5.0 MANDATORY CEQA TOPICS

The *State CEQA Guidelines* set forth several general content requirements for EIRs. Those applicable to this Project include cumulative impacts (Section 15130), growth inducing impacts (Section 15126(d)) and unavoidable adverse impacts (Section 15126(b)). The following addresses each of these general requirements.

5.1 CUMULATIVE IMPACT ANALYSIS

5.1.1 Introduction

CEQA requires that an EIR examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone (*State CEQA Guidelines* Section 15130(b)).

As stated in the *State CEQA Guidelines*, an EIR "shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable (Section 15130(a))." "Cumulatively considerable" means that "the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130" (Section 15065(c)). Section 15355 of the *State CEQA Guidelines* states that "cumulative impacts" occur from "...the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through fee-payment programs. The EIR must examine "reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project" (*State CEQA Guidelines* Sections 15130(a)(3) and 15130(b)(5)).

State CEQA Guidelines Section 15130(b)(1) requires that a discussion of cumulative impacts be based on either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

This EIR utilizes the "summary of projections" approach in the cumulative analysis. Section 15130(d) of the *State CEQA Guidelines* states that, "Previously approved land use documents such as general plans, specific plans, and local coastal plans may be used in cumulative impact

analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impact analysis is required when a project is consistent with a general, specific, master, or comparable programmatic plan where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have been adequately addressed, as defined in Section 15152(f), in a certified EIR for that plan." Additionally, if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact. (Section 15130(e) of the *State CEQA Guidelines*)

5.1.2 Cumulative Analysis Setting

The cumulative impact analysis for the proposed Project is based on information contained in the San Jacinto General Plan, San Jacinto General Plan EIR (SCH No. 2001111165), Hemet General Plan, Hemet General Plan EIR (SCH 90020515), Riverside County General Plan, and Riverside County General Plan Final EIR (SCH No. 2002051143) certified by the respective jurisdictions. These documents are utilized because the geographic area addressed in these documents encompasses the proposed boundaries of the SJV-MDP, and all portions of the surrounding area that could be potentially impacted by the proposed Project's contribution to cumulative impacts. All six of these documents are hereby incorporated by reference and are available for review at the locations cited for these documents in Section 6.0 (References) of this Draft EIR.

5.1.3 Assessment of Cumulative Impacts

5.1.3.1 Aesthetics

There are no State Designated Scenic Highways within the Project area. The closest State Designated Scenic Highway is Highway 243 (Banning/Idyllwild Panoramic Highway), which is located over seven and one-half miles northeast of the Project's northeastern boundary. Therefore, the SJV-MDP will not impact State Eligible Scenic Highways. Ramona Expressway, Gilman Springs Road, State Route 79, and Soboba Road, which are located in proximity to the Project area, are designated County Eligible Scenic Highways in the San Jacinto Valley Area Plan (COR SJVAP, Figure 9). Gilman Springs Road, State Route 79, and Soboba Road are not located within the boundaries of the SJV-MDP. Ramona Expressway passes through the Project area. Line 2, portions of Line H, and Line J-3 are proposed to be located adjacent to the Ramona Expressway. Line 2 is proposed as an underground storm drain from Avenue to a point approximately 2,000 feet east of the Ramona Expressway/Sanderson Avenue intersection, and as an open channel from the Ramona Expressway/Sanderson Avenue intersection approximately one and one-quarter mile west (Figure 3.1-2). Line H is a storm drain that would cross the Ramona Expressway at State Street. Line J-3 is an open channel, which would be located adjacent to the Ramona Expressway from the Ramona Expressway/San Jacinto Avenue intersection approximately 2,750 feet east of said intersection (Figure 3.1-2).

The open channel portions of Line 2 and Line J-3 would be visible to passing motorists using Ramona Expressway. However, this view would be brief lasting only a few seconds for each facility for motorists traveling between 50 to 55 miles per hours (mph). The posted speed limit for Ramona Expressway is 55 mph. Due to the limited exposure to these facilities, **impacts to a County Eligible Scenic Highway are considered less than significant**.

<u>Proposed Mitigation Measures</u>

The proposed Project will result in **less significant impacts** with respect to aesthetics, no mitigation measures are proposed.

