March 2016 | Final Environmental Impact Report
State Clearinghouse No. 2014101003

YUCAIPA GENERAL PLAN UPDATE

City of Yucaipa

Prepared for:

City of Yucaipa
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PLACEWORKS

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1. Introduction

1.1 INTRODUCTION

This Final Environmental Impact Report (FEIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Administrative Code Section 15000 et seq.).

According to CEQA Guidelines, Section 15132, the FEIR shall consist of:

(a) The Draft Environmental Impact Report (DEIR) or a revision of the Draft;

(b) Comments and recommendations received on the DEIR either verbatim or in summary;

(c) A list of persons, organizations, and public agencies comments on the DEIR;

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and

(e) Any other information added by the Lead Agency.

This document contains responses to comments received on the DEIR for the Yucaipa General Plan Update during the public review period, which began December 15, 2015, and closed January 29, 2016. This document has been prepared in accordance with CEQA and the CEQA Guidelines and represents the independent judgment of the City of Yucaipa (Lead Agency). This document and the circulated DEIR comprise the FEIR, in accordance with CEQA Guidelines, Section 15132.

1.2 FORMAT OF THE FEIR

This document is organized as follows:

Section 1, ***Introduction.*** This section describes CEQA requirements and content of this FEIR.

Section 2, ***Response to Comments.*** This section provides a list of agencies and interested persons commenting on the DEIR; copies of comment letters received during the public review period, and individual responses to written comments. To facilitate review of the responses, each comment letter has been reproduced and assigned a number—A-1 through A-4. Individual comments have been numbered for each letter and the letter is followed by responses with references to the corresponding comment number.

Section 3. ***Revisions to the Draft EIR.*** This section contains revisions to the DEIR text and figures as a result of the comments received by agencies and interested persons as described in Section 2, and/or minor editorial changes made subsequent to release of the DEIR for public review.

The responses to comments contain material and revisions that will be added to the text of the FEIR. City staff has reviewed this material and determined that none of this material constitutes the type of significant new information that requires recirculation of the DEIR for further public comment under CEQA Guidelines Section 15088.5. None of this new material indicates that the project will result in a significant new environmental impact not previously disclosed in the DEIR. Additionally, none of this material indicates that there would be a substantial increase in the severity of a previously identified environmental impact that will not be mitigated, or that there would be any of the other circumstances requiring recirculation described in Section 15088.5.

1.3 CEQA REQUIREMENTS REGARDING COMMENTS AND RESPONSES

CEQA Guidelines Section 15204 (a) outlines parameters for submitting comments, and reminds persons and public agencies that the focus of review and comment of DEIRs should be "on the sufficiency of the document in identifying and analyzing possible impacts on the environment and ways in which significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible. …CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR."

CEQA Guidelines Section 15204 (c) further advises, "Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence." Section 15204 (d) also states, "Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility." Section 15204 (e) states, "This section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section."

In accordance with CEQA, Public Resources Code Section 21092.5, copies of the written responses to public agencies will be forwarded to those agencies at least 10 days prior to certifying the environmental impact report. The responses will be forwarded with copies of this FEIR, as permitted by CEQA, and will conform to the legal standards established for response to comments on DEIRs.

2. Response to Comments

Section 15088 of the CEQA Guidelines requires the City of Yucaipa, as Lead Agency, to evaluate comments on environmental issues received from public agencies and interested parties who reviewed the DEIR and prepare written responses.

This section provides all written responses received on the DEIR and the City's responses to each comment.

Comment letters and specific comments are given letters and numbers for reference purposes. Where sections of the DEIR are excerpted in this document, the sections are shown indented. Changes to the DEIR text are shown in underlined text for additions and ~~strikeout~~ for deletions.

The following is a list of agencies that submitted comments on the DEIR during the public review period.

2. Response to Comments

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LETTER A1 – California Department of Fish and Wildlife (7 pages)

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
(909) 484-0459
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

January 26, 2016

Joseph M. Lambert
Director of Development Services
City of Yucaipa
34272 Yucaipa Boulevard
Yucaipa, CA 92399

Subject: Draft Environmental Impact Report
Yucaipa General Plan Update
State Clearinghouse No. 2014101003

Dear Mr. Lambert:

The Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Yucaipa General Plan Update (project) [State Clearinghouse No. 2014101003]. The Department is responding to the DEIR as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 *et seq.*) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

The proposed project is an update to the City of Yucaipa General Plan, affecting the City of Yucaipa (City) and its Sphere of Influence (SOI). The City is located in the eastern portion of the San Bernardino Valley; north of the City of Calimesa, east of the City of Redlands, south of Mill Creek, and south and west of the San Bernardino Mountains; within the County of San Bernardino, California. Intro

The project proposes to reorganize the City's current General Plan into seven elements, consisting of the Community Design and Land Use Element; the Housing and Neighborhood Element; the Parks, Recreation, Trails, and Open Space Element; the Economic Development Element; the Transportation Element; the Public Safety Element; and the Public Services and Facilities Element. The project's implementation is expected to result in a potential buildout total of 30,077 units, 77,328 residents, 9,581,104 nonresidential square feet, and 18,488 jobs within the City and SOI.

Conserving California's Wildlife Since 1870

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Compared to existing conditions, this would represent an increase of 10,847 units, 29,493 residents, 6,830,178 nonresidential square feet, and 11,600 jobs.

Comments and Recommendations

Following review of the DEIR, the Department offers the comments and recommendations presented below to assist the City in adequately identifying and/or mitigating the project's significant, or potentially significant, impacts on biological resources:

Intro cont'd

Assessment of Biological Resources

Mitigation Measure 4-1requires applicants for future development projects to prepare and submit a biological resources report, which will include an analysis of available literature and biological databases to determine the potential for sensitive resources to occur on the project site; a review of current land use and ownership within the project site and its vicinity; an assessment of vegetation communities within the project vicinity; an evaluation of local and regional wildlife movement corridors; an assessment of wetlands and riparian habitats; and the results of focused surveys for any special status species that have the potential to occur within the proposed project site.

The Department offers the following guidelines for assessing the biological resources potentially present on future project sites:

1. *Vegetation Mapping*: Vegetation communities should be assessed and mapped following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

A1-1

2. *Focused Surveys*: Focused species-specific surveys should be conducted by a qualified biologist, during the season(s) and time(s) at which the species in question is most likely to be present and identifiable (e.g., during blooming and/or fruiting for plants, at dawn and dusk for crepuscular species, during times of year when migratory species are expected to be present in the region, etc.). Focused surveys should follow the protocols recommended by the Department and/or the United States Fish and Wildlife Service (collectively, "the Wildlife Agencies"). The Department's recommended survey protocols and guidelines may be found at https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html. In cases where the Wildlife Agencies do not have a specific recommended survey methodology, survey protocols based on the best available scientific knowledge should be established in coordination with the Wildlife Agencies.

3. *Survey Updates*: Please note that focused surveys for animal species and annual or short-lived perennial plant species are generally considered valid for a

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period of one year, whereas surveys for longer-lived perennial plant species may be valid for two to five years, depending on the species and site conditions. If a project's construction is scheduled to begin more than one year after focused surveys have been conducted, the applicant should plan to conduct updated surveys prior to the project's start. Some projects may warrant periodic updated surveys for certain sensitive taxa, particularly if the project is proposed to occur over a protracted time frame, or in phases, or if environmental conditions change during the project period.

A1-1 cont'd

Impact Avoidance and Minimization

The Department recommends incorporating the following avoidance and minimization measures into the final EIR:

1. *Nesting Bird Avoidance*: Mitigation Measure 4-7 requires project applicants to conduct preconstruction nesting bird surveys within 7 days prior to initiation of construction between February 1 and August 31. Because some birds may take fewer than 7 days to build a nest, the Department recommends that preconstruction nesting bird surveys be completed within 3 days prior to initiation of project activities, as instances of nesting may otherwise be missed. Additionally, not all bird species nest only between February and August; some species (e.g., owls) commence nesting in January, and some passerine species may continue to nest later than August 31. Nesting dates can also vary from year to year due to variations in weather patterns, and the Department expects that nesting patterns may change over time due to the ongoing effects of climate change. Therefore, the Department recommends that nesting bird surveys be conducted regardless of the time of year.

A1-2

2. *Bat Avoidance*: If a project is determined to have the potential to affect bat roosting habitat (e.g. bridges, culverts, palm trees, hollow trees, buildings, crevices, caves, mines, etc.), then potential roosts should be surveyed by a qualified bat biologist prior to initiating project activities. If bats are found, then the following avoidance measures should be implemented:

    - If bats are present or potentially present, then work on top of, under, around, or near the roosting structure(s) should be scheduled outside of the bat maternity season (generally between March 1 and September 1, with variations depending on species).

    - Gasoline and diesel engines should not be stored or operated under any bridge.

    - Night work, or use of night lighting, should be avoided within the vicinity of the roosting structure(s).

A1-3

2. Response to Comments

- Exclusionary devices should not be used if bats may be raising young (e.g., during the bat maternity season). If exclusionary devices are used, they should not contain mesh components, as wildlife may become entangled and/or injured. Exclusionary devices should only be used following consultation with and approval by the Department, and under the direct guidance of a Department-approved bat biologist.

A1-3 cont'd

3. *Wildlife Hazards*: Certain structures, equipment, and substances used during construction may cause wildlife to become trapped, entangled, injured, or poisoned unless proper preventative measures are taken. The Department recommends the following measures to reduce the potential for harm:

   - Structures in which wildlife may become trapped (e.g. open pipes, pits, trenches, etc.) should be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp should be provided to allow any wildlife that falls in to safely escape.

   - Debris piles, construction materials, equipment, and other items that may be used as refugia should be inspected for wildlife at the start of each work day and prior to disturbance. If wildlife is discovered, it should either be moved out of harm's way by a qualified biologist, or allowed to move off of the project site on its own.

   - Nets and mesh should be made of loose weave material that is not fused at the intersections of the weave, as nets with welded weaves present an entanglement risk.

   - Toxic materials and garbage should be removed from the work site and safely stored or disposed of at the end of each work day.

A1-4

4. *Protection of Open Space*: Projects proposed to be constructed adjacent to open space areas may have indirect adverse impacts on wildlife within the open space. To reduce indirect impacts to open space, the Department recommends that the following measures be included in the final EIR:

   - If a proposed project has the potential to affect sensitive biological resources (e.g., nesting birds) by increasing ambient noise levels, a qualified biologist should be contracted to implement appropriate avoidance measures, such as sound walls, buffers, and changes in project phasing or timing.

   - Landscaping in projects near open space areas should avoid the use of exotic plants, particularly invasive species, to the greatest extent possible to prevent infestation of the adjacent lands. A list of invasive plant species of concern may be found at http://www.cal-ipc.org/paf/.

A1-5

- Open space-adjacent projects with the potential to introduce or increase the presence of domestic animals, such as cats and dogs, or animals associated with urban development, such as rats, should include an assessment of the potential impacts associated with an increase in domestic and/or urban animals in the area. Appropriate avoidance and minimization measures should be implemented, including, but not limited to, the use of exclusion fencing, requirements to keep pets leashed, feral animal control programs, spay/neuter programs, homeowner education programs, and programs designed to minimize accessibility of pest attractants such as food waste.

A1-5 cont'd

Future Planning

By necessity, future development within the City and its SOI will result in loss of habitat, most likely including rare, sensitive, and declining habitat types. It is not possible to predict the exact locations and magnitudes of future impacts at this early stage in the planning process. However, a proactive approach to identifying likely areas of impact, setting priorities for avoidance and preservation, and developing comprehensive mitigation strategies may result in lower overall impacts, lower mitigation costs, and a better-functioning network of conserved open space as compared to taking a piecemeal approach. In the Department's experience, applying mitigation requirements on a project-by-project basis without considering the overall regional effects on habitat connections and functions can result in isolated "postage stamp" conservation areas, which is costly, time consuming, and ultimately of limited use to wildlife.

A1-6

The Department appreciates the City's consideration of ecological functions on a regional level in the form of identifying existing wildlife movement corridors and implementing measures to conserve and protect their function. We offer the following comments and recommendations to assist the City in its proactive approach to lower-impact planning:

Consideration of Cumulative Impacts: Environmental damage often occurs in a subtle and incremental fashion, from a large number of sources. Many individual projects result in impacts that, when considered in a vacuum, are not significant. However, the impacts of several similar projects, while individually small, may be cumulatively significant. As a cumulative impact becomes more severe, small and incremental contributions become more significant. It can be difficult to address cumulative impacts on a project-to-project basis, and some cumulative impacts can only be feasibly mitigated through the adoption of ordinances, regulations, and large scale mitigation plans (e.g., integrated waste management plans, air quality plans, habitat conservation plans, etc.). For projects that will contribute to a cumulative adverse impact, even if the individual contribution is small, the Department requests that the City fully analyze the cumulative effect and make a good faith effort in identifying and implementing feasible, enforceable, and adequate measures to lessen the severity of the impact.

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Floodplain Protection: The Department is concerned with the channelization of streams and rivers in Southern California and the associated loss of floodplain habitat, including, but not limited to, alluvial fan sage scrub, riparian forests, ephemeral pools, and freshwater wetlands. Numerous sensitive, threatened, and endangered species are associated with floodplain habitat and are threatened by its loss. It is the Department's opinion that the increasing rarity of these habitat types, and the suite of species that depend on them, makes them a high priority for avoidance and preservation. A1-7

Development within a natural floodplain usually requires the development of flood control structures, such as levees, basins, and dams. Flood control infrastructure can restrict a river's natural function, causing channelization, erosion, scour, and the need for ongoing maintenance. This causes repeated disturbance to the habitat within the watercourse, and often results in lower habitat value.

In order to protect habitats associated with floodplains, we strongly encourage the City to minimize development within floodplains and allow watercourses to maintain their natural characteristics to the greatest extent possible.

Mitigation Land Management: When the Department issues permits for a project, the project applicant may be required to transfer interest in real property to an appropriate conservation entity to mitigate the impact that the project will have on fish and wildlife resources. The Department may authorize non-profit organizations, governmental entities, and special districts to hold title and manage the mitigation lands (Gov. Code, § 65967).

The Department is required to conduct due diligence when approving non-profit organizations, governmental entities, and special districts to hold and manage mitigation lands. Specifically, Government Code section 65967 states, "[a] state or local agency shall exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources." A1-8

For future projects requiring habitat conservation, the Department requests to coordinate with the City to identify appropriate conservation entities that have undergone the Department's due diligence process and are willing and able to take responsibility for the long-term management of the proposed mitigation lands.

Future Mitigation Needs: The Department typically recommends that impacts to sensitive habitats be mitigated through the preservation, enhancement, and restoration of similar habitat. As Southern California becomes more populous and developed, mitigation opportunities have become increasingly costly and difficult to locate. In order to plan for future projects' mitigation needs, the Department recommends that the City identify a) likely areas of future impacts, b) sensitive habitat types associated with A1-9

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those areas, and c) locations containing similar habitats that may have the potential for preservation and enhancement/rehabilitation. By identifying potential future impacts and possible mitigation strategies early in the planning process, the City may reduce delays and costs associated with finding suitable habitat for mitigation, and may also be able to use the information to make better-informed decisions about the best locations for future projects. The Department recommends that the City coordinate early with regulatory agencies to identify mitigation needs and strategies for reducing impacts associated with future projects. Early consultation can give project planners the advantage of greater flexibility, and can lessen the potential for unexpected costs and delays. A1-9 cont'd

Additional Concerns

California is experiencing one of the most severe droughts on record. To ameliorate the water demands of future development projects, the Department recommends incorporation of water-wise concepts in project landscape design plans. In particular the Department recommends xeriscaping with locally native California species, and installing water-efficient and targeted irrigation systems (such as drip irrigation). Local water agencies/districts, and resource conservation districts in your area may be able to provide information on plant nurseries that carry locally native species, and some facilities display drought-tolerant locally native species demonstration gardens (for example the Riverside-Corona Resource Conservation District in Riverside). Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: http://saveourwater.com/what-you-can-do/tips/landscaping/ A1-10

Further Coordination

The Department appreciates the opportunity to comment on the Yucaipa General Plan Update (SCH No. 2014101003), and requests that the City address the Department's comments and concerns prior to circulating the final EIR. If you should have any questions pertaining to these comments, please contact Gabriele Quillman at (909) 980-3818 or gabriele.quillman@wildlife.ca.gov.

Sincerely,

for Leslie MacNair
Regional Manager

cc: State Clearinghouse, Sacramento

2. Response to Comments

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A1. Response to Comments from Leslie MacNair, Regional Manager, CDFW, dated January 26, 2016.

Intro The introduction provided by the California Department of Fish and Wildlife (CDFW) provides background information and does not raise any environmental issues necessitating a response.

A1-1 At the request of the commenter, Mitigation Measure 4-1 has been revised in Section 3.2, *DEIR Revisions in Response to Written Comments*, to include more detailed guidelines for assessing potential biological resources on future project sites, including (1) vegetation mapping, (2) focused surveys, and (3) survey updates.

A1-2 At the request of the commenter, additional avoidance and minimization measures have been incorporated into the EIR. Mitigation Measure 4-7 (renumbered to Mitigation Measure 4-9) is revised in Section 3.2, *DEIR Revisions in Response to Written Comments*, to ensure preconstruction nesting bird surveys be completed per recommended protocols at the time of construction.

A1-3 At the request of the commenter, additional avoidance and minimization measures have been incorporated into the EIR. To minimize potential impacts to bats, a new mitigation measure, Mitigation Measure 4-10, is added to the EIR as detailed in Section 3.2, *DEIR Revisions in Response to Written Comments*.

A1-4 At the request of the commenter, additional avoidance and minimization measures have been incorporated into the EIR. New Mitigation Measure 4-7 is added to the EIR, as detailed in Section 3.2, *DEIR Revisions in Response to Written Comments* to minimize construction hazard impacts to wildlife moving within and through a project site.

A1-5 At the request of the commenter, additional avoidance and minimization measures have been incorporated into the EIR. New Mitigation Measure 4-8 is added to the EIR, as detailed in Section 3.2, *DEIR Revisions in Response to Written Comments* to minimize impacts of future projects adjacent to open space areas.

A1-6 The commenter states that the impacts of several similar projects, while individually small, may be cumulatively significant. As identified in Impact 5.4-2, approximately 9,732 acres of previously undisturbed habitat may be impacted through implementation of the General Plan Update. The EIR details survey requirements and avoidance and minimization measure to reduce potential project and cumulative impacts to biological resources. Despite the policies incorporated into the General Plan Update, cumulative impacts of habitat loss are considered significant and unavoidable for the proposed project.

A1-7 Various federal, state, and local regulations protect floodplains and limit development in these areas to protect natural habitat and sensitive species and maintain overall habitat

value. Floodplain Management and Protection of Wetlands (42 FR 26961, 52 FR 34617), Executive Order 11990, as amended, requires federal agencies to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance functions and values of these wetlands while carrying out their responsibilities pertaining to water supply, erosion and flood prevention, and maintenance of natural systems, among others. Additionally, the City has an ongoing floodplain management program, which includes mapping flood hazard areas, adopting new and/or updated ordinances, and regulating and enforcing safe building practices. Future development within 100-year flood zones would require submittal of a letter of map revision application to the Federal Emergency Management Agency (FEMA) for review and approval. All new development would be required to meet federal floodplain regulations, including that the lowest floor of the structure is raised above the 100-year base flood elevation. This would ensure future developments do not impede or redirect flood flows in a manner that would indirectly and adversely impact surrounding uses.

In addition, the General Plan Update includes several policies that would reduce impacts from flooding and minimize development in the City's floodplains:

- **S-2.1 Flood Hazard Identification.** Maintain and continuously update the City's floodplain safety hazards map in concert with FEMA map amendments and improvements to local drainage facilities.

- **S-2.2 Floodplain Development.** Promote the dedication of land within the 100-year floodplain and adjacent areas for park, multi-purpose trails, recreational uses, open spaces, and habitat conservation/mitigation.

- **S-2.3 Land Use Regulations.** Prohibit development of new essential and critical facilities and lifeline services in the 100-year floodplain. Prohibit facilities that use, store, transport, or dispose of hazardous materials from developing in the Floodplain Safety Overlay District.

- **S-2.4 Building Codes.** Require adherence to the latest building, site, and design codes in the California Building Code, FEMA flood control guidelines, and Floodplain Safety Overlay District to avoid or minimize the risk of flooding hazards in the community.

- **Policy S-2.5 – Special Flood Hazard Areas.** Support policies, procedures, and recommendations of the National Flood Insurance Program for SFHAs with respect to zoning, subdivision, building codes, and overlays.

- **Policy S-2.6 – Flood Control Facilities.** Prioritize and fund maintenance and construction of improvements to drainage facilities and roadways identified in the City's Master Plan of Drainage and Hazard Mitigation Plan.

- **PR-5.5 Channels and Creeks.** While completing necessary safety improvements, preserve the ecological integrity of watersheds and creek corridors that support riparian and wildlife resources by restoring native plants and other best practices to the extent practical.

A1-8 Comments regarding CDFW's responsibility for conducting due diligence when approving non-profit organizations, governmental entities, and special districts to hold and manage mitigation lands are noted. The commenter requests coordination with the City to identify appropriate conservation entities that are willing and able to take responsibility for the long-term management of future mitigation land. This is not a comment related to the substance and technical adequacy of the EIR.

However, the Yucaipa General Plan Update includes several policies supporting the coordination of the City with state and federal agencies to protect biological resources:

- **PR-5.1 Resource Protection.** Protect and conserve Yucaipa's biological resources, with a special focus on sensitive, rare, or endangered plant and wildlife species in accordance with state and federal resource agency requirements.

- **PR-5.2 Habitat Conservation.** Support habitat conservation efforts to set aside and preserve suitable habitats, with priority given to habitats for rare and endangered species in Yucaipa in accordance with state and federal resource agency requirements.

- **PR-5.6 Interagency Coordination.** Coordinate with the CDFW and USFWS in the review of biological resource assessments and surveys for land development applications in accordance with state and federal resource agency requirements.

- **PR-5.7 Mitigation Program.** Develop, periodically update, and implement a community-wide mitigation program to preserve and enhance sensitive biological resources and associated habitats in Yucaipa.

Additionally, the City has a long history partnering, in varying capacities, with the Inland Empire Resource Conservation District (IERCD) on basin projects, habitat restoration, conservation easements, and public education. For example, IERCD worked with the City on the Oak Glen Creek Basin Project as a funding partner for the public outreach component and holds a two-acre conservation easement for offsite mitigation at Oak Glen Creek; implements an invasive weed removal program in Yucaipa's drainage areas; performs numerous public outreach presentations on environmental conservation in the Yucaipa area (e.g., City Council, school districts, service clubs, water districts, etc.); and in the future, will also hold and perform long-term maintenance for a 6.19-acre conservation easement at El Dorado Ranch Park for project-specific off-site mitigation pending regulatory approval.

2. Response to Comments

The Commenters request to coordinate with the City to identify additional appropriate conservation entities for projects requiring habitat conservation will be forwarded to the decision-makers for their consideration.

A1-9 Comments regarding future project impacts and mitigation needs are noted. These comments are not related to the substance and technical adequacy of the EIR. However, the Yucaipa General Plan Update includes several policies supporting City coordination with state and federal agencies to protect biological resources as listed under the response to Comment A1-8. The Commenters request to coordinate with regulatory agencies early in the planning process to identify mitigation needs and strategy will be forwarded to the decision-makers for their consideration.

A1-10 Comments regarding water conservation measures are noted. The Yucaipa General Plan Update includes several policies related to water supply conservation and management and is required to comply with current regulations regarding water efficiency and conservation.

- **PSF-5.4 Use of Recycled Water.** Increase use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, practical, and available.

- **PSF-5.5 Water Conservation.** Support water conservation measures that comply with state and federal legislation and that are consistent with measures adopted in the urban water management plan.

- **PSF-5.6 Drought Planning.** Support the implementation of drought contingency plans to ensure adequate water during drought, including emergency water connections and related measures.

- **PSF-5.8 Public Education.** Partner with water treatment agencies to increase public awareness of the need for efficient management of water resources, including but not limited to conservation and reuse practices.

- **PSF-5.9 Communications.** Maintain effective communication between the City, water providers, businesses, and the public to optimize resources and provide the highest level of dependable and affordable water service.

