts. Resource agencies, such as the Office of Historic Preservation, shall be consulted during this process.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>CR-3: Implementing and local agencies should require consultation, surveys, and monitoring for archaeological resources</p> <p>During environmental review of projects, implementing and local agencies should:</p> <ul style="list-style-type: none"> • Consult with the Native American Heritage Commission to determine whether known sacred sites are in the project area, and identify the Native American(s) to contact to obtain information about the project area. • Contact the Native American organizations and/or individuals on the list provided by the Native American Heritage Commission and conduct follow-up phone calls as recommended in the Native American Heritage Commission response. • Conduct a records search at the Central California Information Center (California State University Stanislaus) to determine whether the project area has been previously surveyed and whether resources were identified. 	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>CR-3: (continued)</p> <p>In the event the records indicate that no previous survey has been conducted, the Central California Information Center (California State University Stanislaus) will make a recommendation on whether a survey is warranted based on the archaeological sensitivity of the project area. If recommended, a qualified archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards should be retained to conduct archaeological surveys. The significance of any resources that are determined to be in the project area should be assessed according to the applicable local, state, and federal significance criteria. Implementing and local agencies should devise treatment measures to ameliorate “substantial adverse changes” to significant archaeological resources, in consultation with qualified archaeologists and other concerned parties. Such treatment measures may include avoidance through project redesign, data recovery excavation, and public interpretation of the resource.</p> <p>Implementing and local agencies and the contractors performing the improvements should adhere to the following requirements:</p> <ul style="list-style-type: none"> • If significant or sensitive cultural resources have been determined to be present with the project limits, implementing and local agencies should retain a qualified archaeologist to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property. • If, during the course of construction cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered work should be halted immediately within 50 meters (165 feet) of the discovery, implementing and local agencies should be notified, and a qualified archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology should be retained to determine the significance of the discovery. 				

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>CR-3 (continued)</p> <ul style="list-style-type: none"> Implementing and local agencies should consider mitigation recommendations presented by a qualified archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology for any unanticipated discoveries and should carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures (CEQA Guidelines Section 15064.5(f)). The project proponent should be required to implement any mitigation necessary for the protection of cultural resources. 				
<p>CR-4: Implementing and local agencies should identify, survey, and evaluate paleontological resources to avoid potential impacts. During environmental review implementing and local agencies should retain a qualified paleontologist to identify, survey, and evaluate paleontological resources where potential impacts are considered high. All construction activities should avoid known paleontological resources, if feasible, especially if the resources in a particular lithologic unit formation have been determined to be unique or likely to contain unique or significant paleontological resources. If avoidance is not feasible, paleontological resources should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.</p>	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>CR-5: Implementing and local agencies should implement Stop-Work and Consultation Procedures Mandated by Public Resources Code 5097.98 and <i>State CEQA Guidelines</i> Section 15064.5(e).</p> <p>In the event of discovery or recognition of any human remains during construction or excavation activities implementing and local agencies should cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the following steps are taken:</p> <ul style="list-style-type: none"> • The San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required. • If the coroner determines the remains are of Native American origin, either of the following steps will be taken: <ol style="list-style-type: none"> 1. The coroner shall contact the Native American Heritage Commission within 24 hours. 2. The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American. 3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code 5097.98, or. <p>Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.</p> <p>(A) The Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.</p> <p>(B) The descendant identified fails to make a recommendation, or</p> <p>(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.</p>	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
Impact – Geology, Soils, and Mineral Resources				