Summary of Cumulative Environmental Effects After Mitigation Measures are Implemented

The San Jacinto General Plan EIR identified potential cumulative impacts to scenic views resulting from development per the San Jacinto General Plan. New development may increase light and glare, which would have the potential to significantly impact views from outside of San Jacinto. Although sources of light and glare will increase within San Jacinto, any new development will be required to meet the standards contained in the City's Lighting Regulations that are contained within the Zoning Ordinance. Therefore, because the City will mitigate new sources of light, the City will not cumulatively contribute a considerable level of new light and glare (SJGP DEIR, p. 7-2).

The County of Riverside General Plan Final EIR identified potential cumulative impacts to scenic views from development in surrounding areas. Development would result in the intensification of existing urban uses as well as conversion of open space into urban land uses. The intensification of existing urban uses would result in a less than significant impact. Whereas, the conversion of open space to urban uses would result in a significant unavoidable impact. Therefore, development per the County of Riverside General Plan will cumulatively contribute significantly to the loss of visual character if Riverside County.

The Hemet General Plan EIR concluded that ultimate development planned and envisioned will fundamentally change the aesthetic character of the Hemet area from largely open agricultural to more of a typical suburban setting and these impacts cannot be mitigated below a level of significance (HGP EIR, F-5). However, the portions of Hemet which are within the boundaries of the SJV-MDP boundary are already developed with residential and commercial uses.

The geographic scope for cumulative aesthetics analysis is the SJV-MDP boundary and immediately adjacent communities and jurisdictions. Implementation of the proposed Project will provide drainage infrastructure that could support development of portions of San Jacinto, portions of Hemet, and portions of unincorporated Riverside County in accordance with the General Plan for each jurisdictions. Development of the Project area will result in the construction of structures associated with urban development. This future development will change the character of the foreground views from vacant, natural open space and agriculture, to ornamental landscaping and buildings.

Future development will be subject to the approval process for the jurisdiction in which it is located, and will be required to comply with all development guidelines and ordinances regulating building size, type, location, landscaping, and design. Since future development will

be conditioned and designed to be aesthetically pleasing, as required by the San Jacinto, Hemet, and Riverside County General Plans, **indirect cumulative impacts to aesthetics resulting from the proposed Project are considered less than significant**.

5.1.3.2 Agricultural Resources

Construction and operation of the proposed basin and channels would result in a permanent change to Important Farmland, as they are open facilities and must be maintained in order to retain flood control capacity. Construction of the proposed open channels will be primarily located within or adjacent to road right-of-way (ROW). Construction of open channels, will not significantly impact existing agricultural uses adjacent to the open channel facilities, because limited property within the footprint of the open channel facilities will be converted to a public, i.e., non-agricultural use. Based on the limited direct impacts associated with construction and operation of the linear open channel facilities, **potential impacts to Important Farmland from the construction of these facilities are less than significant.**

The proposed Line D Basin, which is anticipated to encompass approximately 15 acres, is located within an area identified as being Prime Farmland and Farmland of Statewide Importance. Therefore, construction of this facility will result in the direct conversion of 15 acres of Important Farmland to a non-agricultural use by converting the property to a flood control facility, which is a **potentially significant impact**.

SJV-MDP conceptual alignment and location of open channels Line 1, Line 2, Line 3, Line X, and the Line E-Y-Z Confluence Basin are within property under a Williamson Act contract. With respect to the proposed open channels, construction will be primarily located within or adjacent to road ROW. Construction of open channels within existing road ROW will not conflict with or require the cancellation of a Williamson Act contract due to the limited direct impacts associated with construction and operation of the linear open channel facilities. The conversion of approximately 6.3 acres of Farmland of Local Importance under a Williamson Act Contract to a non-agricultural use will be required in the construction of the Line E-Y-Z confluence basin and will be a **direct impact** to a Williamson Act Contract.

As previously discussed, the proposed Project will provide drainage infrastructure that could support development of the Project area. Development of adjacent areas would result in the direct conversion of farmland (including Important Farmland) to non-agricultural uses. Consequently, the proposed Project has the potential to indirectly convert farmland in the Project area. The portions of the Project area in San Jacinto, Hemet, and part of the unincorporated portions of the Project area are designated for non-agricultural land uses in the adopted San Jacinto, Hemet, and Riverside County General Plans; thus the direct conversion of farmland to non-agricultural uses would likely occur in the Project area with the build out of the San Jacinto, Hemet, and Riverside County General Plans.