LETTER A2 –San Bernardino County Department of Public Works (1 page)

825 East Third Street, San Bernardino, CA 92415-0835 | Phone: 909.387.8109 Fax: 909.387.7876
www.SBCounty.gov

SAN BERNARDINO COUNTY

Department of Public Works
Environmental & Construction • Flood Control
Operations • Solid Waste Management
Surveyor • Transportation

Gerry Newcombe
Director

January 28, 2016

City of Yucaipa
Attn: Joseph Lambert
Development Services Director
34272 Yucaipa Blvd.
Yucaipa, CA. 92399
jlambert@yucaipa.org

File: 10(ENV)-4.01

RE: CEQA – NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE GENERAL PLAN UPDATE FOR THE CITY OF YUCAIPA

Dear Mr. Lambert:

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on December 16, 2015** and pursuant to our review, the following comments are provided:

Water Resources Division (Mary Lou Mermilliod, PWE III, 909-387-8213):

1. The recommendations made here are general in nature until such time as more detailed plans become available.
2. Prior to any activity on Flood Control District right-of-way, a permit shall be obtained from the District. Other on-site or off-site improvements may be required which cannot be determined at this time. A2-1

Environmental Management Division (Brandy Wood, Ecological Resource Specialist, 909-387-7971):

1. All future activities on San Bernardino County Flood Control District (District) right-of-way requires an encroachment permit. Any landscaping within District right-of-way would require plant palate approval. The District requires the use of native plants exclusively when landscaping within District right-of-way.
2. Parry's spineflower has been observed by District staff within Potato Creek Spreading Grounds. Focused rare plant surveys should be conducted within the area to ensure complete transparency to the public for project impacts. A2-2
3. All developments adjacent to District lands would need to have their own fire breaks outside of District right-of-way. A2-3

If you have any questions, please contact the individuals who provided the specific comment, as listed above.

Sincerely,

NIDHAM ARAM ALRAYES, MSCE, PE, QSD/P
Public Works Engineer III
Environmental Management
NAA:PE:sr

2. Response to Comments

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A2. Response to Comments from Nidham Aram Alrayes, MSCE, PE, QSD/P, Public Works Engineer III, San Bernardino County Public Works Department, dated January 28, 2016.

A2-1 Comments regarding permit requirements for future development on San Bernardino County Flood Control District (SBCFCD) right-of-way, plant palate approval, and exclusive use of native plants are noted.

A2-2 Comment regarding observed Parry's spineflower within Potato Creek Spreading Grounds is noted. Per Mitigation Measure 4-1, applicants for future development projects that disturb undeveloped land, including the Potato Creek Spreading Grounds, are required to conduct a biological resources survey to determine if sensitive biological resources would be impacted. If the proposed development project site supports Parry's spineflower or any vegetation communities that may provide habitat for plant or wildlife species, a focused habitat assessment shall be conducted by a qualified biologist to determine the potential for the special status plant to occur within or adjacent to the proposed development project area. If required, mitigation would be incorporated into the future environmental documentation.

A2-3 Comment regarding future developments adjacent to SBCFCD lands needing fire breaks is noted. The City requires compliance with fuel modification standards and defensible space requirements near or within hazardous fire areas per Section 87.1160 of the City's Municipal Code. Additionally, the proposed project includes the following policies related to fire abatement:

- **S-3.3 Fire Codes.** Require adherence to applicable fire codes for buildings and structures, fire access, and other standards in accordance with Fire Hazard Overlay Districts, California Fire Code, and municipal codes; encourage retrofit of nonconforming land uses

- **S-3.4 Fuel Modification.** Require adherence to fuel modification and defensible space requirements to reduce wildfire hazards; work with CAL FIRE to coordinate fuel breaks in very high fire severity zones.

2. Response to Comments

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LETTER A3 –Soboba Band of Luiseno Indians (2 pages)

January 28, 2016

Attn: Joseph M. Lambert, Director of Development Services
City of Yucaipa
Development Services Department
34272 Yucaipa Boulevard
Yucaipa, CA 92399

SOBOBA BAND OF LUISEÑO INDIANS
EST. JUNE 19, 1883

RE: Draft Environmental Impact Report for the City of Yucaipa General Plan Update (Case No. 14-135/GPA); State Clearing House No. 2014101003

There are numerous concerns regarding the proposed cultural resource mitigation measures for the updated general plan. It would be best to meet in person to discuss all of the specifics, as there is much work to be done. A3-1

- To be included into bullet point one: in accordance with AB-52, notifications will be sent out to concerned tribes, regarding each initial application. This is in accordance with the law as it brings the tribes in at an earlier level for consultation. A3-2
- Data recovery is not the only way to mitigate impacts to resources. Also, it should be understood that there are additional tribes that have concerns for the area. In accordance with Assembly Bill 52, requests have been sent to the city to identify those tribes. They need to be included into this mitigation as well aside from just the two mentioned. A3-3
- There is too much language for this bullet point. All that it needs to state is that upon the discovery of human remains procedures will be followed as set forth by California public resources code section 5097.98 A3-4
- For projects that contain known cultural resources on site, the applicant shall provide evidence that every effort has been made to avoid and preserve those resources. Mitigation measures should also be drafted in order to lessen the impact upon any known resource and inadvertent discoveries associated with the project. A3-5
- For projects with a possibility of impacts to Tribal Cultural Resources, the applicant shall be required to provide evidence of a tribal monitoring agreement with the consulting Tribal nations. A3-6
- Treatment and disposition of cultural resources : A3-7

Confidentiality: The entirety of the contents of this letter shall remain confidential between Soboba and the City of Yucaipa. No part of the contents of this letter may be shared, copied, or utilized in any way with any other individual, entity, municipality, or tribe, whatsoever, without the expressed written permission of the Soboba Band of Luiseño Indians.

2. Response to Comments

Prior to Grading Permit

1. The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Yucaipa Planning Department with evidence of same.

a. A fully executed reburial agreement with the appropriate culturally affiliated Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.

b. A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation.

c. If more than one Native American Group is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the San Bernardino County Museum by default.

d. Should reburial of collected cultural items be preferred, it shall not occur until after the Phase IV monitoring report has been submitted to the City of Yucaipa Planning Department. Should curation be preferred, the developer/permit applicant is responsible for all costs and the repository and curation method shall be described in the Phase IV monitoring report.

A3-7 cont'd

In order to address these important issues, it is my request that a consultation meeting be scheduled immediately and at your earliest convenience. If you have any additional questions or concerns, please feel free to contact me directly, anytime.

A3-8

Sincerely,

Joseph Ontiveros
Cultural Resource Director
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

A3. Response to Comments from Joseph Ontiveros, Cultural Resources Director, Soboba Band of Luiseño Indians, dated January 28, 2016.

A3-1 Per Senate Bill 18 (SB 18), the City sent letters to Native American contacts provided by the Native American Heritage Commission (NAHC) on August 14, 2014 to request any information related to cultural resources or heritage sites within or adjacent to the project area. The Commenter, Joseph Ontiveros, replied by email on January 16, 2015 requesting consultation regarding the proposed project. A SB 18 consultation meeting between the City and Soboba Band of Luiseño Indians was held on May 26, 2015. Tribes were notified of the availability of the Draft EIR for the proposed project. However, pursuant to the Tribal Consultation Guidelines, such notice does not initiate a new consultation process.

A3-2 Assembly Bill 52 (AB 52) went into effect on July 1, 2015. The Notice of Preparation (NOP) for the proposed project was released for public review on September 23, 2014; therefore, AB 52 does not apply to the project. However, all subsequent projects in accordance with the Yucaipa General Plan Update would be subject to AB 52, as detailed in Mitigation Measure 5-1. The Commenter suggests moving this requirement under Mitigation Measure 5-1 from the third bullet point to be combined with the first. All four bullets are required to be included in the cultural resources assessment; therefore, no changes to Mitigation Measure 5-1 are proposed.

A3-3 Mitigation measures in the Draft EIR ensure potential impacts to cultural resources are avoided, protected, and/or preserved.

Per SB 18, the City sent tribal consultation request letters to seven Native American contacts provided by the NAHC for Tribal Consultation under SB 18 and either did not get a response within 90 days or received a response and consulted with the tribes (see Section 5.5, *Cultural Resources*, of the Draft EIR).

AB 52 does not apply to the proposed project because the NOP was released for public review prior to AB 52 taking effect. Therefore, the City is not required to send letters to additional tribes beyond what is required under SB 18.

A3-4 The Commenter does not identify which "bullet point" is being referred to. It is assumed that this comment is in reference to Mitigation Measure 5-3. The Commenter suggests referencing California Public Resources Code Section 5097.98 to condense the mitigation measure. Mitigation Measure 5-3 outlines the requirements under Public Resources Code Section 5097.98; and therefore, no changes are made.

A3-5 Mitigation Measure 5-1 details that if any cultural resources are inadvertently discovered, no further grading shall occur in the area of the discovery until the City concurs in writing that adequate provisions are in place to protect these resources and necessary

archaeological and historical field work has been completed. The existing mitigation measure would ensure that potential resources are avoided, protected, and/or preserved.

A3-6 Tribal cultural resources have been introduced into CEQA through AB 52. As previously stated, AB 52 does not apply to the proposed project because the NOP was released for public review prior to AB 52 taking into effect. Future projects in accordance with the Yucaipa General Plan Update would be required to comply with AB 52 and analyze potential impacts to tribal cultural resources, which may include preparing a tribal monitoring agreement with consulting tribes.

A3-7 See response to Comment A3-5. Mitigation Measure 5-1 require that adequate provisions are in place to protect cultural resources. Under Mitigation Measure 5-1, unanticipated discoveries are required to be evaluated for significance by a San Bernardino professional archaeologist. If significance criteria are met, then cultural resources would be submitted to the San Bernardino Archaeological Information Center in accordance with the San Bernardino County Museum guidelines. Therefore, as recommended by the Commenter, the landowner would be required to relinquish ownership of the cultural resources.

The additional recommended request related to a reburial agreement, would occur after ownership of the resources is relinquished to the San Bernardino County Museum. Pursuant to Mitigation Measure 5-1, applicants for future development projects would be required to implement the recommendation of the Cultural Resources Report, which include requirements to have the artifacts collected or recovered per San Bernardino County Museum guidelines and to have the artifacts adequately curated in an institution with appropriate staff and facilities for their scientific information potential to be preserved.

A3-8 See response to Comment A3-1.

LETTER A4–State Clearinghouse (2 pages)

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

January 29, 2016

Joseph M. Lambert
City of Yucaipa
34272 Yucaipa Boulevard
Yucaipa, CA 92399

Subject: Yucaipa General Plan Update (Case No. 14-135/GPA)
SCH#: 2014101003

Dear Joseph M. Lambert:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 28, 2016, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

A4-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

2. Response to Comments

Document Details Report
State Clearinghouse Data Base

SCH#	**2014101003**
Project Title	Yucaipa General Plan Update (Case No. 14-135/GPA)
Lead Agency	Yucaipa, City of
Type	**EIR** Draft EIR
Description	The Yucaipa General Plan Update is intended to shape development in the City and its SOI over the next 20+ years. The proposed project involves reorganization of the current General Plan into the following seven elements: Community Design and Land Use Element; Housing and Neighborhood Element; Parks, Recreation, Trials, and Open Space Element; Economic Development Element; Transportation Element; Public Safety Element; and Public Services and Facilities Element. Buildout of the General Plan would generate a total of 30,077 units, 77,328 residents, 9,581,104 nonresidential sq. ft., and 18,488 jobs.

Lead Agency Contact

Name	Joseph M. Lambert		
Agency	City of Yucaipa		
Phone	909-797-2489 x.224	***Fax***	
email			
Address	34272 Yucaipa Boulevard		
City	Yucaipa	***State*** CA	***Zip*** 92399

Project Location

County	San Bernardino			
City	Yucaipa			
Region				
Lat / Long	34° 02' 01.8" N / 117° 02' 32.4" W			
Cross Streets	Citywide			
Parcel No.				
Township	***Range***	***Section***	***Base***	

Proximity to:

Highways	SR-38, I-10
Airports	
Railways	
Waterways	Wilson, Oak Glen, Wildwood, Yucaipa Creeks
Schools	Various
Land Use	Various

Project Issues	Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Other Issues
Reviewing Agencies	Resources Agency; Colorado River Board; Department of Fish and Wildlife, Region 6; Department of Water Resources; Department of Parks and Recreation; Office of Emergency Services, California; California Highway Patrol; Caltrans, District 8; Department of Housing and Community Development; Air Resources Board; Regional Water Quality Control Bd., Region 6 (Victorville); Native American Heritage Commission; Public Utilities Commission

Date Received	12/15/2015	***Start of Review***	12/15/2015	***End of Review***	01/28/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

A4. Response to Comments from Scott Morgan, Director, State Clearinghouse, dated January 29, 2016.

A4-1 The comment states that the City of Yucaipa has complied with State Clearinghouse requirements for public review of the DIER for the proposed project. The comment also provides the project's report as shown in the State Clearinghouse database. No response is needed.

2. Response to Comments

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LETTER A5 – California Department of Transportation (3 pages)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING (MS 725)
464 WEST 4th STREET, 6th FLOOR
SAN BERNARDINO, CA 92401-1400
PHONE (909) 388-7017
FAX (909) 383-5936
TTY 711
www.dot.ca.gov/dist8

Serious Drought. Help save water!

February 3, 2016 **File: 08-SBd-10-PM 35.32**

Joseph Lambert
City of Yucaipa
34272 Yucaipa Boulevard
Yucaipa, CA 92399

Dear Mr. Lambert:

General Plan Update – Draft Environmental Impact Report and Traffic Impact Analysis Report

Thank you for providing the California Department of Transportation (Department) the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) and the Traffic Impact Analysis Report (TIA) for the City of Yucaipa General Plan Update (Project). The City is located the eastern portion of the San Bernardino Valley, immediately north of and adjacent to the border with Riverside County. The General Plan Update would result in a potential build-out total of 30,077 units, 77,328 residents, 9,581,104 nonresidential square feet in the City and Sphere of Influence. Intro

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. As the responsible agency under the California Environmental Quality Act, it is also our responsibility to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Yucaipa, due to the project's potential impact to the State facilities, it is also subject to the policies and regulations that govern the SHS. We offer the following comments on DEIR and TIA: A5-1

- Use the Highway Capacity Manual (HCM) 2010 methodology instead of the HCM 2000 for all traffic analyses. The intersection capacity analysis should identify the level of service (LOS) and the delay, consistent with the HCM 2010 methodology on page H-30 section 5.1.1-Intersection Operations Analysis and page H-34 section 5.1.3-LOS Standards of the TIA and Section 5. Environmental Analysis Transportation and Traffic of the DEIR on page 5.15-5.

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

2. Response to Comments

- Explain why a 1.5 percent growth rate per year was selected to adjust traffic counts collected prior to 2013 on pages H-39 section 6.2.1-Intersction Volumes and H-44 section 6.2.2-Road Segment Volumes. A5-2

- Include the Project fair-share of the improvement costs to mitigate the impacted intersections in the TIA. A5-3

- The General Plan, specifically the Circulation element, should include language requiring the City to develop policies (a) stressing coordination between the City and the Department early in the land use and transportation planning process and (b) requiring new development to defraying all or a portion of the cost of transportation facilities related to the development project through the Development Impact Fee (Gov. Code § 66000(b). A5-4

- Consider integrating the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) with the General Plan Update to increase mobility for the region. A5-5

The Department is committed to providing a safe transportation system for all users. We encourage the City to embark a safe, sustainable, integrated and efficient transportation system and complete street to enhance California's economy and livability. A pedestrian/bike-friendly environment served by multimodal transportation would reduce traffic congestion prevalent in the surrounding areas. (See *Complete Street Implementation Action Plan 2.0* at http://www.dot.ca.gov/hq/tpp/offices/ocp/docs/CSIAP2_rpt.pdf and *Urban Bikeway Design Guide* at http://nacto.org/wp-content/uploads/2011/03/NACTO_UrbanBikeway_DesignGuide_LRez.pdf). A5-6

- There is not any existing and/or proposed transit line to serve the Freeway Corridor Specific Plan. To reduce Vehicle Miles Traveled and Greenhouse Gases, which are the primary goals of the 2040 California Transportation Plan, it is recommended that the City in coordination with the Transit Agency (OmniTrans) consider future transit route to serve proposed landuse development within the corridor. A5-7

- Facilitate coordination between the OmniTrans and Metrolink to provide direct and convenient services from the Metrolink Redlands station to the proposed Freeway Corridor development. A5-8

Mr. Lambert
February 3, 2016
Page 3

- Both the San Bernardino County Non-Motorized Transportation Plan and the Project call for Class II bike lane along part of Oak Glen Road, Yucaipa Boulevard, Calimesa Boulevard, 14th Street, 5th Street, and Bryant Street. Additionally, the City has defined these roadways as designated truck routes. We recommend the provision of the Class IV separated bikeway along mentioned roadways to provide a safe, sustainable, complete, and an enhanced bicycling network. A5-9

- Install traffic calming devices, such as signage, road bulbs, chicanes, raised crosswalks, and speed humps and consider reducing curb-to-curb road widths and employing roadway design features such as islands, pedestrian refuges, and pedestrian count-down signal as needed and appropriate to improve safety for pedestrians on proposed College Village mixed-use and R-24-Multiple Residential landuse development to encourage safe alternative modes of transportation. A5-10

All comments should be addressed and the TIA should be resubmitted prior to proceeding with the Encroachment Permit Process. These recommendations are preliminary and summarize our review of materials provided for our evaluation. Please continue to keep us informed of this project and other future updates, which could potentially impact the SHS and interfacing transportation facilities. If you have any questions or need to contact us, please do not hesitate to contact Adrineh Melkonian at (909) 806-3928 or myself at (909) 383-4557.

Sincerely,

MARK ROBERTS
Office Chief
Intergovernmental Review, Community and Regional Planning

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

2. Response to Comments

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A5. Response to Comments from Mark Roberts, Office Chief, Caltrans, dated February 3, 2016.

Intro The comment provides background information and does not raise environmental issues. Thus, no further response is necessary.

A5-1 The HCM 2000 methodology was applied for analysis of ramp termini intersections controlled by Caltrans. The HCM 2010 methodology was not selected for this intersection assessment since the methodology does not support or evaluate "T" intersections like those present in Yucaipa. As such, the HCM 2000 methodology was applied and is still the current methodology used by the City of Yucaipa based on the intersection geometries present in the City. The major updates from the HCM 2000 to the HCM 2010 methodologies include the following facility types:

- Weaving
- Roundabouts
- Signals
- Streets
- Simulation

However, the methodology for basic Freeway, Merge, and Diverge assessment is consistent between the two methodologies. A comparative analysis using HCM 2010 and HCM 2000 was performed by IBI Group (see Appendix A to this FEIR). Under this analysis, all Caltrans-controlled intersections within the City were found to operate at an acceptable level of service per Caltrans standards.

A5-2 The 1.5 percent growth rate used to adjust traffic counts conducted prior to 2013 is consistent with the annual traffic volume growth rate applied by the City of Yucaipa for traffic studies within the City during this time period. It is also a reasonable and conservative growth rate estimate to ensure all potential impacts are discussed.

A5-3 The traffic study was prepared to support the adoption of a new General Plan for the City. Consequently, the calculation of the project's fair-share is not applicable. The mitigation measures identified in the EIR for traffic impacts would become part of the City's planned future roadway improvements and would be implemented either by the City, through construction in conjunction with future development, and/or through development impact fees collected by the City as development in accordance with the proposed General Plan Update occurs.

A5-4 The City is committed to coordination with regional and State agencies with regards to regional transportation issues. The proposed Transportation Element includes Policy T-1.7, reproduced below, which encouraged intergovernmental coordination with Caltrans, SCAG, and SANBAG.

- **T-1.7 Intergovernmental Coordination.** Coordinate with Caltrans, SCAG, and SANBAG to plan, fund, and improve freeway access at Wildwood Canyon Road, roadways of regional importance, and local projects that further regional mobility goals.

The City of Yucaipa would also continue collecting development impact fees that assist in the construction of transportation network improvements that are consistent with the General Plan Transportation Element. The City's current Development Impact Fee (DIF) Program includes the interchange/bridge improvements at Oak Glen Road, Yucaipa Boulevard and Wildwood Canyon Road. The interchange improvements identified in the DIF Program are specifically for City streets that provide access to Interstate 10.

A5-5 As identified in Table 5.10-1, in Section 5.10, *Land Use and Planning,* the proposed General Plan Transportation Element is consistent with the goals and objectives of the SCAG RTP/SCS as the element proposes a range of transportation and mobility strategies (including transit service improvements and bicycle and pedestrian facilities).

A5-6 The General Plan Transportation Element includes strategies, goals, and policies to enhance and promote alternative and active modes of transportation. Further, the Transportation Element is written to meet the requirements of the Complete Streets Act and to ensure that the city designs and implements a transportation network that serves all types of roadway users.

A5-7 The General Plan Transportation Element calls for the expansion of the OmniGo local bus service in Yucaipa. This service, operated by Omnitrans, provides local circulator transit service within Yucaipa and facilitates regional transit connections at the Yucaipa Transit Center. The proposed General Plan Update calls for the City to explore expansion of the OmniGo service to new corridors and developments within Yucaipa in the future.

A5-8 The City of Yucaipa regularly coordinates with Omnitrans regarding local bus transit services in Yucaipa and connecting Yucaipa to adjacent jurisdictions. As bus service within the City is provided and administered by Omnitrans, it would be this agency's decision with regard to the demand for a regional transit service connection between Yucaipa and the Redlands Metrolink Station.

A5-9 The comment notes that the roadways identified are proposed to have Class II bicycle facilities while also being designated truck routes. While these roadways do carry the truck route designation, the actual and anticipated volume of trucks traveling these roadways is anticipated to be minor given the absence of major truck trip generating land uses within the City. Under this condition, as well as the project future traffic

volumes for these roadways, Class II bicycle facilities were identified as being the most appropriate design solutions.

A5-10 The City actively works with local neighborhoods to identify the potential need for traffic calming devices. Further, the Transportation Element proposes the downgrade in classification of several roadways in and near the areas noted in the comment to facilitate reduced traffic speeds and support traffic calming strategies.

The comment suggests resubmitting the traffic study prior to proceeding with the Encroachment Permit Process. The proposed project is an update to the City's General Plan; and therefore, no encroachment permits are envisioned as part of this project. Future projects requiring encroachment permits in accordance with the General Plan Update would be submitted to Caltrans for review as warranted.

2. Response to Comments

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3. Revisions to the Draft EIR

3.1 INTRODUCTION

This section contains revisions to the DEIR based upon (1) additional or revised information required to prepare a response to a specific comment; (2) applicable updated information that was not available at the time of DEIR publication; and/or (3) typographical errors. This section also includes additional mitigation measures to fully respond to commenter concerns as well as provide additional clarification to mitigation requirements included in the DEIR.

None of the revisions to the DEIR require recirculation of the document. Recirculation is only required when significant new information is added. Information is not significant unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect or a feasible way to mitigate or avoid such an effect. Recirculation is not required where the new information merely clarifies, amplifies, or makes insignificant modifications. (CEQA Guidelines Section 15088.5.) As explained below, none of the changes adds any new significant information and recirculation is not required. Changes made to the DEIR are identified here in ~~strikeout text~~ to indicate deletions and in underlined text to signify additions.

3.2 NEW AND REVISED GENERAL PLAN POLICIES AND PROGRAMS

The following policies and programs have been added and/or revised to the Safety Element of the Yucaipa General Plan Update. Most changes are non-substantive editorial changes provided for clarity that would result in beneficial impacts to hazards and hydrology impacts. More substantive policy and program changes are made to supplement the City's Hazards Mitigation Plan (HMP) and Emergency Operations Plan (EOP), comply with the new General Plan Safety Element requirements per Government Code Section 65302, effective January 1, 2016, and to respond to concerns raised by the California State Board of Forestry and Fire Protection (BFFP) in compliance with this new regulatory requirement.

The new safety element changes were made to comply with Senate Bill 1241, which requires a city or county, when it next revises its housing element on or after January 1, 2014, to update the safety element to address the risk for fire on lands classified as state responsibility areas (SRAs) or very high fire hazard severity zones. The update must include:

A. Consideration of guidance from the Office of Planning and Research's Fire Hazard Planning and Department of Forestry and Fire Protection documents.

B. Specific information regarding fire hazards, including new mapping of very high fire severity zones and other information specified by statute.

C. A set of goals, policies, and objectives to protect the community from unreasonable wildfire risks and a set of feasible implementation measures to achieve these goals, policies, and objectives.

Existing law also requires local agencies to submit the safety element of their general plan to the California BFFP for review. BFFP may offer recommendations for changes regarding the use of SRAs or very high fire hazard severity zone lands in order to protect life, property, and natural resources from unreasonable wildland fire risks. The local agency, City of Yucaipa, must consider BFFP's recommendations but are not required to adopt them.

3.2.1 New Safety Element Policies and Programs

Geologic and Seismic Safety

- **S-1.4 Building Codes.** Require adherence to the latest California Building Codes and regulations in the Geologic and Seismic Hazards Overlay District; update local codes periodically for the latest advances.