GEO-1: Implementing and local agencies should require the development and implementation of detailed erosion control measures, consistent with the CBC and UBC regulations and guidelines and/or local NPDES, to address erosion control specific to the project site; revegetate sites to minimize soil loss and prevent significant soil erosion; avoid construction on unstable slopes and other areas subject to soil erosion where possible; require management techniques that minimize soil loss and erosion; manage grading to maximize the capture and retention of water runoff through ditches, trenches, siltation ponds, or similar measures; and minimize erosion through adopted protocols and standards in the industry. The implementing local agencies should also require land use and transportation projects to comply with locally adopted grading, erosion, and/or sediment control ordinances beginning when any preconstruction or construction-related grading or soil storage first occurs, until all final improvements are completed.	Ongoing over the life of the plan	Implementing and local agencies		
GEO-2: Implementing and local agencies should coordinate with the Department of Conservation, California Geological Survey to maintain a database of (1) available resources in the region including permitted and un-permitted and (2) the anticipated 50-year demand. Based on the results of this survey Local agencies should implement strategies to address anticipated demand, including identifying future sites that may seek permitting and working with industry experts to identify ways to encourage and increase recycling to reduce the demand for aggregate.	Ongoing over the life of the plan	Implementing and local agencies		
GEO-3: Local jurisdictions should review availability of aggregate and mineral resources in their jurisdiction and should develop a long-range plan to meet demand.	Ongoing over the life of the plan	Implementing and local agencies		
Impact – Greenhouse Gas Emissions				
GHG-1: SJCOG shall update future Regional Transportation Plans (including Sustainable Community Strategies) to incorporate policies and measures that build upon successful GHG reduction strategies from the 2014 RTP/SCS and lead to further reduced greenhouse gas (GHG) emissions. Such policies and measures may be derived from the General Plans, local jurisdictions’ Climate Action Plans (CAPs), and other adopted policies and plans of its member agencies that include GHG mitigation and adaptation measures or other sources.	Ongoing over the life of the plan	SJCOG		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>GHG-2: Local governments should adopt policies and develop practices that lead to GHG emission reductions. These activities will include, but are not limited to, providing technical assistance and information sharing on developing local Climate Action Plans</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>GHG-3: Implementing and local agencies should adopt and implement Climate Action Plans (CAPs, also known as Plans for the Reduction of Greenhouse Gas Emissions as described in <i>State CEQA Guidelines</i> Section 15183.5 Tiering and Streamlining the Analysis of Greenhouse Gas Emissions) that do the following:</p> <ul style="list-style-type: none"> a) Quantify GHG emissions, both existing and projected over a specified period, resulting from activities within each agency's jurisdiction; b) Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; c) Identify and analyze the GHG emissions resulting for specific actions or categories of actions anticipated within their respective jurisdictions; d) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; e) Establish a mechanism to monitor the plan's progress toward achieving that level and to require amendment if the plan is not achieving specified levels; and f) Be adopted in a public process following environmental review. 	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>GHG-3: (continued)</p> <p>CAPs should, when appropriate, incorporate planning and land use measures from the California Attorney General’s latest list of example policies to address climate change at both the plan and project level. Specifically, at the plan level, land use plans can and should, when appropriate, incorporate planning and land use measures from the California Attorney General’s latest list of example policies to address climate change (http://ag.ca.gov/globalwarming/pdf/GP_policies.pdf), including, but not limited to policies from that web page such as:</p> <ul style="list-style-type: none"> • Smart growth, jobs/housing balance, transit-oriented development, and infill development through land use designations, incentives and fees, zoning, and public private partnerships • Create transit, bicycle, and pedestrian connections through planning, funding, development requirements, incentives and regional cooperation, and create disincentives for auto use • Energy and water-efficient buildings and landscaping through ordinances, development fees, incentives, project timing, prioritization, and other implementing tools. <p>In addition, implementing and local agencies should incorporate, as appropriate, policies to encourage implementation of the Attorney General’s list of project-specific mitigation measures available at the following web site: http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf, including, but not limited to measures from the web page, such as:</p> <ul style="list-style-type: none"> • Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation • Build or fund a major transit stop within or near development • Provide public transit incentives such as free or low-cost monthly transit passes to employees, or free ride areas to residents and customers • Incorporate bicycle lanes, routes and facilities into street systems, new subdivisions, and large developments • Require amenities for non-motorized transportation, such as secure and convenient bicycle parking. 				