Because the proposed Project will likely support the conversion of farmland to non-agricultural uses, **impacts are considered potentially significant**.

Summary of Cumulative Environmental Effects from General Plans

The San Jacinto General Plan will allow new development to occur that will convert existing agricultural resources to non-agricultural uses. Mitigation measures described in Section 5.2 of the San Jacinto General Plan Draft EIR will reduce impacts to agricultural resources. However, the new development will have significant and unavoidable impacts on agricultural resources. Therefore, development planned and envisioned by the San Jacinto General Plan will contribute to the cumulative loss of agricultural resources in San Jacinto.

Development planned and envisioned in the Riverside County General Plan would result in the conversion of state-designated farmland as well as land currently utilized for agricultural productivity to a variety of non-agricultural uses. The Riverside County General Plan contains policies of which will reduce or minimize the effects of future development on agricultural resources. Because these policies do not set specific requirements that will limit the conversion of agricultural lands to non-agricultural uses, and because no feasible or reasonable mitigation was identified to reduce these potential impacts to a less than significant level; impacts to existing farmland and State-designated farmland remain significant and unavoidable and will contribute to a cumulative adverse impact (CORGP FEIR, p. 536).

The City of Hemet General Plan EIR concluded that ultimate development planned and envisioned will impact almost all of the agricultural soils and farming activities in support of suburban uses. Therefore, the ultimate development will have an adverse cumulative regional impact on soil and agricultural resources that cannot be mitigated below a level of significance (HGP EIR, F-2). However, the portions of the Hemet within the boundaries of the SJV-MDP are currently developed with residential and commercial uses. Therefore, the Project will not cumulatively impact agricultural resources in Hemet.

Proposed Mitigation Measures

No mitigation measures were found to be feasible. See Section 3.2 of this Draft EIR for further discussion.

Summary of Environmental Effects After Mitigation Measures are Implemented

Direct impacts to agricultural land in the Project area include the conversion of approximately 15 acres of Important Farmland and 6.3 acres of Farmland of Local Importance associated with the construction of the four basins identified in the SJV-MDP. The proposed Project provides a master plan and funding mechanism for drainage facilities that could support future urbanization as set forth in the San Jacinto, Hemet, and Riverside County General Plans and could result in the indirect conversion of Farmland. As discussed in Section 3.2.7, absent active property owner cooperation and substantial financial incentives, it is highly unlikely that long term agricultural production is viable and would continue in the Project area, with or without the Project.

Therefore, there are no feasible mitigation measures that would reduce direct or indirect project impacts to less than significant levels. Adoption of a Statement of Overriding Considerations would be required prior to Project approval.

5.1.3.3 Air Quality

Based on the regional significance threshold analysis for the proposed Project, short-term construction emissions will exceed the daily regional thresholds set by SCAQMD for NO_X, PM-10, and PM-2.5 during the construction of various facilities or combinations of facilities, but will not exceed any other regional criteria pollutant thresholds. Short-term construction impacts are **considered significant**. No long-term MDP operational emissions were evaluated because the proposed SJV-MDP will not result in a change from the operation of the existing MDPs for the Project area; therefore, long-term operational impacts are **considered less than significant**.

Based on the LST analysis of the proposed Project, the short-term construction of the Project will not result in any localized air quality impacts to sensitive receptors within the Project area for NO_X or CO; however, emissions of PM-10 and PM-2.5 are above SCAQMD recommended daily thresholds, and short-term construction impacts are **considered significant**. Due to the lack of stationary source emissions; no long-term localized significance threshold analysis is needed, and long-term operational impacts are considered **less than significant**.

The portion of the SCAB in which the Project is located is designated as a non-attainment area for ozone, PM-10, and PM-2.5 under both state and federal standards. In evaluating the cumulative effects of the Project, Section 21100(e) of CEQA states that "previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis." In addressing cumulative effects for air quality, the AQMP utilizes approved general plans; therefore, it is the most appropriate document to use in evaluating cumulative impacts of the proposed Project. This is because the AQMP evaluated air quality emissions for the entire Basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the Project area, into compliance with all federal and state air quality standards. As described in the NOP for this Project (Appendix A), the Project will not conflict with or obstruct the implementation of the AQMP. The Project's short-term construction emissions for NO_X, PM-10, and PM-2.5 have been shown to be significant on a regional level. However, since it is only the Project's short-term emissions that are above thresholds for NO_X, PM-10, and PM-2.5, and the impact is temporary (approximately six months in duration), the impact is **not** considered to have a cumulatively considerable net increase on ozone and PM-10, which are non-attainment in the region under both state and federal standards, and is considered less than significant.