- **S-1.5 City Critical Infrastructure and Facilities.** Locate, design, maintain, and upgrade critical infrastructure and facilities (police, medical facilities, fire, roads, reservoirs, etc.) to required seismic safety standards.

- **S-1.6 Other Agency Critical Infrastructure and Facilities.** Encourage Caltrans, schools, CAL FIRE, utilities, and other relevant agencies to comply with seismic safety standards for critical infrastructure and facilities.

Flood Safety

- **S-2.3 Land Use Regulations.** Prohibit development of new essential and critical facilities and lifeline services in the 100-year floodplain. Prohibit facilities that use, store, transport, or dispose of hazardous materials from developing in the Floodplain Safety Overlay District.

- **S-2.4 Building Codes.** Require adherence to the latest building, site, and design codes in the California Building Code, FEMA flood control guidelines, and Floodplain Safety Overlay District to avoid or minimize the risk of flooding hazards in the community.

- **S-2.8 Interagency Coordination.** Establish and maintain cooperative working relationships among public agencies with responsibility for flood protection, including San Bernardino County Flood Control District, County Public Works, and other entities.

Fire Safety

- **S-3.2 Fire Service Levels.** Provide appropriate staffing levels, equipment, facilities, and training to maintain an Insurance Service Office Rating of 3; continue to strive to meet the latest industry standards in fire safety.

- **S-3.3 Fire Codes.** Require adherence to applicable fire codes for buildings and structures, fire access, and other standards in accordance with Fire Hazard Overlay Districts, California Fire Code, and municipal codes; encourage retrofit of nonconforming land uses.

- **S-3.4 Fuel Modification.** Require adherence to fuel modification and defensible space requirements to reduce wildfire hazards; work with CAL FIRE to coordinate fuelbreaks in very high fire severity zones.

- **S-3.5 Permit Approvals.** Ensure compliance with the Subdivision Map Act requirements for structural fire protection and suppression services, subdivision requirements for on/off-site improvements, ingress and egress, street standards, and other concerns.

- **S-3.6 Adequate Water Supply and Redundancy.** Work with public and private water distribution and supply facilities to ensure adequate water capacity and system redundancy to supply emergency firefighting needs.

- **S-3.7 Critical Facilities and Structures.** Locate, design, maintain, and upgrade critical facilities, structures, and infrastructure (police stations, roads, utilities, reservoirs, etc.) to minimize exposure to fire hazards.

- **S-3.8 Public Education.** Educate the community about fire prevention and suppression; work with other agencies and private interests to educate private landowners on fire-safe measures to achieve a low risk condition.

- **S-3.9 Post-fire Treatment.** Work with CAL FIRE, USFS, USGS, and applicable nongovernmental agencies to create a plan to address post-fire recovery activities and projects that allow burned areas to fully recover and minimize repetitive losses and further damage.

Emergency Preparedness

- **S-4.1 Hazard Planning.** Update the City's hazard mitigation and emergency operations plan on a timely basis; coordinate with relevant agencies responsible for updating water, fire, or other hazard mitigation plans. Integrate updates into the safety element.

- **S-4.2 Training.** Require training of City emergency response personnel through coursework, emergency operations plan orientation, disaster service training, emergency operations center training, and other topics.

- **S-4.3 Public Education.** Promote education and events that reinforce the responsibility and capability of residents, business owners, and City staff to plan for, respond to, and recover from emergencies and disasters; implement and support local CERT programs.

- **S-4.4 Interagency Support.** Sustain mutual aid and automatic aid agreements through the California Disaster and Civil Defense Master Mutual Aid Agreement, and with adjacent service providers (fire, flooding, earthquake, emergency medical, etc.).

- **S-4.5 Communications.** Maintain communication protocols and systems for coordinating emergency service providers, public agencies, business, schools, utilities, and other affected parties to respond in an effective manner to emergencies and disasters.

- **S-4.6 Critical Facilities and Lifeline Services.** Coordinate with service providers to ensure that essential facilities, lifeline services, and infrastructure (water, sewer, communication, power, roads, etc.) are capable of responding following a disaster.

- **S-4.7 Emergency Access and Evacuation.** Maintain and update, as needed, emergency access, protocols, and evacuation routes for residents, business, equine and large animals; regularly exercise evacuation protocol and procedures to assess their effectiveness.

- **S-4.8 Disaster Recovery.** Work with emergency service providers to implement post-disaster recovery plans to return public services to a state of normalcy, address ongoing hazard-specific mitigations, and assist community members in recovering from disasters.

Safety Element Programs

1. Drainage Master Plan

Historically, Yucaipa has been subject to intense flooding that has resulted in personal and economic damages in the community. In 1993 Yucaipa completed and adopted a master drainage plan (MPD) that specified $90 million worth of improvements to its stormwater facilities, including spillover detention and desilting basins. Yucaipa's MPD assesses planned improvements to flood control channels and detention basins; desilting basins; flood channel stabilization; and improvements to drainage facilities and infrastructure needed to provide protection from flooding events.

Action. *Continue to implement projects identified in the Master Plan of Drainage; amend plan as needed to maintain accuracy and relevance for flood planning purposes.*

2. Flood Plain Safety Overlay District Map

Yucaipa's Floodplain Safety Overlay District identifies areas within the city that need additional protection from flooding hazards. In accordance with FEMA regulations, two flood risks were identified. Floodplain Review Area 1 (FP 1) includes areas subject to a 100-year flood. Floodplain Review Area 1 (FP 2) includes areas between the 100-year flood and subject to a 500-year flood. These maps are used for planning purposes, including prioritizing capital improvements to reduce flooding risks and requiring enhanced development regulations for properties within a review area.

Action. *Continue to update plan as capital improvement projects are completed, risks are identified or modified, or flood insurance rate map revisions are made.*

3. Building and Development Standards

The Yucaipa Municipal Code contains enhanced building codes and development standards for projects located within the floodplain. Enforcement of these codes is a precondition for FEMA to make available flood insurance policies for Yucaipa property owners and businesses. Development projects may be subject to FP 1 or FP 2 regulations, flooding studies, or other mitigation. In certain areas where flood risks have not been defined by FEMA, the City Engineer may require additional studies or mitigation.

Action. *Maintain the floodplain management ordinance in accordance with the National Flood Insurance Program and require adherence to the ordinance and state and federal laws.*

4. Low Water Crossings

In 1999, the City Council adopted a resolution to prioritize projects that would eliminate low water crossings at several areas as a precondition for applying for federal grant funding to build bridges over the drainage channels and provide "all weather" crossing for traffic. These roads were always closed to traffic during significant storm events. Since then the City has built bridges or completed "low water crossing replacements" at 5 locations and the City is currently in the design and/or environmental phase for 6 other locations. In 2015, the City Council approved service level options to budget for improvements at the remaining low water crossings.

Action. *Continue to implement low water crossing replacement projects identified in the City's capital improvement program and authorizing ordinance.*

5. Flood Management Projects

Yucaipa's Master Plan of Drainage is the blueprint for how the City will protect the community from flooding through the construction of infrastructure. The City's Master Plan of Drainage (MPD) provides an assessment of drainage and infrastructure needs and a plan for the construction of detention basins and facilities to protect from flooding hazards. Yucaipa's Master Plan of Drainage is periodically updated, most recently in 2011 and 2008. Needed improvements to the City's drainage system are included in the City's capital improvement program and funded through the annual budget.

Action. *Continue the financing and construction of drainage improvements noted in the capital improvements program that are recommended in the Master Plan of Drainage.*

6. Flood Infrastructure Maintenance

Yucaipa's extensive network of drainage courses, detention basins, and storm drains requires periodic maintenance to minimize the potential for riverine and urban flooding. The San Bernardino Flood Control District is responsible for maintaining, cleaning, and repairing regional facilities, while the City is responsible for maintaining, cleaning, and repairing all local facilities. The California Department of Water Resources and

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County Flood Control are responsible for maintaining reservoirs in Yucaipa. To facilitate this maintenance effort, the County operates a master stormwater system maintenance program for regional facilities.

Action. *Maintain agreements to ensure proper clearing, maintenance, and repair of stormwater facilities, detention basins, and other infrastructure to protect against flooding.*

7. Fire Code Amendments

The City has adopted the latest edition of the California Fire Code, with all appendices. The City has also amended the code to address roadway and project access, fuel modification, brush clearance and vegetation management, building signage, and other features. Additional structural requirements have been added for projects in the fire review overlay district. These codes are generally consistent with regulations in the National Fire Protection Association, Board of Forestry and Fire Protection, Wildland-Urban Interface Code, etc. However, as conditions in Yucaipa and best practices change over time, a periodic review of City codes is warranted.

Action. *Review and revise, if necessary, City fire codes to accommodate applicable regulations of the Board of Forestry and Fire Protection, state law, and best practices.*

8. Fire Safety Overlay Districts

When Yucaipa incorporated in 1989, City leaders adopted portions of the County's Development Code, including fire safety overlay district requirements that are more stringent than most fire codes. Since then, the FR1 and FR2 overlay district requirements have been amended, but not in a comprehensive manner. Under state law, a city may adopt ordinances, rules, or regulations to provide fire prevention restrictions or regulations that are necessary or more stringent than state law to meet local fire conditions and needs. To implement the updated Safety Element, a comprehensive review of fire safety overlay district regulations is warranted.

Action. *Review and revise, if necessary, local fire overlay district regulations to accommodate applicable regulations of the Board of Forestry and Fire Protection, state law, and best practices.*

9. Water Supply for Wildland Areas

The City, CAL FIRE, and Yucaipa Valley Water District require that adequate water supplies be made available to address the water supply and fire flow needs for new development. However, citywide water supply standards have not been adopted for wildland areas. In wildland areas, CAL FIRE has access to emergency land use agreements, water tenders, and other provisions to supply water where needed. While CAL FIRE has the capability to address fire suppression needs in very high fire severity zones, the Board of Forestry and Fire Protection recommends that the City review standards (such as water supply standards for wildland areas) for consideration and incorporation.

Action. *Review and revise, if necessary, local municipal codes to accommodate water supply standards recommended by the Board of Forestry and Fire Protection.*

10. Subdivision Map Requirements

As a condition of map approval, the City requires that: 1) subdivision design shall provide for safe and ready access for fire and other emergency equipment and evacuation routes; 2) the subdivision shall be served by water supplies for fire protection in accordance with designated standards; and 3) in hazardous fire areas, all flammable or combustible vegetation shall be removed from around all structures, in accordance with the Fire Code. However, recently adopted codes (Government 66474.02) require additional findings to be made for the approval of a tentative or parcel map in very high fire severity zones.

Action. *Review and, if necessary, revise Yucaipa Municipal Code to incorporate subdivision map act requirements for tentative and parcel map approvals specified in Government Code 66474.02.*

11. Upgrade and Retrofit Program

Yucaipa's structures, streets, water infrastructure, and other features were built in accordance with fire, seismic, flooding, and other safety codes required at that time. The City strives to ensure that public buildings, roads, water infrastructure, and other features are built or retrofitted to meet required safety standards. However, there may be a need to retrofit older structures, buildings and infrastructure outside the purview of City responsibility, such as privately owned mobile homes, buildings, water facilities, and other infrastructure. The City will continue to explore options for grants, loans, and/or other funding mechanisms to address buildings, structures, and facilities needing upgrade.

Action. *Continue to upgrade public facilities in compliance with state and federal law. Explore grants, loans, and other mechanisms to encourage the retrofit of privately owned structures, buildings, infrastructure, and other features to meet current safety codes.*

12. Hazard Mitigation/Emergency Operations Plan Update

Yucaipa prepares and implements a Hazard Mitigation Plan (HMP) and Emergency Operations Plan (EOP) to protect the community from disasters. Both plans are updated regularly in accordance with state and federal law. The Safety Element identified potential evacuation routes, depending on the hazard. At the same time, the safety element will need to be updated in 2017 to address climate change and resiliency. To address these and other changing requirements, future updates of the EOP, HMP, and Safety Element are need to ensure that policies, procedures, and protocols will be mutually supportive and consistent with one another.

Action. *Review and, if necessary, revise the HMP and EOP to address protocols, procedures, and mapping for evacuation routes and overlay districts. Update the safety element to incorporate climate change and resiliency strategies from the HMP and revisions to the EOP that are made in subsequent updates.*

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Table S-4 Safety Implementation Programs

Programs	Implementation Actions and Progress			
	Action	Funding Source	Responsible Party	Time Frame
Program #1: Drainage Master Plan	Continue to implement projects identified in the Master Plan of Drainage; amend plan as needed to maintain accuracy and relevance for flood planning purposes.	General Fund; Drainage Fees	Yucaipa ED	Ongoing
Program #2: Floodplain Safety Overlay District Map	Continue to update plan as capital improvement projects are completed, risks are identified or modified, or flood insurance rate map revisions are made.	General Fund; Drainage Fees	Yucaipa ED	Ongoing
Program #3: Building and Development Standards	Maintain the floodplain management ordinance in accordance with the National Flood Insurance Program and require adherence to the ordinance and state and federal laws.	General Fund	Yucaipa ES	As part of triennial update
Program #4: Low Water Crossing	Continue to implement low water crossing replacement projects identified in the City's capital improvement program and authorizing ordinance.	General Fund	Yucaipa ED	2016–2020
Program #5: Flood Management projects	Continue the financing and construction of drainage improvements noted in the capital improvements program and recommended in the Master Plan of Drainage.	General Fund	Yucaipa ED	Ongoing
Program #6: Flood Infrastructure Maintenance	Maintain agreements to ensure proper clearing, maintenance, and repair of stormwater facilities, detention basins, and channels to protect against flood.	General Fund	Yucaipa PWD	Ongoing
Program #7: Fire Code Amendment	Review and revise, if necessary, city fire codes to accommodate applicable regulations of the Board of Forestry and Fire Protection, state law, and best practices.	General Fund	Yucaipa DSD Yucaipa Fire	As part of triennial update
Program #8: Fire Safety Overlay District	Review and revise, if necessary, fire overlay district regulations to address applicable regulations of the Board of Forestry and Fire Protection, state law, and best practices.	General Fund	Yucaipa DSD Yucaipa Fire	As part of triennial update
Program #9: Water Supply for Wildland Areas	Review and revise, if necessary, local municipal codes to accommodate water supply standards recommended by the Board of Forestry and Fire Protection.	General Fund	Yucaipa DSD Yucaipa Fire	2016–2020
Program #10: Subdivision Map Act Requirements	Review and, if necessary revise, Yucaipa Municipal Code to incorporate criteria for tentative and parcel map approvals specified in Government Code 66474.02.	General Fund	Yucaipa DSD	2016–2020
Program #11: Upgrade and Retrofit Program	Continue to upgrade public facilities in compliance with state and federal law. Explore grants, loans, and other mechanisms to encourage the retrofit of privately owned structures, buildings, infrastructure, and other features to meet current safety codes.	General Fund	Yucaipa DSD	2016–2020

Table S-4 Safety Implementation Programs

Programs	Implementation Actions and Progress			
	Action	Funding Source	Responsible Party	Time Frame
Program #12: Mitigation/Emergency Operations Plan Update	Review and, if necessary, revise the HMP and EOP to address protocols, procedures, and mapping for evacuation routes and overlay districts. Update the safety element to incorporate climate change and resiliency strategies from the HMP and revisions to the EOP that are made in subsequent updates.	General Fund	Yucaipa CCD	As required by state and federal law

3.2.2 Analysis of New and Revised Policies and Programs

The following analysis demonstrates that the new and revised policies and programs to the Safety Element of the Yucaipa General Plan Update would not introduce new significant impacts.

Geologic and Seismic Safety

Policy S-1.4 has minor editorial changes and would not introduce new significant impacts.

Policies S-1.5 and S-1.6 are revised to require compliance with seismic safety standards for critical infrastructures in addition to critical facilities. Policy S-1.6 has minor editorial changes to consolidate various utility companies. No substantive changes to these policies would introduce new significant impacts.

Flood Safety

Policy S-2.3 is slightly reworded to include lifeline services as one of the prohibited developments in 100-year floodplains. This would not introduce new significant impacts.

Policy S-2.4 is revised to more specifically state that future developments are required to comply with building, site and design codes in the California Building Code (CBC). This revision would not cause any new impacts.

Policy S-2.8 lists more public agencies that the City should engage in interagency coordination with regarding flood protection. The minor revision would not introduce new significant impacts.

Fire Safety

Policy S-3.2 establishes an Insurance Service Office Rating of 3 to maintain adequate levels of staffing, equipment, facilities, and training. This would help further minimize impacts of the proposed project on existing police services by Yucaipa Fire Department and the California Department of Forestry and Fire Protection (CAL FIRE).

Policy S-3.3 requires adherence to applicable fire codes and regulations, including those of the City's Fire Hazard Overlay District, and California Fire Code, and Policy S-3.4 requires adherence to fuel modification

and defensible space requirements. These policies would minimize potential project impacts related to urban fire and wildfire hazards.

Policies S-3.5 and S-3.6 would ensure future developments comply with subdivision requirements for ingress/egress improvements and street standards, and provide adequate water pressure systems and water distribution facilities to supply emergency firefighting needs. These policies would supplement other fire safety policies in protecting existing and future residents and structures from fire hazards. Policy S-3.7 also minimizes risk of fire hazards through strategic location, design and maintenance of critical facilities.

Policy S-3.8 related to public education on fire safety has been renumbered. The policy text has not changed.

Policy S-3.9 encourages interagency coordination with other agencies to address post-fire recovery activities and minimize damage.

Overall, these new and revised fire safety policies would enhance the City's fire protection services by providing adequate resources (i.e., staffing, equipment, facilities), fire prevention (i.e., fuel modifications, development standards), and interagency coordination. These policies would not introduce new significant impacts.

Emergency Preparedness

Policies S-4.1, S-4.2, S-4.6, and S-4.7 include minor editorial revisions that would not introduce new significant project impacts.

Policy S-4.3 promotes public education regarding emergency and disaster recovery for residents, business owners, and City staff, including support for the City's recently started CERT program. This would bolster the City's overall emergency preparedness and would be a beneficial project impact.

Policies S-4.4, S-4.5, and S-4.8 encourage interagency support and communication between the City and other jurisdictions, agencies, businesses, schools, and service providers during emergency response and recovery. These policies ensure the City had adequate support and aid during emergencies and disasters. Therefore, these policies would not introduce an adverse environmental impact.

Overall, the new and revised policies related to emergency preparedness would not introduce new significant environmental impacts.

Safety Element Programs

The Safety Element programs were added to the Public Safety Element of the Yucaipa General Plan Update to comply with Government Code Section 65302, which states that the safety element, upon the next revision of the housing element on or after January 1, 2009, shall establish a set of feasible implementation measures designed to carry out the goals, policies, and objectives. Of the 12 programs, six programs (Programs 1-6) are already being implemented by the City. The main actions for these programs are to continue implementing projects identified in the City's Master Plan of Drainage, low water crossing replacement projects, and other flood management projects (Programs 1, 4, and 5); updating the City's floodplain safety overlay district map (Program 2); maintaining building and development standards per the National Flood Insurance Program

(Program 3); and maintaining agreements with flood control entities (Program 6). Continuing these programs would not introduce any new significant environmental impact.

Programs 7 through 10 were added to the Safety Element in response to concerns raised by the California BFFP related to urban and wildland fire hazards. The programs would ensure city fire codes and development standards are continuously updated to reflect the most recent regulations of the BFFP, state law (Government Code Section 66474.02), and best practices. Inclusion of these programs related to fire safety would not introduce new significant impacts.

Implementation of Program 11 would encourage the City to explore funding sources to retrofit and upgrade existing structures, streets, and infrastructures to meet recently updated safety standards, and implementation of Program 12 would ensure the City's Safety Element, Emergency Operations Plan, and Hazard Mitigation Plan are regularly updated to be mutually supportive and consistent with one another. These programs would not introduce any new environmental impacts.

3.3 DEIR REVISIONS IN RESPONSE TO WRITTEN COMMENTS AND SAFETY ELEMENT REVISIONS

The following text has been revised in response to comments received on the DEIR and the policies and programs integrated into the Safety Element identified in Section 3.2 above.

Page 3-30, Chapter 3, *Project Description*. The following table has been changed to reflect a revised Community Design and Land Use Element Policy CDL-11.5. This policy is revised to clarify the intent of the City's mobile home park overlays and to encourage the preservation and/or transition of properties depending on their current and future status. The Mobile Home Park Overlay District 3 (MHP3) referenced in revised Policy CDL-11.5 is a proposed overlay district and is part of the General Plan Update. Revisions to the Overlay District do not affect the underlying land use designations and buildout statistics used throughout the EIR. The other revisions to Policy CDL-11.5 are editorial clarifications and, together, would not result in any new environmental impacts.

Table 3-5 General Plan Update Policies

Policy No.	Policy
General Plan Chapter 11. Community Design and Land Use Element	
Goal CDL-11: PRESERVATION AND REUSE. Revitalization, reuse of structures, and transition of land uses where appropriate to materially improve structures and the visual quality in Yucaipa.	
• Policy CDL-11.1 – Community Preservation. Encourage the rehabilitation of neighborhoods and commercial and industrial areas, and the application of code compliance efforts to preserve and maintain community quality of life.	
• Policy CDL-11.2 – Land Use Change. Where opportunities for land use change arise, seek input from property owners, the surrounding neighborhood or district, and other stakeholders during the consideration process so as to determine appropriateness or inform strategies.	
• Policy CDL-11.3 – Project Compatibility. Strive to ensure appropriate transitions in scale, density, and intensity between residential and nonresidential uses; between adjacent residences or uses within a defined neighborhood; and within areas of different densities.	
• Policy CDL-11.4 – Reuse of Underutilized Land. Encourage the transition of underutilized land uses, projects in significant disrepair, or marginal uses to other uses offering greater community benefits, provided that appropriate transitions and design treatments are	

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Table 3-5 General Plan Update Policies

Policy No.	Policy

incorporated.

- Policy CDL-11.5 – Mobile Home Park Transition. The City will complete a study evaluating the potential reuse of certain mobile home parks, removal of the mobile home park overlay, and/or transition to other land uses; and establish standards to guide consideration of park reuse requests through a closure mitigation ordinance or other regulations. Provisions for potential mobile home park reuse shall include, but shall~~, including but~~ not be limited to the following~~ factors:~~

  a) The mobile home park shall be designated within the mobile home park overlay district 3 (MHP3) or obtain such designation.

  ~~a~~b) Requests for removal from the overlay district and land use redesignation initiated by the property owner.

  ~~b~~c) A mobile home park is no longer economically viable or the property has a higher and better use that facilitates other policies and goals of the City.

  ~~c~~d) Long-standing or repeated substandard conditions or code enforcement problems in a mobile home park impair public health and safety.

  ~~d~~e) Rehabilitation and upgrades needed to remedy substandard conditions are cost-prohibitive.

  ~~e~~f) Adherence to state law and local policies and regulations, including but not limited to the City's mobile home rent stabilization ordinance and housing policies and goals.

Page 3-39, Chapter 3, *Project Description*. The following table has been changed to reflect the new and revised Safety Element policies listed above in Section 3.2, *New and Revised General Plan Policies and Programs*. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hazards, emergency services, and hydrology in the City of Yucaipa.

Table 3-5 General Plan Update Policies

Policy No.	Policy
General Plan Chapter 6. Public Safety Element	
GOAL S-1: GEOLOGIC AND SEISMIC SAFETY. Adequate protection of public health and safety; property; and economic, social, and service functions from seismic and geologic hazards.	