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>GHG-3: (continued)</p> <p>They should also incorporate, when appropriate, planning and land use measures from additional resources listed by the California Attorney General at the following webpage: http://ag.ca.gov/globalwarming/ceqa/resources.php.</p> <p>In addition, CAPs should also incorporate analysis of climate change adaptation, in recognition of the likely and potential effects of climate change in the future regardless of the level of mitigation and in conjunction with Executive Order S-13-08, which seeks to enhance the state's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of state's first climate adaptation strategy.</p>				
Impact – Hazards and Hazardous Materials				
<p>HAZ-1: Implementing and local agencies should determine whether specific project sites are listed on government lists of hazardous materials and/or waste sites compiled pursuant to Government Code Section 65962.5. Implementing and local agencies should require preparation of a Phase I Environmental Site assessment (ESA) for any listed sites or sites with the potential for residual hazardous materials and/or waste as a result of location and/or prior uses. Implementing and local agencies should require that recommendations of the Phase I ESA be fully implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the implementing agency should require a Phase II ESA, and recommendations of the Phase II ESA should be fully implemented</p>	Ongoing over the life of the plan	Implementing and local agencies		
Impact – Land Use and Population				
<p>LU-1: SJCOG will work with its member cities and counties to encourage that transportation projects and growth are consistent with the RTP/SCS and general plans.</p>	Ongoing over the life of the plan	SJCOG		
<p>LU-2: Local jurisdictions should reflect RTP policies and strategies in their general plan updates. San Joaquin COG will work to build consensus on how to address inconsistencies between general plans and RTP policies.</p>	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>LU-3: SJCOG will provide technical assistance and regional leadership to implement the RTP/SCS goals and strategies, integrate growth and land use planning with the existing and planned transportation network, determine and upon request help local jurisdictions/project sponsors in determining consistency with the SCS included within the 2014 RTP.</p>	<p>Ongoing over the life of the plan</p>	<p>SJCOG</p>		
<p>LU-4: SJCOG will use a continuing SCS or a Greenprint process (to prioritize maintenance of open space areas) and other ongoing regional planning efforts to build a consensus in the region to support changes in land use to accommodate future population growth while maintaining the quality of life in the region.</p>	<p>Ongoing over the life of the plan</p>	<p>SJCOG</p>		
<p>LU-5: SJCOG will continue to encourage patterns of development that are consistent with RTP/SCS policies.</p>	<p>Ongoing over the life of the plan</p>	<p>SJCOG</p>		
<p>LU-6: SJCOG, will work with its member agencies to implement growth strategies to create an urban form designed to focus development in urban areas in accordance with the policies, strategies and investments contained in the 2014 RTP/SCS, enhancing mobility and reducing land consumption, providing urban infrastructure to support growth and ensuring a jobs-housing balance that supports decreases in greenhouse gas emissions.</p>	<p>Ongoing over the life of the plan</p>	<p>SJCOG</p>		
<p>LU-7: Implementing and local agencies should evaluate alternate route alignments and transportation facilities that minimize the displacement of homes and businesses. An iterative design and impact analysis would help where impacts to homes or businesses are involved. Potential impacts should be minimized to the extent feasible. If possible, existing rights-of-way should be used.</p>	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		
<p>LU-8: Implementing and local agencies to mitigate impacts to affordable housing as feasible through construction of affordable units (deed restricted to remain affordable for an appropriate period of time) or payment of any fee established to address loss of affordable housing.</p>	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
Impact - Noise				
<p>NOISE-1: Implementing and local agencies should assess and mitigate to the extent feasible short- and long-term noise impacts in accordance with applicable regulations and to implement site-specific noise reduction measures, including the following as applicable:</p> <ul style="list-style-type: none"> • Equipment and trucks used for project construction can and should utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible). • Except as may be exempted by the Lead Agency (or other appropriate government agency), impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction can and should be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler can lower noise levels from the exhaust by up to about 10 dB(A). External jackets on the tools themselves should be used, if such jackets are commercially available and this could achieve a reduction of 5 dB(A). Quieter procedures should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. • Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction. • A procedure and phone numbers for notifying the Lead Agency staff and local Police Department; (during regular construction hours and off-hours). • A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign should also include a listing of both the Lead Agency and construction contractor's telephone numbers (during regular construction hours and off-hours). 	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>NOISE-1: (continued)</p> <ul style="list-style-type: none"> • The designation of an on-site construction complaint and enforcement manager for the project. • Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity. • A preconstruction meeting can and should be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed. • Use of portable barriers in the vicinity of sensitive receptors during construction. • Projects that require pile driving or other construction noise above 90 dB(A) in proximity to sensitive receptors, should reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dB(A), a set of site-specific noise attenuation measures should be completed under the supervision of a qualified acoustical consultant. • Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts. • Monitor the effectiveness of noise attenuation measures by taking noise measurements. • Strategically place material stockpiles between the operation and the affected dwelling to minimize noise generated from any rock-crushing or screening operations performed within 3,000 feet of any occupied residence. • Retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage any adjacent historic or other structure subject to damage, and design means and construction methods to not exceed the thresholds. 				