In regards to GHG emissions, the proposed Project's construction emissions and annual CO₂ operational emissions will not exceed the SCAQMD recommended Tier 3 screening level of significance for commercial or industrial projects. The SCAQMD additional requirements for energy and water usage do not apply to the Project. The CARB has not yet developed a quantitative threshold for commercial projects and the currently recommended performance standards for construction and operation of commercial projects also do not apply to the SJV-MDP. Therefore, the impact is considered **less than significant**.

Summary of Cumulative Environmental Effects from General Plans

The cumulative area for air quality impacts is the South Coast Air Basin (Basin). The portion of the Basin within which the Project is located is designated as a non-attainment area for ozone, PM-10 and PM-2.5 under both state and federal standards.

The San Jacinto General Plan Draft EIR concluded that construction-related emissions associated with General Plan buildout will exceed SCAQMD thresholds. These construction-related emissions will impact cumulative air quality as well and will be significant and unavoidable (SJGP EIR, p. 7-3). Regional emissions, although significant and unavoidable, are more related to the consistency with SCAG area growth projections than with emissions (SJGP EIR, p. 7-5).

The Riverside County General Plan Final EIR concluded that buildout per the Riverside County General Plan would contribute to the regional air pollutant emissions during construction and at build out. Therefore, the implementation of the Riverside County General Plan will have significant and unavoidable cumulative air quality impacts (CORGP FEIR, p. 536).

The City of Hemet General Plan EIR concluded that ultimate development planned and envisioned will produce additional air pollutants which will contribute to the entire Basin and will result in significant and unavoidable cumulative air quality impacts (HGP EIR, p. F-3).

Proposed Mitigation Measures

Mitigation measures addressing temporary construction and maintenance activities have been incorporated into the Project to reduce project-level impacts. Please refer to Section 3.3 of this DEIR.

Cumulative Environmental Effects After Mitigation Measures are Implemented

The Project-specific evaluation presented in the Draft EIR demonstrates that, even with mitigation, projected short-term emissions from construction of Project facilities are above applicable SCAQMD regional thresholds for NO_X, PM-10, and PM-2.5 for various facilities or combinations of SJV-MDP facilities, but will not exceed any other pollutant thresholds. Additionally, short-term emissions from construction of the Casa Loma Basin, Line E, and Line D-4 will exceed SCAOMD's LST for PM-10 and/or PM-2.5.

No long-term MDP operational emissions were evaluated because the proposed MDP will not result in a change from the operation of the existing MDPs for the project area. Additionally, no long-term localized significance thresholds analysis is needed due to the lack of stationary source emissions. Since the Project only exceeds standards during construction (a maximum duration of approximately six months, and considered a temporary impact), the project is considered cumulatively less than significant.

Regarding global climate change and GHG emissions as discussed above, even in the absence of the project, the impacts associated with global climate change will still exist, however due to the fact that the project's GHG emissions are temporary (only occur during construction; a maximum duration of approximately six months) and are well below the SCAQMD threshold,

the Project's contribution to global climate change is not considered cumulatively considerable.

5.1.3.4 Biological Resources

Several special-status plant species have low to high potential for occurrence along alignments within the Project area (see **Table 3.4-A**). Plant species with a high potential to occur on site include Smooth tarplant and Coulter's goldfields. Locations of smooth tarplant were detected along the alignments including Line V, Line Y and Lat Y-4 through Lat Y-7. Additionally, approximately half of the Project area is located within the Narrow Endemic Plant Species Survey Area (NEPSSA) 3 (see **Figure 3.4-4**). However, no narrow endemic plant species were observed within the Project area during the surveys. Project-specific surveys would be required during the appropriate time of the year to determine the presence/absence of all Narrow Endemic Plants and Criteria Area Plants.