- Policy S-1.1 – Geologic Hazard Identification. Maintain and continuously update the City's geologic and seismic hazards map in concert with updates from the California Geologic Survey and local surveys.
- Policy S-1.2 – Geotechnical Analysis. In areas within the City's Geologic and Seismic Hazards Overlay District or as required by the Building Official, require development proposals to include a geotechnical hazard analysis.
- Policy S-1.3 – Alquist-Priolo Act. Enforce development requirements, such as seismic study analyses, project siting, and project design features for proposed developments near active faults pursuant to the Alquist-Priolo Act.
- Policy S-1.4 – Building Codes. Require adherence to the latest California Building Code regulations and regulations in the Geologic and Seismic Hazards Overlay District; update codes and ordinances periodically for latest advances.
- Policy S-1.5 – City Critical Infrastructure and Facilities~~ and Structures~~. Locate, design, maintain, and upgrade critical infrastructure and facilities (police, medical facilities, fire, roads, reservoirs, etc.) to ~~minimize susceptibility to~~ required seismic safety standards~~ and geologic hazards~~.
- Policy S-1.6 – Other ~~Agency~~ Critical Infrastructure and Facilities~~ and Services~~. Encourage Caltrans, CAL FIRE, school~~s district, CAL FIRE, water districts, California Department of Water Resources~~, utility companies, and ~~utilities~~ other relevant agencies to comply with seismic safety standards for critical infrastructure and facilities ~~providing critical infrastructure to ensure facilities are capable of withstanding earthquakes~~.
- Policy S-1.7 – Retrofitting Buildings. Encourage owners of potentially hazardous buildings (e.g., mobile homes) to assess seismic

Table 3-5 General Plan Update Policies

Policy No.	Policy
	vulnerability and conduct seismic retrofitting as necessary to improve resistance to earthquakes.
	• Policy S-1.8 – Natural Topography. Limit grading for future developments to the minimum amount needed to preserve Yucaipa's natural topography, preserve vegetation, and maintain soil and slope stability.
	• Policy S-1.9 – Public Education and Preparedness. Compile and distribute earthquake preparedness information to Yucaipa residents and business owners; conduct periodic inspections and preparedness events.
	GOAL S-2: FLOOD SAFETY. A community well versed in flood control hazards and protected from or minimally disrupted by flooding and inundation hazards.
	• Policy S-2.1 – Flood Hazard Identification. Maintain and continuously update the City's floodplain safety hazards map in concert with FEMA map amendments and improvements to local drainage facilities.
	• Policy S-2.2 – Floodplain Development. Promote the dedication of land within the 100-year floodplain and adjacent areas for park, multi-purpose trails, recreational uses, open spaces, and habitat conservation/mitigation.
	• Policy S-2.3 – Land Use Regulations~~Prohibited Land Uses~~. Prohibit development of new ~~both~~ essential and critical facilities and lifeline services in ~~facilities that use, store, transport, or dispose hazardous materials from developing within~~ the 100-year ~~or 500-year~~ floodplain. Prohibit facilities that use, store, transport or dispose of hazardous materials from developing in the Floodplain Safety Overlay District.
	• Policy S-2.4 – Building Codes. Require adherence to the latest building, site, and design codes in the California Building Code, FEMA flood control guidelines, and Floodplain Safety Overlay District to avoid or minimize the risk of flooding hazards in the community.~~; update codes periodically for latest advances.~~
	• Policy S-2.5 – Special Flood Hazard Areas. Support policies, procedures, and recommendations of the National Flood Insurance Program for SFHAs with respect to zoning, subdivision, building codes, and overlays.
	• Policy S-2.6 – Flood Control Facilities. Prioritize and fund maintenance and construction of improvements to drainage facilities and roadways identified in the City's Master Plan of Drainage and Hazard Mitigation Plan.
	• Policy S-2.7 – Stormwater Runoff. Require new developments that add substantial amounts of impervious surfaces to integrate low impact development best management practices to reduce stormwater runoff.
	• Policy S-2.8 – Interagency Coordination. Establish and maintain cooperative working relationships among public agencies with responsibility for flood protection, including ~~Collaborate with the~~ San Bernardino County Flood Control District, County Public Works, and other entities.~~ to maintain and improve the City's flood control channels and detention basins.~~
	• Policy S-2.9 – Public Education and Preparedness. Compile and distribute flooding prevention information to Yucaipa residents and business owners; conduct periodic inspections and preparedness events.
	GOAL S-3: FIRE SAFETY. A community that implements proactive fire hazard abatement strategies and, as a result, is minimally impacted by wildland and urban fires.
	• Policy S-3.1 – Fire Hazard Identification. Maintain and continuously update the City's fire hazard overlay map for changes in fire hazard severity zones overlay district consistent with changes in hazard designations by CALFIRE.
	• Policy S-3.2 – Fire Service Levels. Provide appropriate staffing levels, equipment, ~~and~~ facilities, and training to maintain an Insurance Service Office Rating of 3~~a community ISO 3 rating~~; continue to strive to meet the latest industry standards in fire safety.~~NFPA-recommended response times for fires and emergency paramedic response.~~
	• Policy S-3.3 – Fire ~~and Building~~ Codes. Require adherence to applicable fire ~~standards and building~~ codes for buildings and structures, fire access, and other standards in accordance with ~~in accordance with the City's municipal code,~~ Fire Hazard Overlay Districts, California Fire Code, and municipal codes; encourage retrofit of nonconforming land uses~~California Building Code~~.
	• Policy S-3.4 – Fuel Modification. Require adherence to ~~Enforce~~ fuel modification ~~standards~~ and defensible space requirements ~~around structures~~ to reduce wildfire hazards; work with CAL FIRE to coordinate fuelbreaks in very high fire severity zones~~ and to protect Yucaipa's urban area from potential wildfire spreading~~.
	• Policy S-3.5 – Permit Approvals. Ensure compliance with the Subdivision Map Act requirements for structural fire protection and suppression services, subdivision requirements for on/off-site improvements, ingress and egress, street standards, and other concerns. ~~Fire Abatement Features. Encourage residential, commercial, and industrial developments to implement fire-hazard-reducing project designs and features (e.g., fire resistive materials, vegetation).~~
	~~• Policy S-3.6 Development Review. Allow CAL FIRE to review future development proposals for impacts to fire facilities and compatibility with high fire hazard severity zones.~~

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Table 3-5 General Plan Update Policies

Policy No.	Policy
	• Policy S-3.6~~7~~ – Adequate Water Supply and Redundancy. ~~Ensure that~~ Work with public and private water distribution and supply facilities ~~have~~ to ensure adequate water capacity and system redundancy ~~reliability~~ to supply emergency firefighting needs~~ beyond everyday demands~~.
	• Policy S-3.7 – Critical Facilities and Structures. Locate, design, maintain, and upgrade critical facilities, structures, and infrastructure (police stations, roads, utilities, reservoirs, etc.) to minimize exposure to fire hazards.
	• ~~Policy S-3.8 – Aid Agreements. Participate in mutual aid and automatic aid agreements with adjoining fire service providers, emergency medical service providers, and other agencies providing critical services.~~
	• Policy S-3.8~~9~~ – Public Education. Educate the community about fire prevention and suppression; work with other agencies and private interests to educate private landowners on fire-safe measures to achieve a low risk condition.
	• Policy S-3.9 – Post-fire Treatment. Work with CAL FIRE, USFS, USGS, and applicable nongovernmental agencies to create a plan to address post-fire recovery activities and projects that allow burned areas to fully recover and minimize repetitive losses and further damage.
GOAL S-4: EMERGENCY PREPAREDNESS. A comprehensive preparedness program that anticipates the potential for disasters, maintains continuity of life-support functions, and uses community-based disaster response planning	
	• ~~Policy S-4.1 – Land Use Patterns and Facilities. Maintain land use patterns and building standards that minimize exposure to natural or human-caused hazards and contribute to a "disaster-resistant" community.~~
	• Policy S-4.1~~2~~ – Hazard Planning. Update City hazard mitigation and emergency operations plan on a timely basis; coordinate with relevant agencies responsible for updating water, fire, or other hazard mitigation plans. Integrate updates into the safety element.
	• Policy S-4.2~~3~~ – Training. ~~Facilitate~~ Require training of City emergency response personnel through coursework, emergency operations plan orientation, disaster service training, emergency operations center training, and other ~~training~~topics.
	• Policy S-4.3~~4~~ – Public Education. Promote education and events that reinforce the responsibility and capability of ~~all~~ residents, business owners, and City staff to ~~individually and collectively~~ plan for, respond to, and recover from emergencies and disasters; implement and support local CERT programs.
	• Policy S-4.4~~5~~ – Interagency Support. Sustain mutual aid and automatic aid agreements through the California Disaster and Civil Defense Master Mutual Aid Agreement, and with adjacent service providers (fire, flooding, earthquake, emergency medical, etc.)~~to provide emergency aid to parties as needed~~.
	• Policy S-4.5~~6~~ – Communications. Maintain ~~effective~~ communication protocols and systems for coordinating emergency service providers, public agencies, ~~neighboring cities,~~ business, schools, utilities, and other affected parties ~~agencies for responding~~ to respond in an effective manner to emergencies and disasters.
	• Policy S-4.6~~7~~ – Critical Facilities and Lifeline Services. Coordinate~~Work~~ with various service providers to ensure that essential facilities, lifeline services, and infrastructure (water, sewer, communication, power, roads, etc.) are capable of responding following a disaster.
	• Policy S-4.7~~8~~ – Emergency Access and Evacuation. Maintain and update, as needed, emergency access, protocols, and evacuation routes for residents, business, and equine and large animals; regularly exercise evacuation protocol and procedures to assess their effectiveness.
	• Policy S-4.8~~9~~ – Disaster Recovery. Work with emergency service providers to implement post-disaster ~~Foster provision of~~ recovery plans ~~programs that provide relief to individuals and communities during times of emergency, so that necessary actions are taken~~ to return public services to a state of normalcy, address ongoing hazard-specific mitigations, and assist community members in recovering from disaster.

Page 5.4-44, Section 5.4, *Biological Resources*. The following mitigation measure is revised in response to Comment A1-1 from the California Department of Fish and Wildlife. This is a minor technical correction intended to reflect current methodology for biological resources surveys by the CDFW and would not result in a new significant environmental impact.

4-1 The City of Yucaipa shall require applicants for future development projects that disturb undeveloped land to conduct a biological resources survey to determine if sensitive biological resources would be impacted. The biological resources survey shall be prepared by a qualified biologist. The biological resources survey shall include, but not be limited to:

- An analysis of available literature and biological databases, such as CNDDB, to determine sensitive biological resources that have been reported historically from the proposed development project vicinity,
- A review of current land use and land ownership within the proposed development project vicinity,
- An assessment and mapping of vegetation communities present within the proposed development project vicinity, including adjoining habitat areas susceptible to direct or indirect impacts offsite, by following the then current standard protocols,
- An evaluation of potential local and regional wildlife movement corridors.
- A general assessment of potential jurisdictional areas, including wetlands and riparian habitats.

If the proposed development project site supports vegetation communities that may provide habitat for plant or wildlife species, a focused habitat assessment shall be conducted by a qualified biologist to determine the potential for special status plant and/or animal species to occur within or adjacent to the proposed development project area.

If one or more special status species has the potential to occur within the proposed development project area, focused species surveys shall be conducted to determine the presence/absence of these species to adequately evaluate potential direct and/or indirect impacts to these species. Focused species surveys shall be conducted by a qualified biologist, during the season(s) and time(s) at which the species in question is most likely to be present and identifiable (e.g., during blooming and/or fruiting for plants, at dawn and dusk for crepuscular species, during times of year when migratory species are expected to be present in the region, etc.). The focused surveys shall follow the protocols recommended by the California Department of Fish and Wildlife (CDFW) and/or the United States Fish and Wildlife Service (USFWS). In cases where there are no specific recommended survey methodology, survey protocols based on the best available scientific knowledge shall be established.

If construction activities are not initiated ~~immediately after~~ within one year of focused surveys ~~have been~~ being completed, additional pre-construction special status species surveys may be required to assure impacts are avoided or minimized to the extent feasible. If pre-construction activities are required, a qualified biologist would perform these surveys as required for each special status species that is known to occur or has a potential to occur within or adjacent to the proposed development project area.

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The results of the biological survey shall be presented in a biological survey letter report for proposed development projects with no significant impacts, or in a biological technical report for proposed development projects with significant impacts that require mitigation to reduce the impacts to below a level of significance.

Page 5.4-47, Section 5.4, *Biological Resources*. The following mitigation measure is added to the EIR in response to Comment A1-4 from the California Department of Fish and Wildlife. This is a minor technical addition intended to further reduce the potential for wildlife hazards related to construction activities and would not result in a new significant environmental impact.

4-7 During construction activities, workers shall reduce potential wildlife hazards by implementing the following preventative measures to ensure wildlife does not become trapped, entangled, injured, or poisoned by certain construction structures, equipment, and/or substances:

- Structures in which wildlife may become trapped (e.g., open pipes, pits, trenches, etc.) shall be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp shall be provided to allow any wildlife that falls in to safely escape.
- Debris piles, construction materials, equipment, and other items that may be used as wildlife refuge shall be inspected for wildlife at the start of each work day and prior to disturbance. If wildlife is discovered, it shall either be moved out of harm's way by a qualified biologist, or allowed to move off of the project site on its own.
- Nets and mesh shall be made of loose weave material that is not fused at the intersections of the weave, as nets with welded weaves present an entanglement risk.
- Toxic materials and garbage shall be removed from the work site and safely stored or disposed of at the end of each work day.

Page 5.4-47, Section 5.4, *Biological Resources*. The following mitigation measure is added to the EIR in response to Comment A1-5 from the California Department of Fish and Wildlife. This is a minor technical correction intended to protect open space areas adjacent to future project construction and operations activities. This mitigation measure would be beneficial in reducing biological impacts of the proposed project and would not result in a new significant environmental impact.

4-8 To reduce indirect impacts, future proposed projects constructed adjacent to open space areas shall implement the following measures:

- If the project has the potential to affect sensitive biological resources (e.g., nesting birds) by increasing ambient Noise levels, a qualified biologist shall be contracted to implement appropriate avoidance measures, such as sound walls, buggers, and changes in project phasing or timing.
- Landscaping in projects near open space areas shall avoid the use of exotic plants, particularly invasive species, to the greatest extent possible to prevent infestation of the adjacent lands.
- Open space-adjacent projects with the potential to introduce or increase the presence of domestic animals, such as cats and dogs, or animals associated with urban development (e.g., rats), shall include an assessment of the potential impacts associated with an increased in domestic and/or urban animals in the area. Appropriate avoidance and minimization measures may include, but are not limited to, the use of exclusion fencing, requirements to keep pets leashed, feral animal control programs, spay/neuter programs, homeowner education programs, and programs designed to minimized accessibility of pest attractants (e.g., food waste) shall be considered.

Page 5.4-47, Section 5.4, *Biological Resources*. The following mitigation measure is revised in response to Comment A1-2 from the California Department of Fish and Wildlife. This is a minor technical correction intended to reflect current methodology for preconstruction general nesting bird surveys by the CDFW and would not result in a new significant environmental impact.

4-~~7~~9 The City of Yucaipa shall require applicants for future development projects to contract with a qualified biologist to conduct a preconstruction general nesting bird survey within all suitable nesting habitats that may be impacted by active construction during general avian breeding season (February 1 through August 31) or pursuant to current generally accepted protocols. The preconstruction surveys shall be conducted no more than 3~~7~~ days prior to initiation of construction. If no active avian nests are identified within the proposed development project area or within a 300-foot buffer of the proposed development project area, no further mitigation is necessary. If active nests of avian species covered by the MBTA are detected within the proposed development project area or within a 300-foot buffer of the proposed development project area, construction shall be halted until the young have fledged, until a qualified biologist has determined the nest is inactive, or until appropriate mitigation measures that respond to the specific situation have been developed and implemented in consultation with the regulatory agencies. Based on the discretion of the qualified biologist, the 300-foot buffer may be expanded as appropriate to the species.

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Page 5.4-47, Section 5.4, *Biological Resources*. The following mitigation measure is added to the EIR in response to Comment A1-3 from the California Department of Fish and Wildlife. This is a minor technical addition intended to reduce potential impacts to bat roosting habitat and would not result in a new significant environmental impact.

4-10 If a project is determined to have the potential to affect bat roosting habitat (e.g., bridges, culverts, palm trees, hollow trees, buildings, crevices, caves, mines, etc.), potential roosts shall be surveyed by a qualified bat biologist prior to initiating project activities. If bats are found, the following avoidance measures shall be implemented:

- If bats are present or potentially present, then work on top of, under, around, or near the roosting structure(s) shall be scheduled outside the bat maternity season (general between March 1 and September 1 with variations depending on species).
- Gasoline and diesel engines shall not be stored or operated under any bridge.
- Night work, or use of night lighting, shall be avoided within the vicinity of the roosting structure(s).
- Exclusionary devices shall not be used if bats may be raising young (e.g., during bat maternity season). If exclusionary devises are used, they shall not contain mesh components that may entangle and/or injure bats. Exclusionary devices shall only be used following consultation with and approval by the CDFW, and under the direct guidance of a CDFW-approved bat biologist.

Page 5.6-19, Section 5.6, *Geology and Soils*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to geology and soil in the City of Yucaipa.

- **Policy S-1.3 – Alquist-Priolo Act.** Enforce development requirements, such as seismic study analyses, project siting, and project design features for proposed developments near active faults pursuant to the Alquist-Priolo Act.
- **Policy S-1.4 – Building Codes.** Require adherence to the latest California Building Code regulations and regulations in the Geologic and Seismic Hazards Overlay District; update codes and ordinances periodically for latest advances.
- **Policy S-1.5 – City Critical Infrastructure and Facilities ~~and Structures~~.** Locate, design, maintain, and upgrade critical infrastructure and facilities (police, medical facilities, fire, roads, reservoirs, etc.) to

~~minimize susceptibility to~~ required seismic safety standards for critical infrastructure and facilities~~and geologic hazards~~.

- **Policy S-1.6 – Other ~~Agency~~ Critical Infrastructure and Facilities ~~and Services~~.** Encourage Caltrans, CAL FIRE, schools~~ district, CAL FIRE, water districts, California Department of Water Resources~~, utility companies, and ~~utilities~~ other relevant agencies to comply with seismic safety standards for critical infrastructure and facilities~~providing critical infrastructure to ensure facilities are capable of withstanding earthquakes~~.

- **Policy S-1.7 – Retrofitting Buildings.** Encourage owners of potentially hazardous buildings (e.g., mobile homes) to assess seismic vulnerability and conduct seismic retrofitting as necessary to improve resistance to earthquakes.

Page 5.8-19, Section 5.8, *Hazards and Hazardous Materials*. The following text has been added to include discussion on the protection and preservation of public facilities, critical infrastructure, and lifeline services, and the locations of evacuation routes in Yucaipa. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hazards in the City of Yucaipa.

Emergency Preparedness

The Yucaipa Fire Department and the City of Yucaipa General Services/City Clerk Department are responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with other City of Yucaipa departments as well as local and state agencies.

Disaster planning and recovery depend on a reliable network of public facilities, critical infrastructure, and lifeline services. Public facilities include police and fire stations, schools, community centers, and emergency operations and communication centers. Critical infrastructure includes generators, water and sewer lines, utilities, transportation routes, etc. Lifeline services critical to health and safety include water, sewer, energy, waste disposal, communications, and others. Figure 5.8-2, *Critical Facilities and Infrastructure*, identifies critical facilities and infrastructure.

With its location in the foothills and near wildlands, Yucaipa is also subject to natural hazards. These include 100-year floodplains, active faults and geological hazards, very high fire severity zones, and other natural hazards. During an emergency, evacuation routes are needed to move people to safe locations and move equipment to affected hazard areas. Yucaipa has three levels of evacuation routes, depending on the emergency.

- **Local Routes**. Eight arterials (Bryant, Oak Glen, Yucaipa, 14th Street, Wildwood Canyon, County Line, Calimesa Boulevard, and Mesa Grande) are designated as evacuation routes.

- **Regional Routes**. The San Bernardino County General Plan has designated Oak Glen Road as the primary regional evacuation routes for the Oak Glen Mountain community.

- **Federal and State Routes**. Interstate 10 is the primary federal evacuation route while Highway 38 is the primary state-designated evacuation route from the mountain communities.

Figure 5.8-3, *Evacuation Routes in Yucaipa*, identifies the local, regional, and state/federal evacuation routes in the city.

City of Yucaipa Emergency Operations Plan

The City of Yucaipa Emergency Operations Plan (EOP) is an all-hazard plan describing how the City will organize and respond to various emergency incidents. The EOP identifies hazards and responses; organizational structures, roles, and responsibilities; and other key activities of government during a disaster (Yucaipa 2012).

Page 5.8-21, Section 5.8, *Hazards and Hazardous Materials*. The following text has been revised to reflect the modified figure number for Figure 5.8-4, *Fire Hazards*. The revised figure number is an editorial correction and would have no environmental impact.

Fire Hazards Severity Zones

The geographic distribution of fire risk discussed above is reflected in the fire hazard severity zones mapped by CAL FIRE and other agencies and is also shown in Figure 5.8-~~2~~4, *Fire Hazards*. The City of Yucaipa, which is considered a "local responsibility area," is mapped as having moderate to very high wildland fire risks. Portions of the City in very high fire hazard severity zones are along the southwest, north, and eastern boundaries. These areas extend into very high fire hazard severity zones in state and federal responsibility areas outside the City (CAL FIRE 2008).

Yucaipa Fire Safety Overlay Districts

The Yucaipa Fire Department, via a contract with CAL FIRE, prepares a Fire Unit plan to provide fire protection and emergency medical services to the community. The City of Yucaipa adopted a Fire Safety Overlay District (FR) in 1989, which identifies two types of areas that must take special fire protection measures, based on Section 85.020220 of the City's development code. Figure 5.8-~~2~~4, *Fire Hazards*, shows the two review areas. As part of the General Plan Update, the Fire Safety Overlay District would be updated to be consistent with the fire severity areas identified by CAL FIRE.

Page 5.8-36, Section 5.8, *Hazards and Hazardous Materials*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hazards in the City of Yucaipa.

The proposed General Plan Update Safety Element includes goals and policies to minimize potential wildfire impacts in Yucaipa. Implementation of Public Safety Element Policies S-3.1 through S-3.9 would help encourage fire hazard abatement. Policy S-3.1 supports maintaining and updating the City's fire hazard overlay map in concert with CAL FIRE hazard designations and local development patterns. Policy S-3.2 addresses staffing and equipment adequacy of the Yucaipa Fire Department to ensure adequate fire and emergency response times. Policies S-3.3 through S-3.5 require adherence to fire and building codes and fuel modification standards and encourage developments to implement fire abatement project designs and features. ~~Policy S-3.6 allows the Yucaipa Fire Department and CAL FIRE to review future development proposals for potential impacts to fire facilities and compatibility with high fire hazard severity zones.~~ Policy S-3.6~~7~~ addresses adequate water supply for emergency firefighting needs. Policy S-3.7~~8~~ encourages ~~mutual and automatic aid agreements with other fire service and emergency medical service providers~~locating critical facilities and structures away from fire hazards, ~~and~~ Policy S-3.8~~9~~ supports educating the community about fire prevention and suppression, and Policy S-3.9 encourages interagency coordination for post-fire recovery activities.

Page 5.8-36, Section 5.8, *Hazards and Hazardous Materials*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hazards in the City of Yucaipa.

The following is a list of the policies from the Yucaipa General Plan Update that are intended to reduce potentially significant adverse effects related to hazards and hazardous materials.

Public Safety Element

- **Policy S-3.1 – Fire Hazard Identification.** Maintain and continuously update the City's fire hazard overlay map for changes in fire hazard severity zones overlay district consistent with changes in hazard designations by CALFIRE.

- **Policy S-3.2 – Fire Service Levels.** Provide appropriate staffing levels, equipment, ~~and~~ facilities, and training to maintain an Insurance Service Office Rating of 3~~a community ISO 3 rating~~; continue to strive to meet the latest industry standards in fire safety.~~NFPA-recommended response times for fires and emergency paramedic response.~~

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- **Policy S-3.3 – Fire Codes.** Require adherence to applicable fire codes for buildings and structures, fire access, and other standards in accordance with Fire Hazard Overlay Districts, California Fire Code, and municipal codes; encourage retrofit of nonconforming land uses.

- **Policy S-3.4 – Fuel Modification.** Require adherence to ~~Enforce~~ fuel modification ~~standards~~ and defensible space requirements ~~around structures~~ to reduce wildfire hazards; work with CAL FIRE to coordinate fuelbreaks in very high fire severity zones ~~and to protect Yucaipa's urban area from potential wildfire spreading~~.
- **Policy S-3.5 – Permit Approvals.** Ensure compliance with the Subdivision Map Act requirements for structural fire protection and suppression services, subdivision requirements for on/off-site improvements, ingress and egress, street standards, and other concerns. ~~**Fire Abatement Features.** Encourage residential, commercial, and industrial developments to implement fire-hazard-reducing project designs and features (e.g., fire resistive materials, vegetation).~~

- ~~**Policy S-3.6 – Development Review.** Allow CAL FIRE to review future development proposals for impacts to fire facilities and compatibility with high fire hazard severity zones.~~

- **Policy S-3.6~~7~~ – Adequate Water Supply and Redundancy**. ~~Ensure that~~ Work with public and private water distribution and supply facilities ~~have~~ to ensure adequate water capacity and system redundancy ~~reliability~~ to supply emergency firefighting needs ~~beyond everyday demands~~.

- ~~**Policy S-3.8 – Aid Agreements.** Participate in mutual aid and automatic aid agreements with adjoining fire service providers, emergency medical service providers, and other agencies providing critical services.~~

- **Policy S-3.8~~9~~ – Public Education.** Educate the community about fire prevention and suppression; work with other agencies and private interests to educate private landowners on fire-safe measures to achieve a low risk condition.