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>NOISE-1: (continued)</p> <ul style="list-style-type: none"> Maximize the distance between noise-sensitive land uses and new roadway lanes, roadways, rail lines, transit centers, park-and-ride lots, and other new noise-generating facilities. Construct sound reducing barriers between noise sources and noise-sensitive land uses. Implement, to the extent feasible and practicable, speed limits and limits on hours of operation of rail and transit systems, where such limits may reduce noise impacts. Maximize the distance of new route alignments from sensitive receptors. Locate transit-related passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible 				
Impact – Public Services and Utilities				
<p>FIRE-1: Implementing and local agencies should ensure adequate fire protection services will be available to satisfy community needs. The implementing local agency should ensure that the fire department will be available to continue to provide acceptable levels of service with implementation of each project.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>FIRE-2: Implementing and local agencies should avoid siting new development in wildfire zones.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>FIRE-3: Implementing and local agencies should ensure that in the event that new development occurs in wildfire zones, the projects comply with safety measures as specified by CAL FIRE.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>POLICE-1: Implementing and local agencies to ensure adequate police services will be available to satisfy community service levels as needed. Implementing and Local agencies should ensure that the local police/sheriff’s department will be able to continue to provide acceptable levels of service with implementation of each project.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>EDU-1: Implementing and local agencies should undertake project-specific review of the impacts to educational facilities as part of project specific environmental review. For any identified impacts, project sponsors can and should ensure that the appropriate school district fees are paid in accordance with state law.</p>	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
REC-1: Local jurisdictions should explore multiple use spaces and redevelopment in areas where it will provide more opportunities for recreational uses and access to natural areas close to the urban core.	Ongoing over the life of the plan	Implementing and local agencies		
REC-2: Local jurisdictions should work as partners to address regional outdoor recreation needs and to acquire the necessary funding for the implementation of their plans and programs. This should be done, in part, by consulting with agencies and organizations that have active open space work plans.	Ongoing over the life of the plan	Implementing and local agencies		
REC-3: Implementing agencies for all park and recreation projects should ensure that all feasible mitigation measures are identified and implemented in order to minimize construction and operation-related impacts to the surrounding environment.	Ongoing over the life of the plan	Implementing and local agencies		
ENERGY-1: Implementing and local agencies should implement energy saving policies and projects that incorporate renewable and alternative energy to the maximum extent feasible.	Ongoing over the life of the plan	Implementing and local agencies		
ENERGY-2: Implementing and local agencies should streamline permitting and provide public information to facilitate accelerated construction of geothermal, solar and wind power generation facilities and transmission line improvements.	Ongoing over the life of the plan	Implementing and local agencies		
ENERGY-3: Utilities should increase capacity of existing transmission lines to meet forecast demand that supports sustainable growth, where feasible and appropriate in coordination with local planning agencies.	Ongoing over the life of the plan	Utilities		
ENERGY-4: SJCOG should continue to consider energy uncertainty impacts prior to the development of the next RTP/SCS. Topics that should be considered include: <ul style="list-style-type: none"> • How the price and availability of transportation fuels affects revenues and demand; • How increases in fuel efficiency could affect revenues and emissions; • How the cost of commuting and personal travel affects mode choice and growth patterns; • How the cost of goods movement affects international trade and employment; or • How the escalation of fuel prices affects the cost of infrastructure construction, maintenance and operation. 	Ongoing over the life of the plan	SJCOG		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
ENERGY-5: Implementing and local agencies should coordinate with local utility providers while implementing local projects.	Ongoing over the life of the plan	Implementing and local agencies		
WW-1: Implementing and local agencies should coordinate with local wastewater treatment providers while implementing local projects.	Ongoing over the life of the plan	Implementing and local agencies		
Impact - Transportation				
TR-1: SJCOG should pursue funding for new unidentified projects and programs, beyond the current financially and institutionally feasible measure included in the 2014 RTP, which may improve LOS results on roadway segments projected to be LOS E or F.	Ongoing over the life of the plan	SJCOG		
TR-2: In addition to the current Tier 1 RTP projects, SJCOG should continue to explore potential measures to reduce vehicular travel. Such measures as land-use strategies, car-sharing programs, additional car- and vanpool programs, additional bicycle programs.	Ongoing over the life of the plan	SJCOG		
TR-3: Implementing and local agencies should evaluate VMT as part of project specific review and identify and implement measures that reduce VMT including mixed use, alternative transportation facilities (bike racks, transit stops, and pedestrian amenities).	Ongoing over the life of the plan	Implementing and local agencies		
TR-4: SJCOG should inform jurisdictions with projected LOS E and F roadway segments under the Plan of the potential need to develop a Deficiency Plan under the San Joaquin Congestion Management Program at some point before 2040. SJCOG should work with these agencies to identify and encourage changes that would increase use of alternative transportation and other means to reduce congestion.	Ongoing over the life of the plan	SJCOG		