The project area contains trees, shrubs, ground cover, and structures that provide suitable habitat for nesting migratory birds, including raptors. The MSHCP does not allow for the take of active nests. If any vegetation or structures are to be removed during the nesting season (February 1 to August 31), facility-specific nesting bird surveys shall be conducted first to determine the presence/absence of active nests. If active nests are identified, appropriate avoidance buffers should be established in the nesting activity has completed, and fledglings have left the nest and are no longer dependent on the parents. Portions of the project area may provide suitable nesting habitat for burrowing owls. Focused surveys for burrowing owl were conducted on July 31, and August 7, 8, 11, 12, 20, 22, and August 26, 2008. No burrowing owls were identified within the facility alignments or basin locations. Though no burrowing owls were detected during the focused surveys, much of the Project area has a moderate to high probability to support owls, whether breeding pairs, resident individuals, or transient individuals. Future habitat assessments and focused surveys (if suitable habitat/burrows are present) shall be required for areas that could not be accessed for the current study. In addition, updated facility-specific focused surveys should be conducted for areas that have been previously surveyed.

San Bernardino kangaroo rat (SBKR) (*Dipodomys merriami parvus*) was determined to have a low potential to occur within the Project area. Los Angeles pocket mouse (LAPM) (*Perognathus longimembris brevinasus*) was also determined to have a low potential to occur within the Project area. However, with implementation of mitigation measure **MM Bio 8**, survey and conservation requirements pursuant to Section 6.3.2 of the MSHCP, potential impacts from the proposed Project are considered less than significant.

Approximately 6.38 acres of riparian habitat were mapped by the biologists within the Project alignments (see **Figure 3.4-B**), and contained native riparian vegetation including willow, mule fat, and Freemont's cottonwood. The riparian areas that were mapped ranged from roadside/agricultural ditches, to ponds and basins, but also included the edge of extensive riparian habitat associated with the San Jacinto River. Some of the mapped areas qualify as MSHCP Riparian Areas, though others would likely be excluded due to their artificial nature. Facility-specific mapping would be required to determine which areas may be subject to MSHCP requirements, and which may not.

The project area contains waters subject to jurisdictions of: (i) the U.S. ACOE pursuant to Section 404 of the Clean Water Act (CWA); (ii) the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of CWA or pursuant to the California Porter-Cologne Act; and/or (iii) CDFG pursuant to Section 1602 of the California Fish and Game code. Features with the potential for jurisdiction were mapped (see **Figure 3.4-3**), including agricultural ditches and other roadside ditches, basins, etc. Facility-specific jurisdictional delineations will need to be conducted to determine whether features would be subject to the jurisdictions of the ACOE, RWQCB, and CDFG. With implementation of MM Bio 3, **potential impacts to federally-protected wetlands are reduced to less than significant levels.**

Summary of Cumulative Environmental Effects from General Plans

The geographic scope for cumulative biological impacts is the Western Riverside County MSHCP area. Development per the San Jacinto General Plan will have the potential to impact biological resources, which could diminish the amount of biological resources within the MSHCP region. However, the San Jacinto General Plan is consistent with and will facilitate implementation of the applicable policies and programs identified in the MSHCP. Additionally, the General Plan includes numerous objectives and policies designed to reduce impacts to biological resources over the long term. Therefore, implementation of these programs and policies and mitigation described in the San Jacinto General Plan will manage and reduce impacts to biological resources within San Jacinto to a less than significant level. Thus, buildout per the San Jacinto General Plan will not create significant cumulative impacts to biological resources.

The development planned and envisioned under the Riverside County General Plan would result in the loss of extensive areas of natural habitats and associated biological resources. Implementation of Riverside County General Plan policies and mitigation measures identified in the Riverside County General Plan EIR will reduce the impacts to below a level of significance. Additionally, the MSHCP will provide mitigation for development impacts to threatened and endangered species through the Western Riverside County by way of development fee and property acquisition.

Hemet General Plan EIR concluded that ultimate development planned and envisioned will eliminate native as well as sensitive plants and animals from the Hemet area. Although the Hemet General Plan contains policies to help preserve biological resources, the Hemet General Plan EIR, which was certified prior to approval of the MSHCP, concluded Hemet General Plan these policies cannot mitigate cumulative regional loss of biological habitat below a level of significance (HGP EIR, p. F-3). However, subsequent to the adoption of Hemet General Plan EIR, Hemet became a permittee under the MSHCP and is obligated to comply with its provisions. Since, the MSHCP provides mitigation for development impacts to threatened and endangered species through the Western Riverside County by way of development fee and property acquisition, buildout per the Hemet General Plan will not create significant cumulative impacts to biological resources.