- ~~**Policy S-4.1 – Land Use Patterns and Facilities.** Maintain land use patterns and building standards that minimize exposure to natural or human caused hazards and contribute to a "disaster resistant" community.~~

- **Policy S-4.1~~2~~ – Hazard Planning.** Update City hazard mitigation and emergency operations plan on a timely basis; coordinate with relevant agencies responsible for updating water, fire, or other hazard mitigation plans. Integrate updates into the safety element.

- **Policy S-4.2~~3~~ – Training.** ~~Facilitate~~ Require training of City emergency response personnel through coursework, emergency operations plan orientation, disaster service training, emergency operations center training, and other topics~~training~~.

- **Policy S-4.34 – Public Education.** Promote education and events that reinforce the responsibility and capability of ~~all~~ residents, business owners, and City staff to ~~individually and collectively~~ plan for, respond to, and recover from emergencies and disasters; implement and support local CERT programs.

- **Policy S-4.45 – Interagency Support.** Sustain mutual aid and automatic aid agreements through the California Disaster and Civil Defense Master Mutual Aid Agreement, and with adjacent service providers (fire, flooding, earthquake, emergency medical, etc.) ~~to provide emergency aid to parties as needed~~.

- **Policy S-4.56 – Communications.** Maintain ~~effective~~ communication protocols and systems for coordinating emergency service providers, public agencies, ~~neighboring cities,~~ business, schools, utilities, and other ~~agencies~~ affected parties to respond in an effective manner~~for responding~~ to emergencies and disasters.

- **Policy S-4.67 – Critical Facilities and Lifeline Services.** Coordinate~~Work~~ with various service providers to ensure that essential facilities, lifeline services, and infrastructure (water, sewer, communication, power, roads, etc.) are capable of responding following a disaster.

- **Policy S-4.78 – Emergency Access and Evacuation.** Maintain and updated, as needed, emergency access, protocols, and evacuation routes for residents, business, and equine and large animals; regularly exercise evacuation protocol and procedures to assess their effectiveness.

- P**olicy S-4.89 – Disaster Recovery.** Work with emergency service providers to implement post-disaster ~~Foster provision of~~ recovery plans~~programs~~ ~~that provide relief to individuals and communities during times of emergency, so that necessary actions are taken~~ to return public services to a state of normalcy, address ongoing hazard-specific mitigations, and assist community members in recovering from disaster.

Page 5.9-6, Section 5.9, *Hydrology and Water Quality*. The following text has been changed to reflect the revised figure title for Figure 5.9-2, *Drainage and Recharge Facilities*. The figure title revision is an editorial correction and would have no environmental impact.

The City updated the Master Plan of Drainage (MPD) 2011. The approved study allows staff to use the information as a new basis for design of all future drainage improvement projects within the City. A map of the drainage facilities within the General Plan area is provided as Figure 5.9-2, *Drainage and Recharge Facilities*. The possibility of reducing drainage flows downstream by adding detention basin facilities upstream will result in cost savings for future drainage improvement projects while enhancing water quality, groundwater recharge, aesthetics, and reducing environmental impacts throughout the system. The results of the MPD update indicate that it will result in a substantive reduction in peak flow rates during a 100-year design storm (Yucaipa 2014b).

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Page 5.9-15, Section 5.9, *Hydrology and Water Quality*. The following text has been revised to reference a new figure added to the section—Figure 5.9-4c, *Flood Hazard Zones (FEMA, Map Revisions and DWR)*. The additional text and figure provide more context to flood hazard zones designated by various agencies, including the Federal Emergency Management Agency and the Department of Water Resources. The new figure would not introduce any new environmental impacts.

FEMA determines floodplain zones to assist cities in mitigating flooding hazards through land use planning. FEMA also outlines specific regulations for any construction in a 100-year floodplain, an area that has a 1 percent chance of being inundated during a 12-month period. This has been established as the base flood for purposes of floodplain management measures. The FIRMs for the General Plan area were prepared in 2008 (FIRM Nos. 06071C8740H and 06071C8745H.) The flood hazard zones within the General Plan area are shown on Figure 5.9-4a, *Flood Hazard Zones*. FIRM No. 06071C8740H was revised by the letter of map revision in 2014, since much of the channel in Dunlap Acres no longer poses a hazard after completion of the Oak Glen Creek detention basin. The revised flood hazard zones in the General Plan area are shown on Figure 5.9-4b, *Flood Hazard Zones with Approved Letter of Map Revision*. ~~This EIR uses the revised map for the environmental analysis.~~ An additional figure, Figure 5.9-4c, *Flood Hazard Zones (FEMA, Map Revisions, and DWR)*, shows flood hazard zones designated by FEMA and areas mapped by the Department of Water Resources (DWR) as having a potential for a 1 percent chance of being inundated during a 12-month period.

Page 5.9-27, Section 5.9, *Hydrology and Water Quality*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hydrology in the City of Yucaipa.

In addition, the General Plan Update includes several policies that would reduce impacts from flooding:

- **Policy S-2.1 – Flood Hazard Identification.** Maintain and continuously update the City's floodplain safety hazards map in concert with FEMA map amendments and improvements to local drainage facilities.

- **Policy S-2.2 – Floodplain Development.** Promote the dedication of land within the 100-year floodplain and adjacent areas for park, multi-purpose trails, recreational uses, open spaces, and habitat conservation/mitigation.

- **Policy S-2.3 – ~~Prohibited~~ Land ~~Uses~~Use Regulations.** Prohibit development of new~~both~~ essential and critical facilities and lifeline services in ~~facilities that use, store, transport, or dispose hazardous materials from developing within~~ the 100-year ~~or 500-year~~ floodplain. Prohibit facilities that use, store, transport or dispose of hazardous materials from developing in the Floodplain Safety Overlay District.

- **Policy S-2.4 – Building Codes.** Require adherence to the latest building, site, and design codes in the California Building Code, FEMA flood control guidelines, and Floodplain Safety Overlay District to avoid or minimize the risk of flooding hazards in the community.~~; update codes periodically for latest advances.~~

- **Policy S-2.5 – Special Flood Hazard Areas.** Support policies, procedures, and recommendations of the National Flood Insurance Program for SFHAs with respect to zoning, subdivision, building codes, and overlays.

- **Policy S-2.6 – Flood Control Facilities.** Prioritize and fund maintenance and construction of improvements to drainage facilities and roadways identified in the City's Master Plan of Drainage and Hazard Mitigation Plan.

- **Policy S-2.7 – Stormwater Runoff.** Require new developments that add substantial amounts of impervious surfaces to integrate low impact development best management practices to reduce stormwater runoff.

- **Policy S-2.8 – Interagency Coordination.** Establish and maintain cooperative working relationships among public agencies with responsibility for flood protection, including ~~Collaborate with~~ the San Bernardino County Flood Control District, County Public Works, and other entities.~~ to maintain and improve the City's flood control channels and detention basins.~~

- **Policy S-2.9 – Public Education and Preparedness.** Compile and distribute flooding prevention information to Yucaipa residents and business owners; conduct periodic inspections and preparedness events.

With implementation of these regulations and policies, impacts from flooding would be less than significant.

Page 5.9-30, Section 5.9, *Hydrology and Water Quality*. The following text has been revised to eliminate the redundancy of repeating the same policies in the same section. The deletion of repeated policies is an editorial correction and would have no environmental impact.

The aforementioned General Plan Public Safety Element Policies S-2.1 through S-2.9 would also reduce impacts from dam failure.~~:~~

- ~~**Policy S-2.1 – Flood Hazard Identification.** Maintain and continuously update the City's floodplain safety hazards map in concert with FEMA map amendments and improvements to local drainage facilities.~~

- ~~**Policy S-2.2 – Floodplain Development.** Promote the dedication of land within the 100-year floodplain and adjacent areas for park, multi purpose trails, recreational uses, open spaces, and habitat conservation/mitigation.~~

- ~~**Policy S-2.3 – Prohibited Land Uses.** Prohibit both essential and critical facilities and facilities that use, store, transport, or dispose hazardous materials from developing within the 100-year or 500-year floodplain.~~

- ~~**Policy S-2.4 – Building Codes.** Require adherence to the latest codes in the California Building Code, FEMA guidelines, and Floodplain Safety Overlay District to minimize flood hazards; update codes periodically for latest advances.~~

- ~~**Policy S-2.5 – Special Flood Hazard Areas.** Support policies, procedures, and recommendations of the National Flood Insurance Program for SFHAs with respect to zoning, subdivision, building codes, and overlays.~~

- ~~**Policy S-2.6 – Flood Control Facilities.** Prioritize and fund maintenance and construction of improvements to drainage facilities and roadways identified in the City's Master Plan of Drainage and Hazard Mitigation Plan.~~

- ~~**Policy S-2.7 – Stormwater Runoff.** Require new developments that add substantial amounts of impervious surfaces to integrate low impact development best management practices to reduce stormwater runoff.~~

- ~~**Policy S-2.8 – Interagency Coordination.** Collaborate with the San Bernardino County Flood Control District to maintain and improve the City's flood control channels and detention basins.~~

- ~~**Policy S-2.9 – Public Education and Preparedness.** Compile and distribute flooding prevention information to Yucaipa residents and business owners; conduct periodic inspections and preparedness events.~~

Page 5.9-31, Section 5.9, *Hydrology and Water Quality*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hydrology in the City of Yucaipa.

Yucaipa also has several dozen aboveground water storage reservoirs that could cause more localized inundation, although to a significantly lesser degree than dams. The General Plan Update includes the following policy that would reduce impacts from aboveground water storage reservoir failures:

- **Policy S-1.5 – City Critical <u>Infrastructure and</u> Facilities ~~and Structures.~~** Locate, design, maintain, and upgrade critical <u>infrastructure and</u> facilities (police, medical facilities, fire, roads, reservoirs, etc.) to ~~minimize susceptibility to~~ <u>required</u> seismic <u>safety standards</u>~~and geologic hazards~~.

With the implementation of this policy, impacts from aboveground water storage reservoir failures are less than significant.

Page 5.9-32, Section 5.9, *Hydrology and Water Quality*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hydrology in the City of Yucaipa.

- **Policy S-1.3 – Alquist-Priolo Act.** Enforce development requirements, such as seismic study analyses, project siting, and project design features for proposed developments near active faults pursuant to the Alquist-Priolo Act.

- **Policy S-1.4 – Building Codes.** Require adherence to the latest California Building Codes and regulations in the ~~and~~ Geologic and Seismic Hazards Overlay District; update codes and ordinances periodically for latest advances.

- **Policy S-1.5 – City Critical Infrastructure and Facilities ~~and Structures~~.** Locate, design, maintain, and upgrade critical infrastructure and facilities (police, medical facilities, fire, roads, reservoirs, etc.) to ~~minimize susceptibility to~~ required seismic safety standards~~and geologic hazards~~.

- **Policy S-1.8 – Natural Topography.** Limit grading for future developments to the minimum amount needed to preserve Yucaipa's natural topography, preserve vegetation, and maintain soil and slope stability.

These policies would reduce the potential impacts from mudflow to less than significant.

Page 5.9-32, Section 5.9, *Hydrology and Water Quality*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to hydrology in the City of Yucaipa.

Public Safety Element

- **Policy S-1.1 – Geologic Hazard Identification.** Maintain and continuously update the City's geologic and seismic hazards map in concert with updates from the California Geologic Survey and local surveys.

- **Policy S-1.2 – Geotechnical Analysis.** In areas within the City's Geologic and Seismic Hazards Overlay District or as required by the Building Official, require development proposals to include a geotechnical hazard analysis.

- **Policy S-1.3 – Alquist-Priolo Act.** Enforce development requirements, such as seismic study analyses, project siting, and project design features for proposed developments near active faults pursuant to the Alquist-Priolo Act.

- **Policy S-1.4 – Building Codes.** Require adherence to the latest California Building Codes and regulations in the ~~and~~ Geologic and Seismic Hazards Overlay District; update codes and ordinances periodically for latest advances.

- **Policy S-1.5 – City Critical Infrastructure and Facilities ~~and Structures.~~** Locate, design, maintain, and upgrade critical infrastructure and facilities (police, medical facilities, fire, roads, reservoirs, etc.) to ~~minimize susceptibility to~~ required seismic safety standards~~and geologic hazards~~.

- **Policy S-1.8 – Natural Topography.** Limit grading for future developments to the minimum amount needed to preserve Yucaipa's natural topography, preserve vegetation, and maintain soil and slope stability.

- **Policy S-1.9 – Public Education and Preparedness.** Compile and distribute earthquake preparedness information to Yucaipa residents and business owners; conduct periodic inspections and preparedness events.

- **Policy S-2.1 – Flood Hazard Identification.** Maintain and continuously update the City's floodplain safety hazards map in concert with FEMA map amendments and improvements to local drainage facilities.

- **Policy S-2.2 – Floodplain Development.** Promote the dedication of land within the 100-year floodplain and adjacent areas for park, multi-purpose trails, recreational uses, open spaces, and habitat conservation/mitigation.

- **Policy S-2.3 – ~~Prohibited~~ Land ~~Uses~~Use Regulations.** Prohibit development of new~~both~~ essential and critical facilities and lifeline services in ~~facilities that use, store, transport, or dispose hazardous materials from developing within~~ the 100-year ~~or 500-year~~ floodplain. Prohibit facilities that use, store, transport or dispose of hazardous materials from developing in the Floodplain Safety Overlay District.

- **Policy S-2.4 – Building Codes.** Require adherence to the latest building, site, and design codes in the California Building Code, FEMA flood control guidelines, and Floodplain Safety Overlay District to avoid or minimize the risk of flooding hazards in the community.~~; update codes periodically for latest advances.~~

- **Policy S-2.5 – Special Flood Hazard Areas.** Support policies, procedures, and recommendations of the National Flood Insurance Program for SFHAs with respect to zoning, subdivision, building codes, and overlays.

- **Policy S-2.6 – Flood Control Facilities.** Prioritize and fund maintenance and construction of improvements to drainage facilities and roadways identified in the City's Master Plan of Drainage and Hazard Mitigation Plan.

- **Policy S-2.7 – Stormwater Runoff.** Require new developments that add substantial amounts of impervious surfaces to integrate low impact development best management practices to reduce stormwater runoff.

- **Policy S-2.8 – Interagency Coordination.** Establish and maintain cooperative working relationships among public agencies with responsibility for flood protection, including ~~Collaborate with~~ the San Bernardino County Flood Control District, County Public Works, and other entities. ~~to maintain and improve the City's flood control channels and detention basins.~~

- **Policy S-2.9 – Public Education and Preparedness.** Compile and distribute flooding prevention information to Yucaipa residents and business owners; conduct periodic inspections and preparedness events.

Page 5.11-29, Section 5.11, *Noise*. The following sentence is revised to delete the word 'zone' because the City does not have zoned land use designations. The revision is editorial and would have no environmental impact.

Nonetheless, with new or revised uses within ~~the~~ Community Industrial (IC) ~~zones~~, there is a potential for future operations at these types of facilities to create elevated vibration levels in the immediate vicinity. Thus, with implementation of the General Plan, heavy industrial operations would result in a potentially significant noise impact.

Page 5.13-3, Section 5.13, *Public Services*. Table 5.13-1 is revised to reflect corrected information regarding fire station equipment, and staffing details. The revisions are editorial corrections and would have no environmental impact.

Fire Stations and Staffing

Figure 5.13-1, *Public Services*, shows where Yucaipa's four fire stations are located in the City and Table 5.13-1, *Yucaipa Fire Department Stations*, provides details regarding their location, equipment, and daily staffing.

3. Revisions to the Draft EIR

Table 5.13-1 Yucaipa Fire Department Stations

Station	Location	Equipment	Daily Staffing
CAL FIRE Fire Station No. 1	32664 Yucaipa Boulevard	▪ 1 Front Line Type I Fire Engine ▪ 2 Front Line Type III Fire Engines ▪ Fire Station Heliopad ▪ Utility (Quick Response Rescue)	Each Type I engine is ALS municipally staffed with minimum 3-person crew–incl. 1 captain, 1 engineer, and 1 firefighter (one paramedic-qualified). Each Type III engine is minimum staffed with 3-person crew, incl. 1 captain or engineer and 2 firefighters. ~~3 person ALS municipally staffed Type I (1-Captain, 1-Engineer, 1-Firefighter) One will be paramedic-qualified.~~ ~~Each Type III Engine will be minimum staffed at 3 person, 1 Captain or Engineer and 2 Firefighters~~ ~~3 person ALS municipally staffed Type I (1-Captain, 1-Engineer, 1-Firefighter) One will be paramedic-qualified.~~ ~~3 person ALS municipally staffed Type I (1-Captain, 1-Engineer, 1-Firefighter) One will be paramedic-qualified.~~
Crafton Hills Fire Station No. 2	11416 Bryant Street	▪ 1 Front Line Type I Fire Engine ▪ 1 Reserve Type I Fire Engine ▪ 1 Type II Fire Engine	
Yucaipa Fire Station No. 3	34259 Wildwood Canyon Road	▪ 1 Front Line Type I Fire Engine ▪ 1 Reserve Type I Fire Engine ▪ 1 Utility (Pick up)	
Oak Glen Fire Station (Volunteer)	11877 Oak Glen Road	▪ 1 Type III Fire Engine ▪ 1 Type IV Fire Engine ▪ 1 Type II Water Tender	Varied depending on Reserve (Volunteer) Firefighters

Source: Janssen 2014.

The Oak Glen Fire Station manages the reserve firefighter program with 20 reserve firefighters. They serve as back up in order to enhance career staffing. They are called upon when needed for emergency incidents and City events, including the Music and Art Festival, Market Night, Oktoberfest, Winterfest, and Toy Drive.

Page 5.13-10, Section 5.13, *Public Services*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to emergency services in the City of Yucaipa.

Furthermore, goals and policies in the Public Safety Element of the proposed General Plan Update ensure adequate protection of public health and safety as they relate to fire and emergency services. Public Services and Facilities Element Policy PSF 7-3 requires new development to pay its fair share of cost for providing public services and financing new public services facilities.

Safety Element Policies S-3.1 through S-3.6~~9~~ identify proactive fire hazard abatement strategies that would also reduce impacts by wildland and urban fires to reduce the need for emergency service calls.

- **Policy S-3.1 – Fire Hazard Identification.** Maintain and continuously update the City's fire hazard overlay map for changes in fire hazard severity zones overlay district consistent with changes in hazard designations by CALFIRE.

- **Policy S-3.2 – Fire Service Levels.** Provide appropriate staffing levels, equipment, ~~and~~ facilities, and training to maintain an Insurance Service Office Rating of 3~~a community ISO 3 rating~~; continue to strive to meet the latest industry standards in fire safety.~~NFPA-recommended response times for fires and emergency paramedic response.~~

- **Policy S-3.3 – Fire Codes.** Require adherence to applicable fire codes for buildings and structures, fire access, and other standards in accordance with Fire Hazard Overlay Districts, California Fire Code, and municipal codes; encourage retrofit of nonconforming land uses.

- **Policy S-3.4 – Fuel Modification.** Require adherence to ~~Enforce~~ fuel modification ~~standards~~ and defensible space requirements ~~around structures~~ to reduce wildfire hazards; work with CAL FIRE to coordinate fuelbreaks in very high fire severity zones~~ and to protect Yucaipa's urban area from potential wildfire spreading~~.
- **Policy S-3.5 – Permit Approvals.** Ensure compliance with the Subdivision Map Act requirements for structural fire protection and suppression services, subdivision requirements for on/off-site improvements, ingress and egress, street standards, and other concerns. ~~**Fire Abatement Features.** Encourage residential, commercial, and industrial developments to implement fire-hazard-reducing project designs and features (e.g., fire resistive materials, vegetation).~~

- ~~**Policy S-3.6 – Development Review.** Allow CAL FIRE to review future development proposals for impacts to fire facilities and compatibility with high fire hazard severity zones.~~

- **Policy S-3.6~~7~~ – Adequate Water Supply and Redundancy**. ~~Ensure that~~ Work with public and private water distribution and supply facilities ~~have~~ to ensure adequate water capacity and system redundancy ~~reliability~~ to supply emergency firefighting needs~~ beyond everyday demands~~.

- ~~**Policy S-3.8 – Aid Agreements.** Participate in mutual aid and automatic aid agreements with adjoining fire service providers, emergency medical service providers, and other agencies providing critical services.~~

In addition, the Safety Element includes policies related to emergency preparedness and disaster response planning to ensure the City's structures and buildings are built "disaster-resistant," the City's hazard mitigation and emergency operations plan is regularly updated, interagency support and communication protocols are established, and public education is available to distribute knowledge about emergency access and evaluation (Safety Element Policies S-4.1 through S-4.8~~9~~).

Thus, impacts on fire protection and emergency services and facilities would be less than significant.

3. Revisions to the Draft EIR

Page 5.13-11, Section 5.13, *Public Services*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to emergency services in the City of Yucaipa.

Public Safety Element

- **Policy S-1.5 – City Critical Infrastructure and Facilities ~~and Structures~~.** Locate, design, maintain, and upgrade critical infrastructure and facilities (police, medical facilities, fire, roads, reservoirs, etc.) to ~~minimize susceptibility to~~ required seismic safety standards for critical infrastructure and facilities~~and geologic hazards~~.

- **Policy S-1.6 – Other ~~Agency~~ Critical Infrastructure and Facilities ~~and Services~~.** Encourage Caltrans, CAL FIRE, schools~~ district, CAL FIRE, water districts, California Department of Water Resources~~, utility companies, and ~~utilities~~ other relevant agencies to comply with seismic safety standards for critical infrastructure and facilities~~providing critical infrastructure to ensure facilities are capable of withstanding earthquakes~~.

- **Policy S-3.1 – Fire Hazard Identification.** Maintain and continuously update the City's fire hazard overlay map for changes in fire hazard severity zones overlay district consistent with changes in hazard designations by CALFIRE.

- **Policy S-3.2 – Fire Service Levels.** Provide appropriate staffing levels, equipment, ~~and~~ facilities, and training to maintain an Insurance Service Office Rating of 3~~a community ISO 3 rating~~; continue to strive to meet the latest industry standards in fire safety.~~NFPA recommended response times for fires and emergency paramedic response.~~

- **Policy S-3.3 – Fire ~~and Building~~ Codes.** Require adherence to applicable fire ~~standards and building~~ codes for buildings and structures, fire access, and other standards in accordance with ~~the City's municipal code,~~ Fire Hazard Overlay Districts, California Fire Code, and municipal codes; encourage retrofit of nonconforming land uses~~California Building Code~~.

- **Policy S-3.4 – Fuel Modification.** Require adherence to ~~Enforce~~ fuel modification ~~standards~~ and defensible space requirements ~~around structures~~ to reduce wildfire hazards; work with CAL FIRE to coordinate fuelbreaks in very high fire severity zones~~ and to protect Yucaipa's urban area from potential wildfire spreading~~.
- **Policy S-3.5 – Permit Approvals.** Ensure compliance with the Subdivision Map Act requirements for structural fire protection and suppression services, subdivision requirements for on/off-site improvements, ingress and egress, street standards, and other concerns. ~~**Fire Abatement Features.** Encourage residential, commercial, and industrial developments to implement fire-hazard-reducing project designs and features (e.g., fire resistive materials, vegetation).~~

- ~~**Policy S-3.6 – Development Review.** Allow CAL FIRE to review future development proposals for impacts to fire facilities and compatibility with high fire hazard severity zones.~~

- **Policy S-3.6~~7~~ – Adequate Water Supply and Redundancy**. ~~Ensure that~~ Work with public and private water distribution and supply facilities ~~have~~ to ensure adequate water capacity and system redundancy ~~reliability~~ to supply emergency firefighting needs~~ beyond everyday demands~~.

- ~~**Policy S-3.8 – Aid Agreements.** Participate in mutual aid and automatic aid agreements with adjoining fire service providers, emergency medical service providers, and other agencies providing critical services.~~

- **Policy S-3.8~~9~~ – Public Education.** Educate the community about fire prevention and suppression; work with other agencies and private interests to educate private landowners on fire-safe measures to achieve a low risk condition.

- ~~**Policy S-4.1 – Land Use Patterns and Facilities.** Maintain land use patterns and building standards that minimize exposure to natural or human-caused hazards and contribute to a "disaster-resistant" community.~~

- **Policy S-4.1~~2~~ – Hazard Planning.** Update City hazard mitigation and emergency operations plan on a timely basis; coordinate with relevant agencies responsible for updating water, fire, or other hazard mitigation plans. Integrate updates into the safety element.

- **Policy S-4.2~~3~~ – Training.** ~~Facilitate~~ Require training of City emergency response personnel through coursework, emergency operations plan orientation, disaster service training, emergency operations center training, and other topics~~training~~.

- **Policy S-4.3~~4~~ – Public Education.** Promote education and events that reinforce the responsibility and capability of ~~all~~ residents, business owners, and City staff to ~~individually and collectively~~ plan for, respond to, and recover from emergencies and disasters; implement and support local CERT programs.