TR-5: Implementing and local agencies should make safety a prime objective in the design of RTP projects, and should plan to avoid, remedy, or mitigate such impacts in the course of project-level environmental review. The implementing agency or local jurisdiction will be responsible for developing and ensuring adherence to necessary mitigation measures.	Ongoing over the life of the plan	Implementing and local agencies		
TR-6: Implementing and local agencies should consider emergency access impacts and plan to avoid, remedy, or mitigate such impacts in the course of project-level environmental review. The implementing agency will require and ensure adherence to the necessary mitigation measures.	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
Impact – Water Resources				
WAT-1: Implementing and local agencies should undergo individual project review and comply with NPDES requirements.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-2: Implementing and local agencies should ensure that projects requiring continual dewatering facilities implement monitoring systems and long-term administrative procedures to ensure proper water management that prevents degrading of surface water and minimizes, to the greatest extent possible, adverse impacts on groundwater for the life of the project. Construction designs can and should comply with appropriate building codes and standard practices including the Uniform Building Code.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-3: Implementing and local agencies should maximize, where practical and feasible, permeable surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. New impervious surfaces can and should be minimized to the greatest extent possible, including the use of in-lieu fees and off-site mitigation.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-4: Implementing and local agencies should avoid development in groundwater recharge areas. Where feasible, transportation facilities should not be sited in groundwater recharge areas, to prevent conversion of those areas to impervious surface.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-5: Implementing and local agencies to reduce hardscape to the extent feasible to facilitate groundwater recharge as appropriate.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-6: Implementing and local agencies should conduct or require project-specific hydrology studies for projects proposed to be constructed within floodplains to demonstrate compliance with applicable federal, state, and local agency flood-control regulations. These studies should identify project design features or mitigation measures that reduce impacts to either floodplains or flood flows to a less than significant level. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to development in the floodplain.	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
WAT-7: Implementing and local agencies should comply with local, state, and federal floodplain regulations. Projects requiring federal approval or funding should comply with Executive Order 11988 on Floodplain Management, which requires avoidance of incompatible floodplain development, restoration, and preservation of the natural and beneficial floodplain values, and maintenance of consistency with the standards and criteria of the National Flood Insurance Program.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-8: Implementing and local agencies should to the extent feasible and appropriate, prevent development in flood hazard areas that do not have appropriate protections.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-9: SJCOG, in coordination with regional water agencies and other stakeholders, should encourage the kind of regional coordination throughout California that develops and supports sustainable policies in accommodating growth.	Ongoing over the life of the plan	SJCOG		
WAT-10: Regional water agencies should consider, to the greatest extent feasible, potential climate change hydrology and attendant impacts on available water supplies and reliability in the process of creating or modifying systems to manage water resources for both year round use and ecosystem health. As the methodology and base data for such decisions is still developing, agencies can and should use the best currently available science in decision making.	Ongoing over the life of the plan	Regional Water Agencies		
WAT-11: Implementing and local agencies should reduce exterior uses of water in public areas, and promote reductions in private homes and businesses by shifting to drought-tolerant native landscape plantings, using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives. Local jurisdictions should work with local water retailers to promote the availability of drought resistant landscaping options and provide information on where these can be purchased. Use of reclaimed water especially in median landscaping and hillside landscaping can and should be implemented where feasible.	Ongoing over the life of the plan	Implementing and local agencies		
WAT-12: Future impacts to water supply should be minimized through cooperation, information sharing, and program development as part of the SJCOG's ongoing regional planning efforts, in-coordination with regional water agencies, and other stakeholders.	Ongoing over the life of the plan	SJCOG		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>WAT-13: Implementing and local agencies should coordinate with the local water provider to ensure that existing and/or planned water supply and water conveyance facilities are capable of meeting water demand/pressure requirements. In accordance with state law, a water supply assessment can and should be required for projects that meet the size requirements specified in the regulations. In coordination with the local water provider, each project sponsor will identify specific on- and off-site improvements needed to ensure that impacts related to water supply and conveyance demand/pressure requirements are addressed prior to issuance of a certificate of occupancy. Water supply and conveyance demand/pressure clearance from the local water provider will be required at the time that a water connection permit application is submitted.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>WAT 14: Implementing and local agencies to implement water conservation measures in new development that should include but not be limited to the following:</p> <ul style="list-style-type: none"> • High efficiency toilets • Restroom faucets with automatic shut-off • High efficiency clothes washers • High efficiency dishwashers • Use of reclaimed water for appropriate uses • Water saving irrigation measures including: weather-based irrigation controller with rain shut-off. 	Ongoing over the life of the plan	Implementing and local agencies		