Proposed Mitigation Measures

Mitigation measures addressing construction and maintenance will be incorporated into the project to reduce project-level biological impacts. The proposed project must also comply with the adopted Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). To address the potential impacts associated with the cumulative loss of habitat for special status wildlife the proposed project shall comply with all pertinent MSHCP requirements. Please refer to Section 3.4 of this DEIR.

Summary of Cumulative Environmental Effects After Mitigation Measures are Implemented

The Riverside County MSHCP Environmental Impact Report Section 5.1.1, *Cumulative Impact Analysis, Biological Resources*, evaluated the cumulative effects of the proposed MSHCP and alternatives on biological resources. In particular, the analysis focuses on the cumulative effects of the proposed MSHCP with the regional growth forecasts.

Through compliance with the MSHCP, the Project will not result in a cumulative adverse effect, either directly or through habitat modifications, on any of the Covered Species listed in the Plan as implementation of the MSHCP benefits Covered Species by preserving their habitat in order to address their life cycle needs. Thus, through compliance with the MSHCP and based on the features of the MSHCP itself, impacts to Covered Species are mitigated below a level of significance.

Implementation of the MSHCP will result in cumulatively significant impacts on the Non-Covered Species because the issuance of incidental take permits will remove an impediment to development outside of the MSHCP Conservation Area. Non-Covered Species would receive little or no protection outside the reserves under existing ordinances and regulations. However, within the project area, there are no threatened or endangered species known or likely to be on site, which are not on the 146-species list covered by the MSHCP. Therefore, impacts to Non-Covered species are **cumulatively less than significant**.

The Project will **not cause adverse cumulative effects** related to the reduction of sensitive vegetation communities; as the project is located within the MSHCP Plan Area and the Plan itself is designed to preserve sufficient acreage of the sensitive vegetation communities present in western Riverside County. Similarly, the project will not cause adverse cumulative effects related to interference with the movement of any native resident or migratory fish or wildlife species or obstruction of genetic flow for the identified Planning Species. Part of the purpose and goals of the MSHCP is to use regional planning efforts to assemble a reserve that will preserve contiguous blocks of habitat in large enough areas to ensure that the reserve will allow movement of species and flow of genetic information.

The proposed project will **not cause adverse cumulative impacts** by conflicting with the provisions of any adopted Habitat Conservation Plan, Natural Communities Conservation Plan or other approved local, regional, or state habitat conservation plan either within or outside of the Plan area. The MSHCP has been written specifically to complement existing HCPs, such as the Stephens' kangaroo rat long-term HCP. Through compliance with the MSHCP and existing HCPs, local, regional, and state plans, cumulative impacts are considered less than significant.

Cumulative effects associated with the proposed MSHCP take authorization would involve direct loss of habitat and species associated with ground disturbance in take authorized areas as development occurs in accordance with projected growth. Cumulative indirect effects would occur to species and habitats within the MSHCP Conservation Area and would be associated with development of proposed land uses and activities in take authorized areas in proximity to the MSHCP Conservation Area. Indirect effects primarily result from adverse "edge effects" and may be short-term indirect effects related to construction or long-term indirect effects associated with development or land use practices in proximity to conserved habitat areas. Cumulative indirect impacts resulting from construction activities include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and runoff. Edge effects at the boundary between natural lands and human-occupied lands ("urban edge effects") arise due to human-related intrusions such as lighting, noise, invasive species, exotic predators (e.g., dogs and cats), hunting, trapping, off-road activities, dumping, and other forms of recreation and disturbance. Human-induced edge effects are generally unfavorable to native species and are considered cumulative as edge increases throughout the landscape.

Cumulative significant indirect impacts associated with edge effects and increased development outside the conservation areas established by the proposed MSHCP are addressed in the provisions of Section 6.1.4 of the Draft MSHCP. Edge effects will result as development occurs in proximity to habitat; however, the proposed MSHCP contains provisions that will reduce the adverse impacts associated with edge effects. The MSHCP provides take authorization for Covered Species. The MSHCP would not directly cause edge effects, but it would dictate where such effects could occur through the reserve assembly process. Thus, cumulative indirect impacts associated with edge effects are considered **less than significant**.