- **Policy S-4.4~~5~~ – Interagency Support.** Sustain mutual aid and automatic aid agreements through the California Disaster and Civil Defense Master Mutual Aid Agreement, and with adjacent service providers (fire, flooding, earthquake, emergency medical, etc.)~~ to provide emergency aid to parties as needed~~.

- **Policy S-4.5~~6~~ – Communications.** Maintain ~~effective~~ communication protocols and systems for coordinating emergency service providers, public agencies, ~~neighboring cities,~~ business, schools, utilities, and other ~~agencies~~ affected parties to respond in an effective manner~~for responding~~ to emergencies and disasters.

- **Policy S-4.6~~7~~ – Critical Facilities and Lifeline Services.** Coordinate~~Work~~ with various service providers to ensure that essential facilities, lifeline services, and infrastructure (water, sewer, communication, power, roads, etc.) are capable of responding following a disaster.

- **Policy S-4.7~~8~~ – Emergency Access and Evacuation.** Maintain and updated, as needed, emergency access, protocols, and evacuation routes for residents, business, and equine and large animals; regularly exercise evacuation protocol and procedures to assess their effectiveness.

Page 5.16-45, Section 5.16, *Utilities and Service Systems*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to flood hazards and emergency services in the City of Yucaipa.

In addition, the General Plan Update includes several policies to reduce stormwater runoff and ensure sufficient infrastructure is installed in new development:

- **Policy PSF-6.9 – Stormwater Runoff.** Require new developments that add substantial impervious surfaces to integrate low impact development best management practices (e.g., permeable pavements) to reduce stormwater runoff.

- **Policy S-2.4 – Building Codes.** Require adherence to the latest building, site, and design codes in the California Building Code, FEMA flood control guidelines, and Floodplain Safety Overlay District to avoid or minimize the risk of flooding hazards in the community~~; update codes periodically for latest advances~~.

These policies—along with implementation of improvements recommended in the 2011 MPD Update and Flood Plan Annex—would reduce the potential impacts of development on the drainage system within the City of Yucaipa.

Page 5.16-45, Section 5.16, *Utilities and Service Systems*. The following text has been revised to reflect new and revised policies. As described in Section 3.2 of this FEIR, the new and revised policies were in response to comments made by BFFP on the Safety Element in regards to new requirements under Government Code Section 66474.02. As identified in Section 3.2, the additional policies would result in beneficial impacts to flood hazards and emergency services in the City of Yucaipa.

Public Safety Element

- **Policy S-2.4 – Building Codes.** Require adherence to the latest building, site, and design codes in the California Building Code, FEMA flood control guidelines, and Floodplain Safety Overlay District to avoid or minimize the risk of flooding hazards in the community~~; update codes periodically for latest advances~~.

- **Policy S-2.5 – Special Flood Hazard Areas.** Support policies, procedures, and recommendations of the National Flood Insurance Program for SFHAs with respect to zoning, subdivision, building codes, and overlays.

- **Policy S-2.6 – Flood Control Facilities.** Prioritize and fund maintenance and construction of improvements to drainage facilities and roadways identified in the City's Master Plan of Drainage and Hazard Mitigation Plan.

- **Policy S-2.7 – Stormwater Runoff.** Require new developments that add substantial amounts of impervious surfaces to integrate low impact development best management practices to reduce stormwater runoff.

- **Policy S-2.8 – Interagency Coordination.** Establish and maintain cooperative working relationships among public agencies with responsibility for flood protection, including ~~Collaborate with the~~ San Bernardino County Flood Control District, County Public Works, and other entities ~~to maintain and improve the City's flood control channels and detention basins~~.

- **Policy S-2.9 – Public Education and Preparedness.** Compile and distribute flooding prevention information to Yucaipa residents and business owners; conduct periodic inspections and preparedness events.

3.4 NEW AND REVISED EIR FIGURES

Appendix A to this FEIR includes revised figures that already appear in the Draft EIR (as indicated) or new figures provided for clarification within the Yucaipa General Plan Update. A summary of the changes are also provided.

- **Page 1-17, Chapter 1, *Executive Summary*.** Figure ES-4, *Proposed Land Use Plan*, has been revised to reflect errors in land use designations of five parcels. The correct designations are accounted for in the proposed project's buildout tables; therefore, no changes are required to the analysis of the EIR. The land use changes only affect the figures and would not introduce potentially new significant impacts.

- **Page 3-23, Chapter 3, *Project Description*.** Similar to Figure ES-4, Figure 3-5, *Proposed Land Use Plan*, has been revised to reflect the same errors in land use designations of five parcels. The correct designations are accounted for in the proposed project's buildout tables; therefore, no changes are required to the analysis of the EIR.

- **Page 5.8-20, Section 5.8, *Hazards and Hazardous Materials*.** Figure 5.8-2, *Critical Facilities and Infrastructure*, has been added to the 'Existing Conditions' section to supplement added text related to critical infrastructure and lifeline services within the City. The figure provides a map consistent with information in the City's Emergency Operations and Hazard Mitigation Plans. Inclusion of this new figure provides better context to the City's critical facilities and infrastructure and would not add any new environmental impacts to the project.

3. Revisions to the Draft EIR

- **Page 5.8-20, Section 5.8, Hazards and Hazardous Materials.** Figure 5.8-3, *Evacuation Routes*, have been added to the 'Existing Conditions' section to supplement added text related to evacuation routes within the City. The figure was added to comply with Government Code Section 65302(g)(1) which states that "the safety element shall include mapping of known seismic and other geologic hazards." It shall also address evacuation routes, military installations, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards. The figures also respond to concerns raised by the California BFFP. Inclusion of this new figure provides better context to the City's evacuation routes and would not add any new environmental impacts to the project.

- **Page 5.8-23, Section 5.8, Hazards and Hazardous Materials.** Figure 5.8-2, *Fire Hazards*, has been renumbered to Figure 5.8-4 because two additional figures were added to the section. No change would occur.

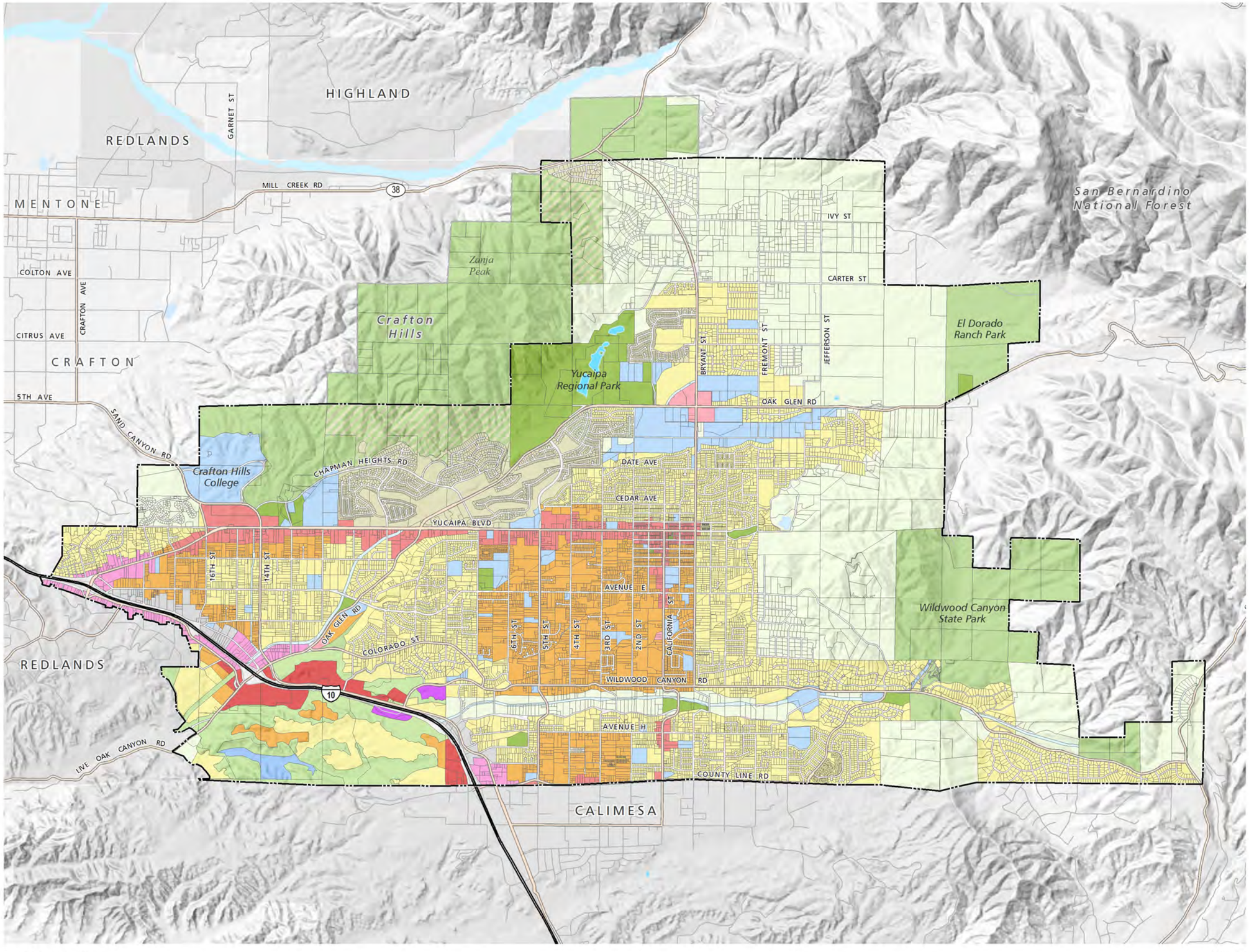
- **Page 5.9-9, Section 5.9, Hydrology and Water Quality.** Figure 5.9-2, *Drainage and Recharge Facilities*, has been revised to comply with Government Code Section 65302 (d)(1)(3) which states that, "upon the next revision of the housing element on or after January 1, 2009, the conservation element shall identify rivers, creeks, streams, flood corridors, riparian habitats, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management." Therefore, the figure is revised to show open space/park groundwater recharge areas and potential groundwater recharge facilities. These minor changes would not create new significant impacts.

- **Page 5.9-19, Section 5.9, Hydrology and Water Quality.** Figure 5.9-4c, *Flood Hazard Zones with FEMA Map Revisions and DWR Mapping*, has been added to the EIR to comply with Government Code Section 65302(a), which states that the land use element shall identify and annually review those areas covered by the plan that are subject to flooding identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources. The addition of this figure would not change the flood hazard analysis conclusions. No new significant impacts would occur.

- **Page 5.11-15, Section 5.11, Noise.** Figure 5.11-2, *Existing Noise Level Contours*, has been revised to address minor technical corrections to the mapped noise contours on Wildwood Canyon Road and Oak Glen Road. These corrections would not result in new significant noise impacts.

- **Page 5.11-23, Section 5.11, Noise.** Figure 5.11-3, *Future Noise Level Contours*, has been revised to address minor technical corrections to the mapped noise contours on Wildwood Canyon Road and Oak Glen Road. These corrections would not result in new significant noise impacts.

Figure ES-4
PROPOSED LAND USE PLAN



City Limits
Yucaipa Sphere of Influence

LAND USE DISTRICTS

- RL - Rural Residential
- RS - Single Residential
- RM - Multiple Residential
- PD - Planned Development
- CG - General Commercial
- CN - Neighborhood Commercial
- CS - Service Commercial
- IC - Community Industrial
- IN - Institutional
- OS - Open Space
- OS-PD - Open Space Planned Development
- P - Park
- FW - Floodway

Freeway Corridor Specific Plan

- R-1 - Rural Living
- R-2 - Single Residential
- R-4 - Single Residential
- R-8 - Single or Multiple Residential
- R-24 - Multiple Residential
- PUB - Public Facilities
- BP - Business Park
- CR - Regional Commercial
- OS2 - Open Space

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

Source: City of Yucaipa, 2014

2/19/2016

3. Revisions to the Draft EIR

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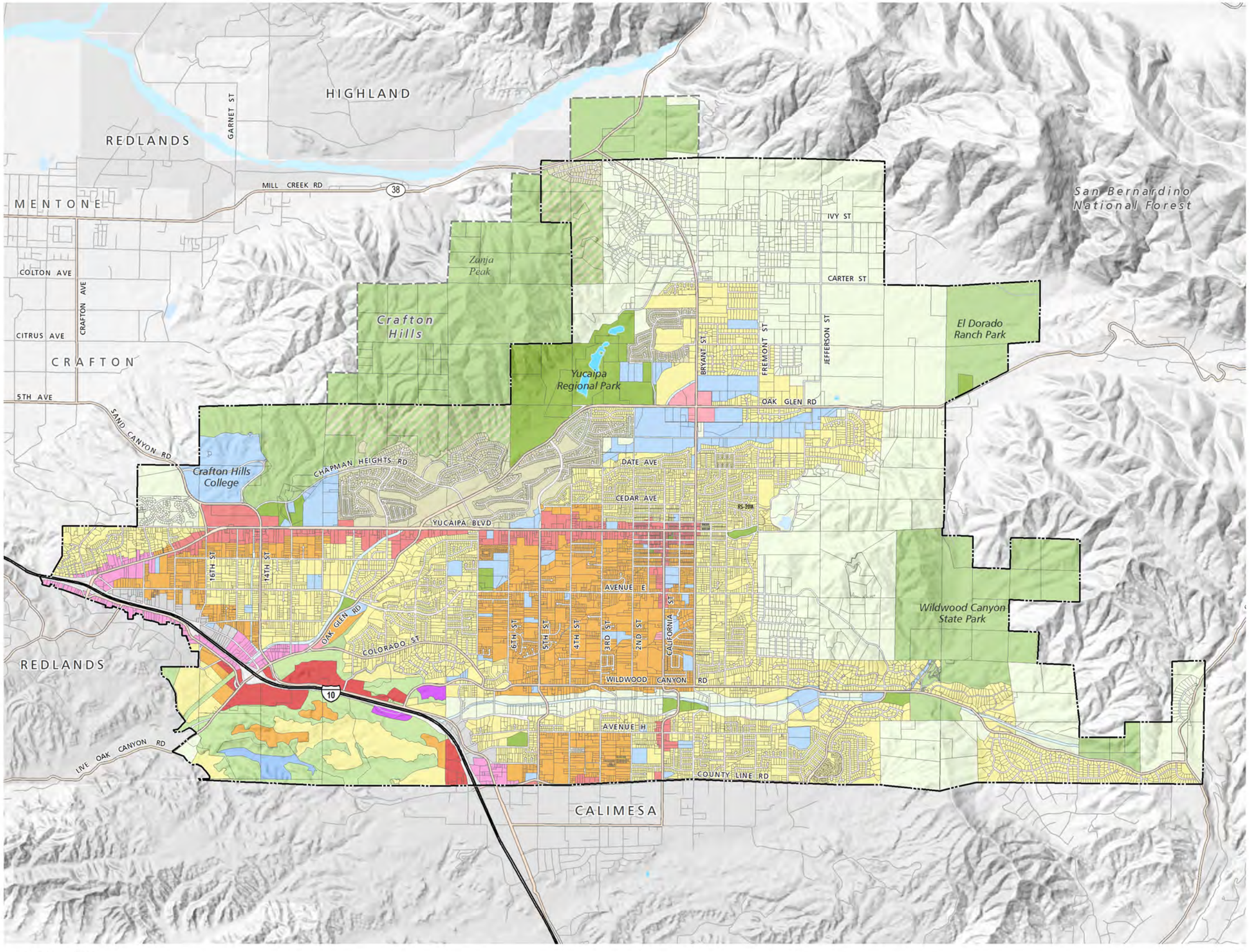
Figure 3-5
PROPOSED LAND USE PLAN



- City Limits
- Yucaipa Sphere of Influence

LAND USE DISTRICTS

- RL - Rural Residential
- RS - Single Residential
- RM - Multiple Residential
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- IN - Institutional
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- OS-PD - Open Space Planned Development
- P - Park
- FW - Floodway

Freeway Corridor Specific Plan

- R-1 - Rural Living
- R-2 - Single Residential
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- PUB - Public Facilities
- BP - Business Park
- CR - Regional Commercial
- OS2 - Open Space

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

Source: City of Yucaipa, 2014

2/19/2016

3. Revisions to the Draft EIR

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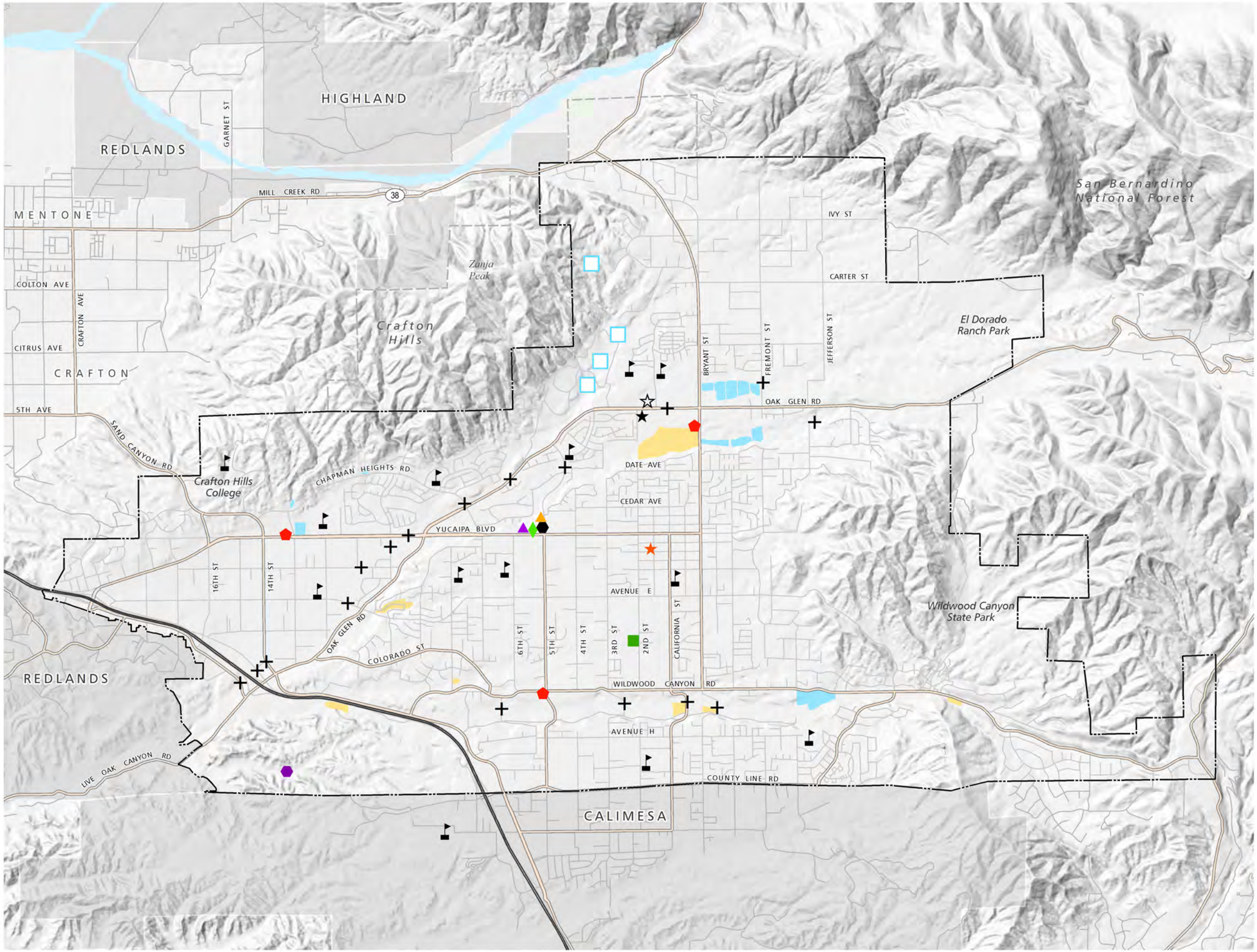
Figure 5.8-2

CRITICAL FACILITIES AND INFRASTRUCTURE



Critical Facilities

- Reservoir
- School
- Fire Station
- Library
- City Hall/Emergency Operations Center (EOC)
- Police Dept/Alternative EOC
- Yucaipa Transit Station
- Yucaipa Community Center
- Public Works Yard/Records Center
- Scherer Community Center
- Yucaipa Valley Wastewater Treatment Plant
- Yucaipa Valley Water District
- Major Bridge
- Existing Drainage Basin
- Proposed Drainage Basin
- Major Roads
- City Limits
- Yucaipa Sphere of Influence

YUCAIPA GENERAL PLAN DRAFT EIR

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PLACEWORKS

Source: Placeworks 2016

3/4/2016

3. Revisions to the Draft EIR

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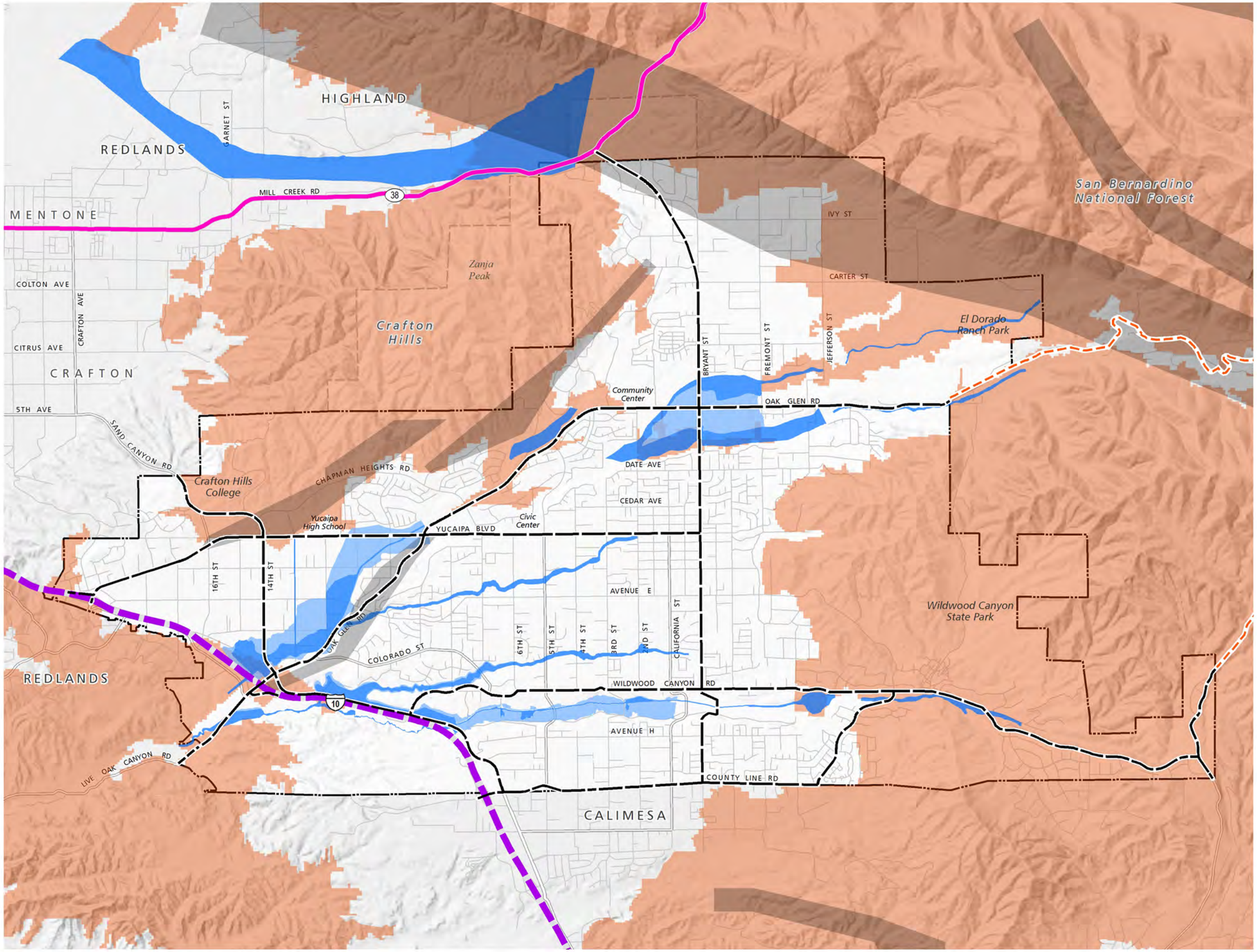
Figure 5.8-3
EVACUATION ROUTES



- City Limits
- Yucaipa Sphere of Influence

Evacuation Routes

- Local Evacuation Route
- Regional Evacuation Route
- State Hwy Evacuation Route
- Interstate Evacuation Route

Hazard Designation

- Alquist Priolo Fault Zone
- Floodplain Review Area 1 (100 Year Flood Area)
- Floodplain Review Area 2 (500 Year Flood Area)
- Fire Safety Review Area 1 (Very High Fire Severity)

Note:
1. Evacuation routes depend on many factors, including the type of emergency or disaster, location of incident, weather conditions, road conditions, and traffic.
2. Delineation of hazard designations are subject to change in accordance with federal and state regulations and local mitigation projects.