<p>WAT-15: Implementing and local agencies should consult with the local water provider to identify feasible and reasonable measures to reduce water consumption, including, but not limited to, systems to use reclaimed water for landscaping, drip irrigation, re-circulating hot water systems, water conserving landscape techniques (such as mulching, installation of drip irrigation systems, landscape design to group plants of similar water demand, soil moisture sensors, automatic irrigation systems, clustered landscaped areas to maximize the efficiency of the irrigation system), water conserving kitchen and bathroom fixtures and appliances, thermostatically controlled mixing valves for baths and showers, and insulated hot water lines.</p>	Ongoing over the life of the plan	Implementing and local agencies		

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>WAT-16: Implementing and local agencies should comply with local drought measures as appropriate including prohibiting hose watering of driveways and associated walkways; requiring decorative fountains to use recycled water, and repairing water leaks in a timely manner.</p>	Ongoing over the life of the plan	Implementing and local agencies		
<p>WAT-17: Implementing and local agencies should adopt and implement a comprehensive strategy to increase water conservation and the use of recycled water that includes similar measure to the following::</p> <ul style="list-style-type: none"> • Water Consumption Reduction Target: Regional water agencies should work together to set a target for to reduce per capita water consumption by 2020. • Water Conservation Plan: Regional water agencies should establish a water conservation plan that may include such policies and actions as: <ul style="list-style-type: none"> – Tiered rate structures for water use; – Restrictions on time of use for landscape watering, and other demand management strategies; – Performance standards for irrigation equipment and water fixtures; – Requirements that increased demand from new construction be offset with reductions so that there is no net increase in water use. • Recycled Water Use: Local jurisdictions and regional water agencies should establish programs and policies to increase the use of recycled water, including: <ul style="list-style-type: none"> – Create an inventory of non-potable water uses within the jurisdiction that could be served with recycled water; – Produce and promote the use of recycled water for agricultural, industrial, and irrigation purposes, including grey water systems for residential irrigation; – Produce and promote the use of treated, recycled water for potable uses where GHG emissions from producing such water are lower than from other potable sources. 	Ongoing over the life of the plan	Implementing and local agencies		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>WAT-17: (continued)</p> <ul style="list-style-type: none"> • Water Conservation Outreach: Local jurisdictions and regional water agencies should implement a public education and outreach campaign to promote water conservation, and highlights specific water-wasting activities to discourage, such as the watering of non-vegetated surfaces and using water to clean sidewalks and driveways <ul style="list-style-type: none"> – Tiered rate structures for water use; – Restrictions on time of use for landscape watering, and other demand management strategies; – Performance standards for irrigation equipment and water fixtures; – Requirements that increased demand from new construction be offset with reductions so that there is no net increase in water use – Recycled Water Use: Local jurisdictions and regional water agencies should establish programs and policies to increase the use of recycled water, including: <ul style="list-style-type: none"> – Create an inventory of non-potable water uses within the jurisdiction that could be served with recycled water; – Produce and promote the use of recycled water for agricultural, industrial, and irrigation purposes, including grey water systems for residential irrigation; – Produce and promote the use of treated, recycled water for potable uses where GHG emissions from producing such water are lower than from other potable sources. • Water Conservation Outreach: Local jurisdictions and regional water agencies should implement a public education and outreach campaign to promote water conservation, and highlights specific water-wasting activities to discourage, such as the watering of non-vegetated surfaces and using water to clean sidewalks and driveways. 	<p>Ongoing over the life of the plan</p>			

4.0 Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity	Mitigation Measure Complete?	Effectiveness
<p>WAT-18: Implementing and local agencies should establish building design guidelines and criteria to promote water-efficient building design, including minimizing the amount of non-roof impervious surfaces around the building(s) and menus and check-lists for developers and contractors to ensure water-efficient infrastructure and technology are used in new construction, including low-flow toilets and shower heads, moisture-sensing irrigation, and other such advances.</p>	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		
<p>WAT-19: Implementing and local agencies should establish criteria and standards to permit the safe and effective use of gray water (on-site water recycling), and review and appropriately revise, without compromising health and safety, other building code requirements that might prevent the use of such systems.</p>	<p>Ongoing over the life of the plan</p>	<p>Implementing and local agencies</p>		