5.1.3.5 Cultural Resources

One historic resource is within the boundaries of a segment of the former San Jacinto Valley Railway that dates to 1888. According to the conceptual alignments and facilities identified in the SJV-MDP, Project-related activities at this location will be limited to trenching for the installation of an underground storm drain within the railway ROW. If construction within the railway ROW is limited to underground facilities, and does not include the intersection of any facilities with the rail line or associated railway structures, the Project will not result in the destruction or relocation of the railway nor will it alter the basic characteristics of the site. Therefore, the proposed project will not cause a substantial adverse change in the significance of the site, the only historical resource encountered in the portions of the Project footprint studied.

Portions of the project footprint were inaccessible to field survey personnel and could not be surveyed; thus, it is possible that historical resources could be present on the portions of the Project's footprint that could not be surveyed. Therefore, to reduce potential impacts to historical resources that could be present to less than significant, mitigation measures are implemented.

Numerous prehistoric—i.e., Native American—archaeological sites have been found in the area consisting of various amounts of habitation debris such as: ceramic shards, chippedstone and

groundstone tools, debitage, midden soils, fire-affected rock, and sometimes human remains. Bedrock milling features and, less frequently, petroglyphs, have been found in the San Jacinto Valley in areas where bedrock outcrops are present. However, no evidence of any prehistoric archaeological cultural resources was found within or adjacent to that portion of the Project footprint that could be surveyed. Additionally, there have been no archaeological resources identified through records searches or Native American consultations. However, since portions of the Project footprint were unable to be surveyed due to restricted access and Native American monitoring has been requested, implementation of **mitigation measures is required to ensure that impacts to archaeological resources are less than significant**.

Surficial soils within the Project's footprint consist of alluvium of Recent (Holocene) age and have a low potential for significant nonrenewable fossil remains. However, these younger alluvial sediments are of variable thickness and are known to rest directly on top of older Pleistocene-age sediments, which have a high potential to yield significant vertebrate fossil remains. Therefore, the proposed Project's potential to impact paleontological resources is determined to be low in the surficial alluvial sediments but high in the subsurface Pleistocene-age soils. Mitigation measures, which relate to excavation and earthmoving activities, are required to ensure reduce potential impacts with respect to paleontological impacts to less than significant.

Summary of Cumulative Environmental Effects from General Plans

The geographic scope for cumulative impacts to cultural resources includes Riverside County. Historical, archaeological, and paleontological resources in Riverside County could be cumulatively impacted by future development, like that which could occur under the proposed San Jacinto General Plan. However, San Jacinto has implemented local policies and programs as well as mitigation that will reduce these impacts to below a level of significance. Thus, potential cumulative impacts to cultural resources will be reduced to a less than significant level (SJGP EIR, p. 7-6).

Development planned and envisioned in the Riverside County General Plan would contribute to the growth and urbanization of Riverside County resulting in direct and/or indirect loss of cultural and paleontological resources. Therefore, implementation of the Riverside County General Plan will cumulatively contribute significantly to the loss of these sensitive areas and their resources (CORGP FEIR, p. 537).

Hemet contains a variety of historical or pre-historical importance. However, the Hemet General Plan EIR contains mitigation measures that protect the existing and undiscovered cultural resources. Therefore, the cumulative impact to cultural resources associated with the buildout per Hemet's General Plan will be mitigated to less than significant (HGP EIR, p. F-6).

Proposed Mitigation Measures

Mitigation measures will be incorporated into the project to reduce potential project-level impacts. Please refer to Section 3.5 of this DEIR. Additional mitigation measures addressing potential cumulative impacts are unnecessary.

Summary of Cumulative Environmental Effects After Mitigation Measures are Implemented

Impacts related to historic and archaeological resources were found to be less than significant within the portions of the Project footprint surveyed (**Table 3.5-A**). Mitigation measure MM Cultural 1 requires documentation of affected segments of the former San Jacinto Railway in the event implementation of the Project results in the construction of above ground facilities within in railway ROW or Project facilities intersect railway ROW. Mitigation measure **MM Cultural 2**, requires archaeological and paleontological field surveys be performed on any facility footprint not previously surveyed prior to construction to ensure that no impacts to unknown archaeological or paleontological resources result from Project implementation. Mitigation measure **MM Cultural 3** requires a qualified archaeologist to determine an appropriate course of action in the event that unanticipated buried cultural resources are encountered.