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

Source: IBI Group Inc., 2015

2/19/2016

3. Revisions to the Draft EIR

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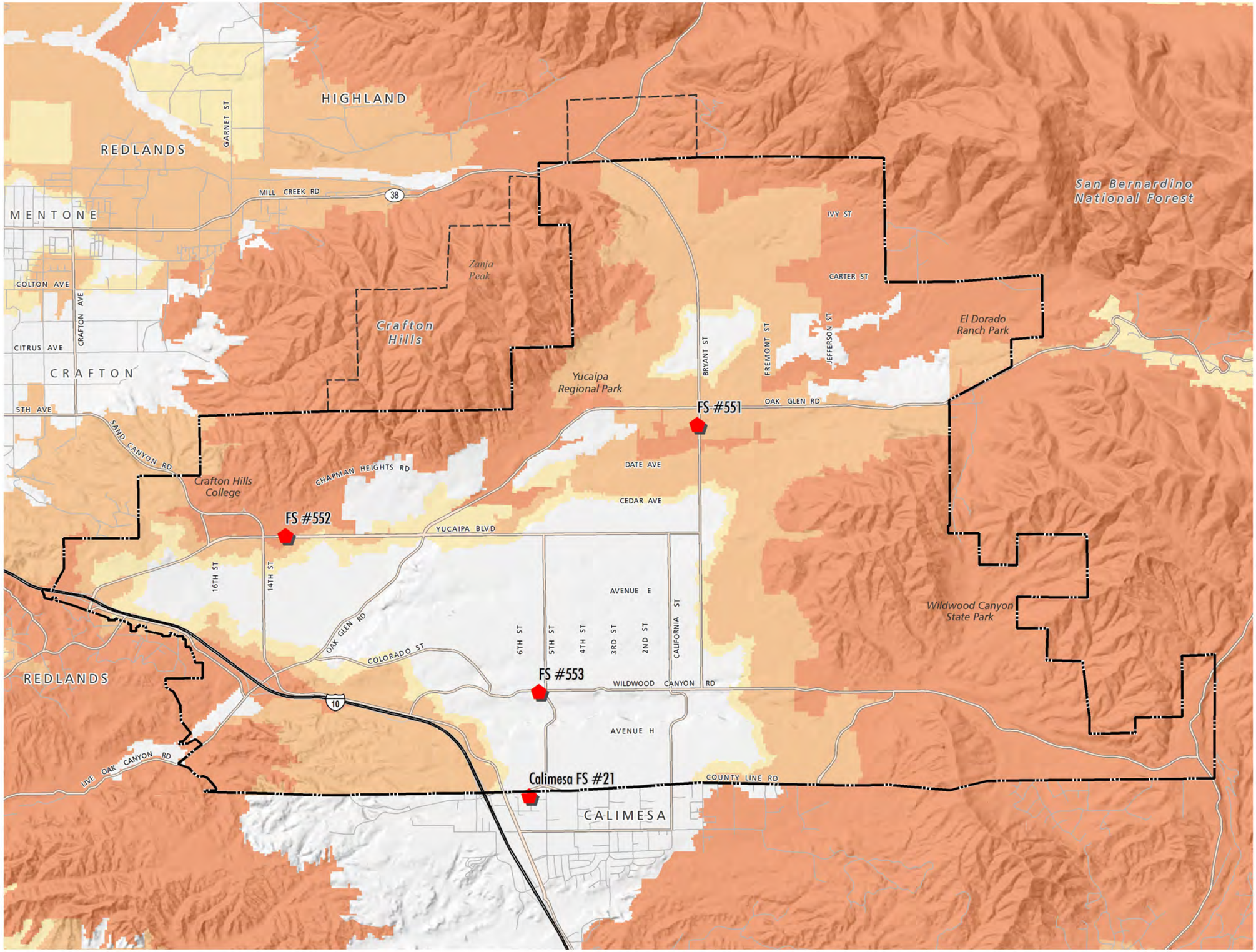
Figure 5.8-4
FIRE HAZARDS



City Limits
Yucaipa Sphere of Influence
Fire Stations

Fire Hazard Classification
- Very High
- High
- Moderate

Notes:
Based on Section 85.020215 of the City of Yucaipa Municipal Code, the City's Fire Safety Overlay District is divided into two review areas, each of which represents a different level of wildland hazard.
* Fire Safety Review Area 1 (FR1): Corresponds to the CAL FIRE Very High Fire Hazard Severity Zone and includes wildland areas that are marginally developable, areas which are not likely to be developed, and the area of transition between wildlands and areas that are partially developed or are likely to be developed in the future. The area of transition is often characterized by an abrupt slope change. Natural hazards are prevalent throughout Area 1, especially in areas with natural ungraded slopes greater than 30%. Area 1 includes areas of very high to extreme fire hazard.
* Fire Safety Review Area 2 (FR2): Generally corresponds to the CAL FIRE High Fire Hazard Severity Zone and includes relatively flat land that is either partially or completely developed; or, if it is not developed, it is usually suitable for development. Present and future development within Area 2 is exposed to the impacts of wildland fires and other natural hazards primarily due to its proximity to Area 1.

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

Source: CAL FIRE, 2014

2/19/2016

3. Revisions to the Draft EIR

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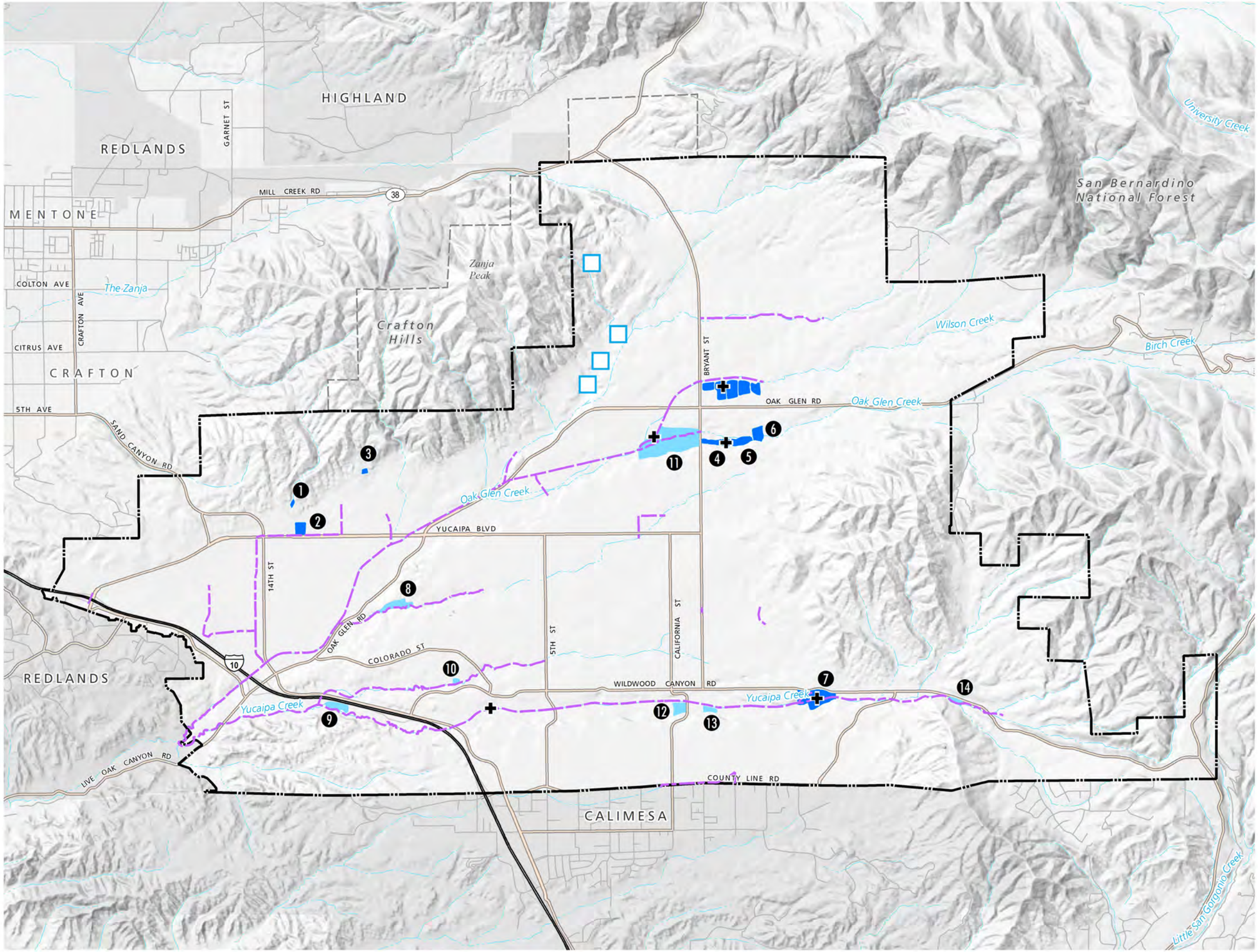
Figure 5.9-2

DRAINAGE AND RECHARGE FACILITIES



- City Limits
- Yucaipa Sphere of Influence
- Drainage Channel
- Existing Drainage Basin
- Proposed Drainage Basin
- Reservoir
- Potential Groundwater Recharge Facility

Drainage Basin Names

1, Dunlap Basin (D-4)
2, Dunlap Basin (D-2)
3, Dunlap Basin (D-5)
4, Oak Glen Basin/Wilson II (WC-II)
5, Oak Glen Basin/Wilson II (WC-II)
6, Oak Glen Basin/Wilson II (WC-II)
7, Wildwood Creek Basin (WW-3)
8, Chicken Springs Basin
9, Wildwood Creek Basin (WW-1)
10, Yucaipa Creek Basin (Y-3)
11, Wilson Creek Basin (WC-1)
12, Wildwood Creek Basin (WW-2b)
13, Wildwood Creek Basin (WW-2a)
14, Wildwood Creek Basin (WW-4)

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

Source: USGS NHD 2013; Michael Baker International 2014

3/4/2016

3. Revisions to the Draft EIR

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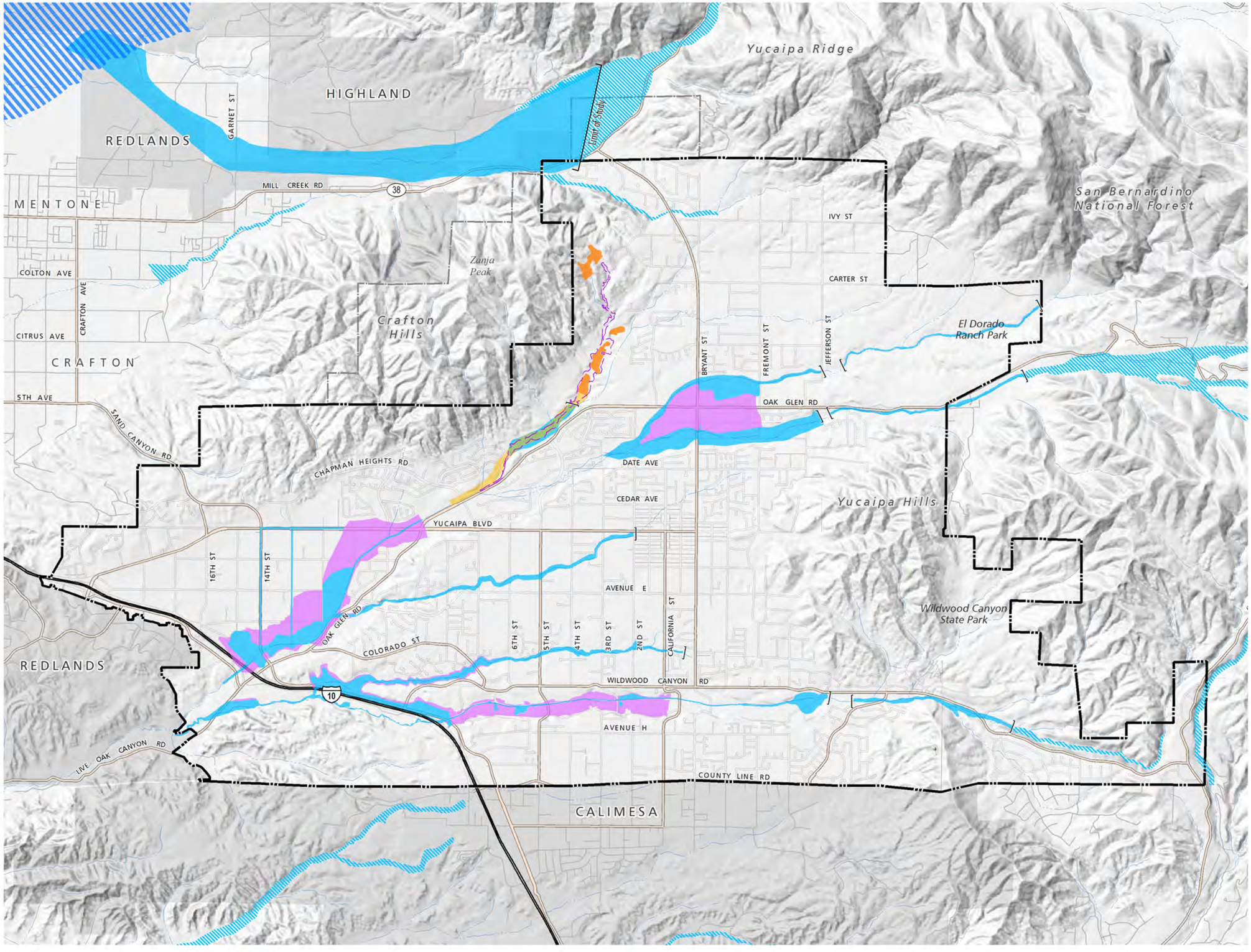
Figure 5.9-4c

FLOOD HAZARD ZONES WITH FEMA MAP REVISIONS AND DWR MAPPING



City Limits

Yucaipa Sphere of Influence

Inundation Areas

- Reservoir
- Yucaipa Res. Dam Inundation (1976)
- Crafton Hills Dam Inundation (2010)
- Seven Oaks Dam Inundation
- Stream/River

Overlay Designation

- Floodplain Review Area 1 (100 Year Flood Area)
- Floodplain Review Area 2 (500 Year Flood Area)
- Limits of Study
- DWR Awareness Flood Areas

Notes:

1. Floodplain Review Area 1 (FP1): FP1 shall include all areas subject to a 100-year flood as defined by the Federal Flood Insurance Regulations and the Federal Emergency Management Agency(FEMA).
2. Floodplain Review Area 2 (FP2): FP2 shall include all areas between limits of the 100-year flood and subject to a 500-year flood, and certain areas subject to 100-year flooding with an average depth of less than one foot or where the contributing drainage areas are less than one square mile, or areas protected by levees from the base flood.
3. DWR Awareness Flood Areas: The Department of Water Resources has identified areas for potential 100-year flooding that may warrant further studies or anlysis to assess the risk of flooding for regulatory purposes, and land use planning.
4. Delineation of FEMA flood zones continues to change in accordance with federal regulations and local flood control projects.

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

FEMA, 2014 (with approved Letters of Map Revisions, 2015); DWR, 2016; USGS NHD, 2015

3/4/2016

3. Revisions to the Draft EIR

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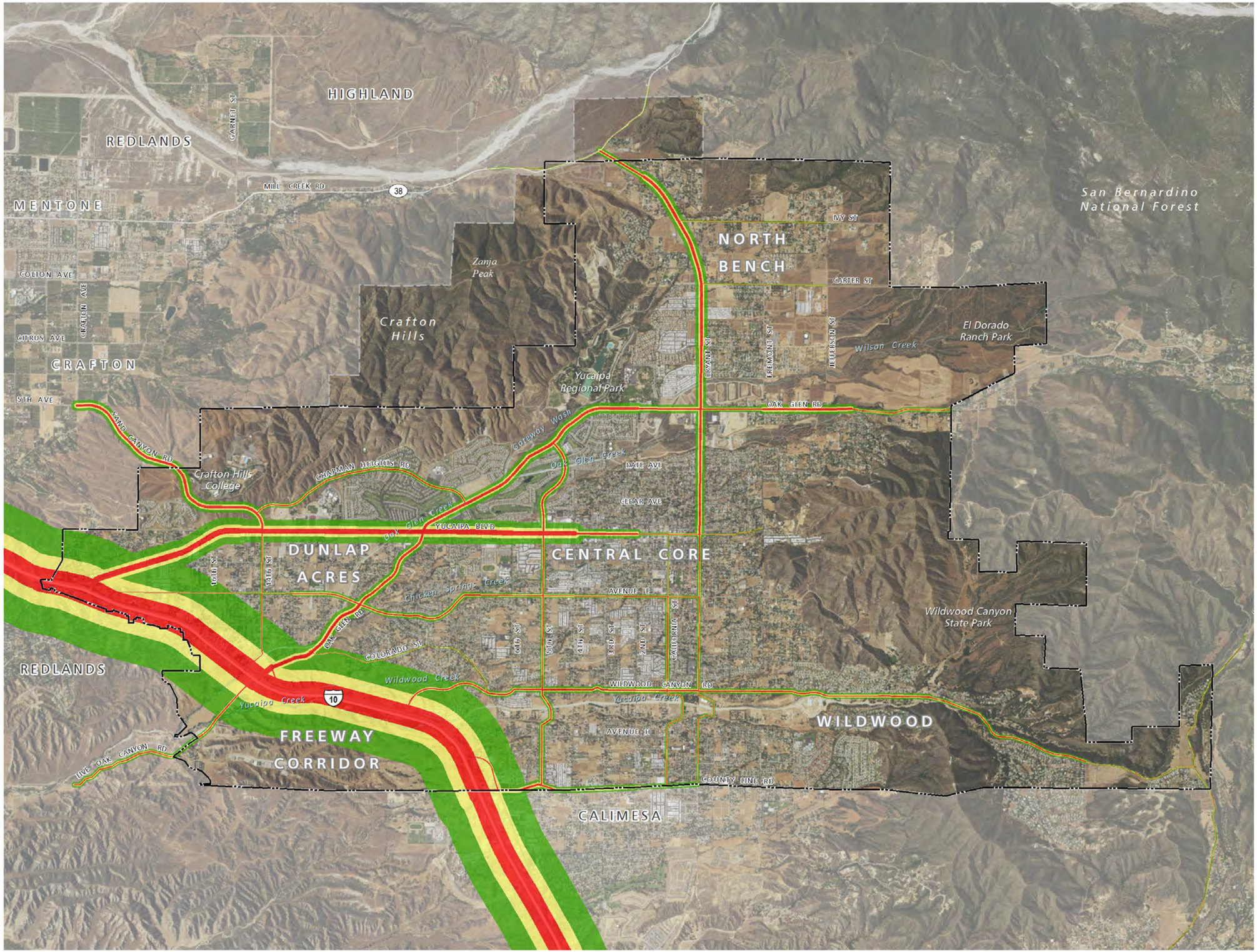
Figure 5.11-2

EXISTING NOISE LEVEL CONTOURS



City Limits

Yucaipa Sphere of Influence

CNEL

60 dBA

65 dBA

70 dBA

Note: Noise contours do not take into consideration attenuation from noise reduction features such as barriers or topographic features.

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

Source: IBI Group, 2015; PlaceWorks, 2015; Esri, 2014; & USGS, 2012

3/4/2016

3. Revisions to the Draft EIR

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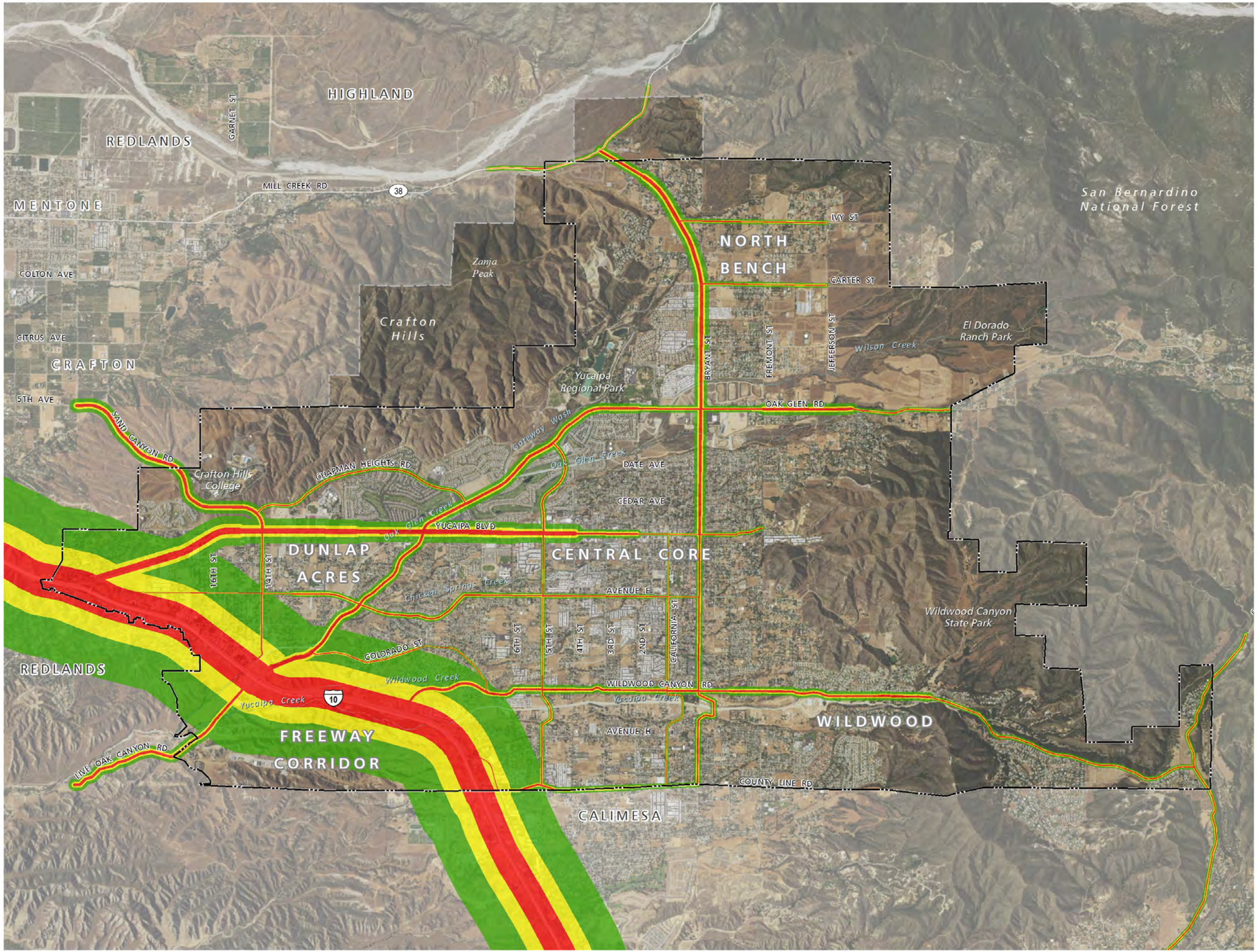
Figure 5.11-3

FUTURE NOISE LEVEL CONTOURS



City Limits

Yucaipa Sphere of Influence

CNEL

- 60 dBA
- 65 dBA
- 70 dBA

Note: Noise contours do not take into consideration attenuation from noise reduction features such as barriers or topographic features.

YUCAIPA GENERAL PLAN DRAFT EIR

0 1,000 2,000 3,000 4,000 Feet

PLACEWORKS

Source: IBI Group, 2015; PlaceWorks, 2015; Esri, 2014; & USGS, 2012

3/4/2016

3. Revisions to the Draft EIR

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Appendix A HCM 2010 Model Outputs

Appendix

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1181	3	145	0	0	0	0	170	11	85	39	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	1388	0	0				0	179	12	89	41	0
Adj No. of Lanes	2	1	0				0	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	2247	1180	0				0	831	55	338	873	0
Arrive On Green	0.63	0.00	0.00				0.00	0.25	0.25	0.25	0.25	0.00
Sat Flow, veh/h	3548	1863	0				0	3462	224	1187	3632	0
Grp Volume(v), veh/h	1388	0	0				0	93	98	89	41	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0				0	1770	1823	1187	1770	0
Q Serve(g_s), s	17.7	0.0	0.0				0.0	3.1	3.2	4.8	0.7	0.0
Cycle Q Clear(g_c), s	17.7	0.0	0.0				0.0	3.1	3.2	8.0	0.7	0.0
Prop In Lane	1.00		0.00				0.00		0.12	1.00		0.00
Lane Grp Cap(c), veh/h	2247	1180	0				0	437	450	338	873	0
V/C Ratio(X)	0.62	0.00	0.00				0.00	0.21	0.22	0.26	0.05	0.00
Avail Cap(c_a), veh/h	2247	1180	0				0	437	450	338	873	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	0.0				0.0	22.5	22.5	25.7	21.5	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0				0.0	1.1	1.1	1.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.0				0.0	1.7	1.7	1.8	0.3	0.0
LnGrp Delay(d),s/veh	9.6	0.0	0.0				0.0	23.6	23.6	27.6	21.6	0.0
LnGrp LOS	A							C	C	C	C	
Approach Vol, veh/h		1388						191			130	
Approach Delay, s/veh		9.6						23.6			25.7	
Approach LOS		A						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		23.0		52.0		23.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.5		47.5		18.5		
Max Q Clear Time (g_c+I1), s		5.2		19.7		10.0		
Green Ext Time (p_c), s		1.3		6.8		1.0		

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	1	0	57	199	1077	0	0	149	898
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				0	0	61	209	1134	0	0	157	0
Adj No. of Lanes				0	1	2	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				0	466	792	444	2124	0	0	973	435
Arrive On Green				0.00	0.00	0.25	0.25	0.60	0.00	0.00	0.28	0.00
Sat Flow, veh/h				0	1863	3167	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				0	0	61	209	1134	0	0	157	0
Grp Sat Flow(s),veh/h/ln				0	1863	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				0.0	0.0	0.9	6.0	11.3	0.0	0.0	2.0	0.0
Cycle Q Clear(g_c), s				0.0	0.0	0.9	6.0	11.3	0.0	0.0	2.0	0.0
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	466	792	444	2124	0	0	973	435
V/C Ratio(X)				0.00	0.00	0.08	0.47	0.53	0.00	0.00	0.16	0.00
Avail Cap(c_a), veh/h				0	466	792	444	2124	0	0	973	435
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	0.0	17.2	19.1	7.1	0.0	0.0	16.5	0.0
Incr Delay (d2), s/veh				0.0	0.0	0.2	3.6	1.0	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	0.0	0.4	3.3	5.6	0.0	0.0	1.0	0.0
LnGrp Delay(d),s/veh				0.0	0.0	17.4	22.7	8.0	0.0	0.0	16.9	0.0
LnGrp LOS						B	C	A			B	
Approach Vol, veh/h					61			1343			157	
Approach Delay, s/veh					17.4			10.3			16.9	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		40.5			19.5	21.0		19.5
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		36.0			15.0	16.5		15.0
Max Q Clear Time (g_c+I1), s		13.3			8.0	4.0		2.9
Green Ext Time (p_c), s		10.2			0.3	7.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	485	0	163	0	0	0	0	152	147	157	479	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	511	0	172				0	160	155	165	504	0
Adj No. of Lanes	2	0	1				0	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1064	0	475				0	1062	475	310	1947	0
Arrive On Green	0.30	0.00	0.30				0.00	0.30	0.30	0.35	1.00	0.00
Sat Flow, veh/h	3548	0	1583				0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	511	0	172				0	160	155	165	504	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583				0	1770	1583	1774	1770	0
Q Serve(g_s), s	7.1	0.0	5.1				0.0	2.0	4.6	4.5	0.0	0.0
Cycle Q Clear(g_c), s	7.1	0.0	5.1				0.0	2.0	4.6	4.5	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1064	0	475				0	1062	475	310	1947	0
V/C Ratio(X)	0.48	0.00	0.36				0.00	0.15	0.33	0.53	0.26	0.00
Avail Cap(c_a), veh/h	1064	0	475				0	1062	475	310	1947	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	16.5				0.0	15.4	16.3	17.5	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	2.1				0.0	0.3	1.8	6.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	2.5				0.0	1.0	2.2	2.7	0.1	0.0
LnGrp Delay(d),s/veh	18.7	0.0	18.6				0.0	15.7	18.1	23.9	0.3	0.0
LnGrp LOS	B		B					B	B	C	A	
Approach Vol, veh/h		683						315			669	
Approach Delay, s/veh		18.7						16.9			6.1	
Approach LOS		B						B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	22.5		22.5		37.5		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	10.5	18.0		18.0		33.0		
Max Q Clear Time (g_c+I1), s	6.5	6.6		9.1		2.0		
Green Ext Time (p_c), s	0.2	3.8		1.8		5.5		

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	140	7	267	40	600	0	0	502	993
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				147	102	218	42	632	0	0	528	1045
Adj No. of Lanes				0	1	1	1	2	0	0	1	2
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				322	224	478	163	1941	0	0	711	1209
Arrive On Green				0.30	0.30	0.30	0.18	1.00	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1068	741	1583	1774	3632	0	0	1863	3167
Grp Volume(v), veh/h				249	0	218	42	632	0	0	528	1045
Grp Sat Flow(s),veh/h/ln				1809	0	1583	1774	1770	0	0	1863	1583
Q Serve(g_s), s				6.7	0.0	6.7	1.2	0.0	0.0	0.0	14.7	18.3
Cycle Q Clear(g_c), s				6.7	0.0	6.7	1.2	0.0	0.0	0.0	14.7	18.3
Prop In Lane				0.59		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				546	0	478	163	1941	0	0	711	1209
V/C Ratio(X)				0.46	0.00	0.46	0.26	0.33	0.00	0.00	0.74	0.86
Avail Cap(c_a), veh/h				546	0	478	163	1941	0	0	711	1209
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.0	0.0	17.0	22.8	0.0	0.0	0.0	16.0	17.1
Incr Delay (d2), s/veh				2.7	0.0	3.1	3.8	0.4	0.0	0.0	6.9	8.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.7	0.0	3.3	0.8	0.1	0.0	0.0	8.8	9.2
LnGrp Delay(d),s/veh				19.7	0.0	20.1	26.6	0.4	0.0	0.0	22.9	25.5
LnGrp LOS				B		C	C	A			C	C
Approach Vol, veh/h					467			674			1573	
Approach Delay, s/veh					19.9			2.1			24.6	
Approach LOS					B			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		37.4			10.0	27.4		22.6
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		32.9			5.5	22.9		18.1
Max Q Clear Time (g_c+I1), s		2.0			3.2	20.3		8.7
Green Ext Time (p_c), s		17.0			0.0	2.3		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	125	418	0	284
Demand Flow Rate, veh/h	127	426	0	289
Vehicles Circulating, veh/h	629	0	389	426
Vehicles Exiting, veh/h	86	389	367	0
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.7	7.1	0.0	9.2
Approach LOS	A	A	-	A

Lane	Left	Right	Left		Left	Right
Designated Moves	LT	R	LT		LT	R
Assumed Moves	LT	R	LT		LT	R
RT Channelized						
Lane Util	0.984	0.016	1.000		0.920	0.080
Critical Headway, s	5.193	5.193	5.193		5.193	5.193
Entry Flow, veh/h	125	2	426		266	23
Cap Entry Lane, veh/h	602	602	1130		738	738
Entry HV Adj Factor	0.980	1.000	0.981		0.981	1.000
Flow Entry, veh/h	123	2	418		261	23
Cap Entry, veh/h	591	602	1108		724	738
V/C Ratio	0.208	0.003	0.377		0.360	0.031
Control Delay, s/veh	8.7	6.0	7.1		9.6	5.2
LOS	A	A	A		A	A
95th %tile Queue, veh	1	0	2		2	0

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	384	840	142	0
Demand Flow Rate, veh/h	392	856	145	0
Vehicles Circulating, veh/h	0	51	392	436
Vehicles Exiting, veh/h	436	486	0	471
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.7	7.7	6.7	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Right	Left	Right
Designated Moves	LT	LT	R	LT	R
Assumed Moves	LT	LT	R	LT	R
RT Channelized					
Lane Util	1.000	0.505	0.495	0.034	0.966
Critical Headway, s	5.193	5.193	5.193	5.193	5.193
Entry Flow, veh/h	392	432	424	5	140
Cap Entry Lane, veh/h	1130	1074	1074	764	764
Entry HV Adj Factor	0.980	0.980	0.981	0.996	0.979
Flow Entry, veh/h	384	424	416	5	137
Cap Entry, veh/h	1108	1053	1054	761	747
V/C Ratio	0.347	0.402	0.395	0.007	0.183
Control Delay, s/veh	6.7	7.7	7.6	4.8	6.8
LOS	A	A	A	A	A
95th %tile Queue, veh	2	2	2	0	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	352	57	3	0	0	0	0	125	2	426	213	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	414	0	3				0	132	2	448	224	0
Adj No. of Lanes	2	0	1				0	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	912	0	407				0	910	407	520	2174	0
Arrive On Green	0.26	0.00	0.26				0.00	0.26	0.26	0.29	0.61	0.00
Sat Flow, veh/h	3548	0	1583				0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	414	0	3				0	132	2	448	224	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583				0	1770	1583	1774	1770	0
Q Serve(g_s), s	6.9	0.0	0.1				0.0	2.0	0.1	16.7	1.8	0.0
Cycle Q Clear(g_c), s	6.9	0.0	0.1				0.0	2.0	0.1	16.7	1.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	912	0	407				0	910	407	520	2174	0
V/C Ratio(X)	0.45	0.00	0.01				0.00	0.15	0.00	0.86	0.10	0.00
Avail Cap(c_a), veh/h	912	0	407				0	910	407	520	2174	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.9	0.0	19.4				0.0	20.1	19.3	23.4	5.6	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0				0.0	0.3	0.0	17.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0				0.0	1.0	0.0	10.5	0.9	0.0
LnGrp Delay(d),s/veh	23.5	0.0	19.4				0.0	20.4	19.4	40.4	5.7	0.0
LnGrp LOS	C		B					C	B	D	A	
Approach Vol, veh/h		417						134			672	
Approach Delay, s/veh		23.5						20.4			28.8	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	25.0	22.5		22.5		47.5		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	20.5	18.0		18.0		43.0		
Max Q Clear Time (g_c+I1), s	18.7	4.0		8.9		3.8		
Green Ext Time (p_c), s	0.3	1.9		1.1		2.5		

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	6	63	115	27	450	0	0	633	695
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				6	92	94	28	474	0	0	666	732
Adj No. of Lanes				1	1	1	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				303	318	270	273	2669	0	0	1991	891
Arrive On Green				0.17	0.17	0.17	0.15	0.75	0.00	0.00	0.56	0.56
Sat Flow, veh/h				1774	1863	1583	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				6	92	94	28	474	0	0	666	732
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				0.3	5.2	6.3	1.6	4.6	0.0	0.0	12.2	45.1
Cycle Q Clear(g_c), s				0.3	5.2	6.3	1.6	4.6	0.0	0.0	12.2	45.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				303	318	270	273	2669	0	0	1991	891
V/C Ratio(X)				0.02	0.29	0.35	0.10	0.18	0.00	0.00	0.33	0.82
Avail Cap(c_a), veh/h				303	318	270	273	2669	0	0	1991	891
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.4	43.4	43.9	43.6	4.2	0.0	0.0	14.1	21.4
Incr Delay (d2), s/veh				0.1	2.3	3.5	0.7	0.1	0.0	0.0	0.5	8.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.2	2.9	3.0	0.9	2.2	0.0	0.0	6.0	21.6
LnGrp Delay(d),s/veh				41.5	45.7	47.4	44.4	4.3	0.0	0.0	14.6	29.8
LnGrp LOS				D	D	D	D	A			B	C
Approach Vol, veh/h					192			502			1398	
Approach Delay, s/veh					46.4			6.6			22.6	
Approach LOS					D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		95.0			23.0	72.0		25.0
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		90.5			18.5	67.5		20.5
Max Q Clear Time (g_c+I1), s		6.6			3.6	47.1		8.3
Green Ext Time (p_c), s		18.3			0.0	11.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1055	1	121	0	0	0	0	191	11	90	82	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	1230	0	0				0	201	12	95	86	0
Adj No. of Lanes	2	1	0				0	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	2247	1180	0				0	838	50	328	873	0
Arrive On Green	0.63	0.00	0.00				0.00	0.25	0.25	0.25	0.25	0.00
Sat Flow, veh/h	3548	1863	0				0	3488	201	1164	3632	0
Grp Volume(v), veh/h	1230	0	0				0	104	109	95	86	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0				0	1770	1827	1164	1770	0
Q Serve(g_s), s	14.6	0.0	0.0				0.0	3.5	3.6	5.3	1.4	0.0
Cycle Q Clear(g_c), s	14.6	0.0	0.0				0.0	3.5	3.6	8.9	1.4	0.0
Prop In Lane	1.00		0.00				0.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	2247	1180	0				0	437	451	328	873	0
V/C Ratio(X)	0.55	0.00	0.00				0.00	0.24	0.24	0.29	0.10	0.00
Avail Cap(c_a), veh/h	2247	1180	0				0	437	451	328	873	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	0.0				0.0	22.6	22.6	26.2	21.8	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0				0.0	1.3	1.3	2.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	0.0				0.0	1.9	2.0	1.9	0.7	0.0
LnGrp Delay(d),s/veh	8.7	0.0	0.0				0.0	23.9	23.9	28.4	22.0	0.0
LnGrp LOS	A							C	C	C	C	
Approach Vol, veh/h		1230						213			181	
Approach Delay, s/veh		8.7						23.9			25.4	
Approach LOS		A						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		23.0		52.0		23.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.5		47.5		18.5		
Max Q Clear Time (g_c+I1), s		5.6		16.6		10.9		
Green Ext Time (p_c), s		1.7		5.8		1.3		

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	9	0	112	188	1051	0	0	147	1747
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				0	0	128	198	1106	0	0	155	0
Adj No. of Lanes				0	1	2	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				0	479	814	469	2174	0	0	1011	452
Arrive On Green				0.00	0.00	0.26	0.26	0.61	0.00	0.00	0.29	0.00
Sat Flow, veh/h				0	1863	3167	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				0	0	128	198	1106	0	0	155	0
Grp Sat Flow(s),veh/h/ln				0	1863	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				0.0	0.0	2.2	6.5	12.3	0.0	0.0	2.3	0.0
Cycle Q Clear(g_c), s				0.0	0.0	2.2	6.5	12.3	0.0	0.0	2.3	0.0
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	479	814	469	2174	0	0	1011	452
V/C Ratio(X)				0.00	0.00	0.16	0.42	0.51	0.00	0.00	0.15	0.00
Avail Cap(c_a), veh/h				0	479	814	469	2174	0	0	1011	452
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	0.0	20.1	21.3	7.6	0.0	0.0	18.7	0.0
Incr Delay (d2), s/veh				0.0	0.0	0.4	2.8	0.9	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	0.0	1.0	3.5	6.1	0.0	0.0	1.2	0.0
LnGrp Delay(d),s/veh				0.0	0.0	20.5	24.1	8.4	0.0	0.0	19.0	0.0
LnGrp LOS						C	C	A			B	
Approach Vol, veh/h					128			1304			155	
Approach Delay, s/veh					20.5			10.8			19.0	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		47.5			23.0	24.5		22.5
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		43.0			18.5	20.0		18.0
Max Q Clear Time (g_c+I1), s		14.3			8.5	4.3		4.2
Green Ext Time (p_c), s		11.0			0.4	8.1		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	968	1	277	0	0	0	0	836	144	35	427	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	1020	0	292				0	880	152	37	449	0
Adj No. of Lanes	2	0	1				0	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1360	0	607				0	1091	488	148	1652	0
Arrive On Green	0.38	0.00	0.38				0.00	0.31	0.31	0.08	0.47	0.00
Sat Flow, veh/h	3548	0	1583				0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	1020	0	292				0	880	152	37	449	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583				0	1770	1583	1774	1770	0
Q Serve(g_s), s	14.9	0.0	8.4				0.0	13.7	4.4	1.2	4.6	0.0
Cycle Q Clear(g_c), s	14.9	0.0	8.4				0.0	13.7	4.4	1.2	4.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1360	0	607				0	1091	488	148	1652	0
V/C Ratio(X)	0.75	0.00	0.48				0.00	0.81	0.31	0.25	0.27	0.00
Avail Cap(c_a), veh/h	1360	0	607				0	1091	488	148	1652	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	0.0	14.0				0.0	19.1	15.9	25.7	9.8	0.0
Incr Delay (d2), s/veh	3.8	0.0	2.7				0.0	6.4	1.7	4.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	4.1				0.0	7.6	2.1	0.7	2.3	0.0
LnGrp Delay(d),s/veh	19.8	0.0	16.7				0.0	25.5	17.5	29.8	10.2	0.0
LnGrp LOS	B		B					C	B	C	B	
Approach Vol, veh/h		1312						1032			486	
Approach Delay, s/veh		19.1						24.3			11.7	
Approach LOS		B						C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.5	23.0		27.5		32.5		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	5.0	18.5		23.0		28.0		
Max Q Clear Time (g_c+I1), s	3.2	15.7		16.9		6.6		
Green Ext Time (p_c), s	0.0	2.1		2.9		10.4		

Intersection Summary	
HCM 2010 Ctrl Delay	19.8
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	298	37	341	325	1451	0	0	169	775
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				314	44	356	342	1527	0	0	178	816
Adj No. of Lanes				0	1	1	1	2	0	0	1	2
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				433	61	438	396	2069	0	0	544	926
Arrive On Green				0.28	0.28	0.28	0.22	0.58	0.00	0.00	0.29	0.29
Sat Flow, veh/h				1565	219	1583	1774	3632	0	0	1863	3167
Grp Volume(v), veh/h				358	0	356	342	1527	0	0	178	816
Grp Sat Flow(s),veh/h/ln				1784	0	1583	1774	1770	0	0	1863	1583
Q Serve(g_s), s				11.8	0.0	13.6	12.1	20.5	0.0	0.0	4.9	16.0
Cycle Q Clear(g_c), s				11.8	0.0	13.6	12.1	20.5	0.0	0.0	4.9	16.0
Prop In Lane				0.88		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				494	0	438	396	2069	0	0	544	926
V/C Ratio(X)				0.72	0.00	0.81	0.86	0.74	0.00	0.00	0.33	0.88
Avail Cap(c_a), veh/h				494	0	438	396	2069	0	0	544	926
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.3	0.0	21.9	24.3	9.9	0.0	0.0	18.0	21.9
Incr Delay (d2), s/veh				8.9	0.0	15.0	21.4	2.4	0.0	0.0	1.6	11.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.0	0.0	7.8	8.2	10.4	0.0	0.0	2.7	8.4
LnGrp Delay(d),s/veh				30.2	0.0	37.0	45.7	12.3	0.0	0.0	19.6	33.8
LnGrp LOS				C		D	D	B			B	C
Approach Vol, veh/h					714			1869			994	
Approach Delay, s/veh					33.6			18.4			31.2	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		42.5			19.0	23.5		22.5
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		38.0			14.5	19.0		18.0
Max Q Clear Time (g_c+I1), s		22.5			14.1	18.0		15.6
Green Ext Time (p_c), s		12.7			0.1	1.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	6.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	95	254	0	269
Demand Flow Rate, veh/h	97	259	0	274
Vehicles Circulating, veh/h	471	0	339	259
Vehicles Exiting, veh/h	62	339	229	0
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.3	5.4	0.0	7.2
Approach LOS	A	A	-	A

Lane	Left	Right	Left		Left	Right
Designated Moves	LT	R	LT		LT	R
Assumed Moves	LT	R	LT		LT	R
RT Channelized						
Lane Util	0.856	0.144	1.000		0.934	0.066
Critical Headway, s	5.193	5.193	5.193		5.193	5.193
Entry Flow, veh/h	83	14	259		256	18
Cap Entry Lane, veh/h	706	706	1130		872	872
Entry HV Adj Factor	0.980	1.000	0.981		0.980	1.000
Flow Entry, veh/h	81	14	254		251	18
Cap Entry, veh/h	692	706	1109		855	872
V/C Ratio	0.118	0.020	0.229		0.294	0.021
Control Delay, s/veh	6.5	5.3	5.4		7.4	4.3
LOS	A	A	A		A	A
95th %tile Queue, veh	0	0	1		1	0

Intersection	
Intersection Delay, s/veh	6.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	338	381	272	0
Demand Flow Rate, veh/h	344	389	277	0
Vehicles Circulating, veh/h	0	180	344	195
Vehicles Exiting, veh/h	195	441	0	374
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.2	6.0	7.1	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Right	Left	Right
Designated Moves	LT	LT	R	LT	R
Assumed Moves	LT	LT	R	LT	R
RT Channelized					
Lane Util	1.000	0.398	0.602	0.217	0.783
Critical Headway, s	5.193	5.193	5.193	5.193	5.193
Entry Flow, veh/h	344	155	234	60	217
Cap Entry Lane, veh/h	1130	944	944	801	801
Entry HV Adj Factor	0.981	0.980	0.979	0.977	0.982
Flow Entry, veh/h	338	152	229	59	213
Cap Entry, veh/h	1109	925	924	782	786
V/C Ratio	0.304	0.164	0.248	0.075	0.271
Control Delay, s/veh	6.2	5.5	6.4	5.3	7.6
LOS	A	A	A	A	A
95th %tile Queue, veh	1	1	1	0	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1010	172	14	0	0	0	0	514	10	515	389	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	1192	0	15				0	541	11	542	409	0
Adj No. of Lanes	2	0	1				0	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1331	0	594				0	669	299	534	1893	0
Arrive On Green	0.38	0.00	0.38				0.00	0.19	0.19	0.30	0.54	0.00
Sat Flow, veh/h	3548	0	1583				0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	1192	0	15				0	541	11	542	409	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583				0	1770	1583	1774	1770	0
Q Serve(g_s), s	31.6	0.0	0.6				0.0	14.6	0.6	30.1	6.1	0.0
Cycle Q Clear(g_c), s	31.6	0.0	0.6				0.0	14.6	0.6	30.1	6.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1331	0	594				0	669	299	534	1893	0
V/C Ratio(X)	0.90	0.00	0.03				0.00	0.81	0.04	1.02	0.22	0.00
Avail Cap(c_a), veh/h	1331	0	594				0	669	299	534	1893	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.4	0.0	19.7				0.0	38.8	33.1	35.0	12.2	0.0
Incr Delay (d2), s/veh	9.7	0.0	0.1				0.0	10.2	0.2	42.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.2	0.0	0.3				0.0	8.1	0.3	21.0	3.0	0.0
LnGrp Delay(d),s/veh	39.1	0.0	19.8				0.0	49.0	33.3	77.7	12.5	0.0
LnGrp LOS	D		B					D	C	F	B	
Approach Vol, veh/h		1207						552			951	
Approach Delay, s/veh		38.8						48.7			49.7	
Approach LOS		D						D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	34.6	23.4		42.0		58.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	30.1	18.9		37.5		53.5		
Max Q Clear Time (g_c+I1), s	32.1	16.6		33.6		8.1		
Green Ext Time (p_c), s	0.0	1.3		2.0		8.0		

Intersection Summary	
HCM 2010 Ctrl Delay	44.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	20	111	299	60	1464	0	0	884	537
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				21	209	216	63	1541	0	0	931	565
Adj No. of Lanes				1	1	1	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				436	458	389	288	2404	0	0	1696	759
Arrive On Green				0.25	0.25	0.25	0.16	0.68	0.00	0.00	0.48	0.48
Sat Flow, veh/h				1774	1863	1583	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				21	209	216	63	1541	0	0	931	565
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				1.1	11.4	14.3	3.7	29.7	0.0	0.0	22.3	34.7
Cycle Q Clear(g_c), s				1.1	11.4	14.3	3.7	29.7	0.0	0.0	22.3	34.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				436	458	389	288	2404	0	0	1696	759
V/C Ratio(X)				0.05	0.46	0.55	0.22	0.64	0.00	0.00	0.55	0.74
Avail Cap(c_a), veh/h				436	458	389	288	2404	0	0	1696	759
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.5	38.4	39.5	43.6	10.9	0.0	0.0	22.1	25.3
Incr Delay (d2), s/veh				0.2	3.3	5.6	1.7	1.3	0.0	0.0	1.3	6.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	6.3	6.8	2.0	14.8	0.0	0.0	11.2	16.4
LnGrp Delay(d),s/veh				34.7	41.7	45.1	45.4	12.3	0.0	0.0	23.4	31.9
LnGrp LOS				C	D	D	D	B			C	C
Approach Vol, veh/h					446			1604			1496	
Approach Delay, s/veh					43.0			13.6			26.6	
Approach LOS					D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		86.0			24.0	62.0		34.0
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		81.5			19.5	57.5		29.5
Max Q Clear Time (g_c+I1), s		31.7			5.7	36.7		16.3
Green Ext Time (p_c), s		38.2			0.1	18.4		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.