Since the project area falls within the bounds of the Soboba Band's Tribal Traditional Use Areas, mitigation measure **MM Cultural 4** requires coordination with Native American groups to allow a monitor to be present during all ground-disturbing work in potentially sensitive areas.

No unique geologic feature is known to exist and no fossils have been documented in the Project footprint. However, the Project footprint is underlain by deposits that could potentially have a high sensitivity for paleontological resources. Paleontological specimens taken from rock similar to that of the project area have, in the past, contributed to scientific understanding of the distant past and, therefore, could be considered unique resources. Consequently, ground-disturbing activities resulting from construction of the proposed project could damage or destroy previously undocumented unique fossils, if located within the project footprint. Mitigation measures MM Cultural 5 through MM Cultural 8 outline specific measures that will be taken if certain soil types or any artifacts are unearthed during construction activities. Therefore, through implementation of proposed mitigation measures, potential cumulative impacts to cultural resources will be reduced to less than significant.

5.1.3.6 Hazards and Hazardous Materials

Based on the results of the EDR report, the Project proposed facilities are within close vicinity of 27 sites classified as hazardous materials sites under various regulatory statuses. Sites listed on the HAZNET, FINDS, CLEANERS, Small Quantity Generators (SQGs), Large Quantity Generators (LQGs), UST, HIST UST, RCRA, and/or TRIS databases only pose a potential problem in the event of a spill or leak. Consequently, unless these sites also appear on a list of contaminated sites, there is no evidence of any problems at this time.

Although no significant impacts related to hazards and hazardous materials are anticipated from the sites listed in **Table 3.6-C**, or from Project-related construction and operations, common types of unanticipated existing contamination (resulting from prior leaking underground storage tanks, poor chemical handling or accidental/intentional unauthorized chemical releases) could be encountered during the construction of proposed facilities. **Therefore, through implementation of proposed mitigation measures, potential impacts will be reduced to less than significant levels.**

Summary of Cumulative Environmental Effects from General Plans

The geographic scope for cumulative impacts to hazards and hazardous materials includes Riverside County. As future development occurs within San Jacinto, Hemet, and within Riverside County, the population will rise and the number of people exposed to hazards related to hazardous materials, flooding, and fires will increase. The cumulative impact of regional development on public safety is potentially significant. However, San Jacinto will implement mitigation identified in the San Jacinto General Plan EIR that will reduce these impacts to less than significant. In addition, cumulative hazards impacts will be limited by public safety policies and programs implemented by other Riverside County jurisdictions. These programs establish policies to ensure that planned land uses are compatible with the surrounding natural and urban environment and hazardous conditions are minimized. Enforcement of state, county, and local hazardous material regulations will reduce significant public health hazards to a less than significant level. Thus, development per the San Jacinto General Plan will not create significant cumulative impacts to hazards and hazardous materials (SJGP EIR, p. 7-6).

Development planned and envisioned in accordance with the Riverside County General Plan would cumulatively increase the intensity of development in Riverside County. However, compliance with federal, State, and local regulations concerning the storage and handling of hazardous materials and/or waste would reduce the potential for significant public health and safety impacts from hazardous materials to occur. Therefore, the impact of the planned development under the General Plan in addition to future development in surrounding areas is not expected to affect significantly the number of people exposed to public health and safety risks from exposure to hazardous materials (COR GP FEIR, p. 537).

Development planned and envisioned under the City of Hemet General Plan will introduce new industrial uses and commensurate increase in commercial and residential uses which will generate increased amounts of hazardous materials. However, policies contained in the Hemet and San Jacinto General Plans will effectively mitigate potential cumulative impacts to less than significant (HGP EIR, p. F-5).

Proposed Mitigation Measures

The proposed project was found to have less than significant impacts without the need for mitigation measures. Compliance with the adopted mitigation measures contained in the Riverside County and City of Perris general plans and existing water resource regulations will reduce potential cumulative impacts associated with future offsite development. Additional mitigation measures addressing potential cumulative impacts are unnecessary.

Summary of Cumulative Environmental Effects After Mitigation Measures are Implemented

Risks associated with hazardous materials are generally site-specific and localized, and are thus limited to the project site. As such, the potential for cumulative impacts to occur is limited. Due to the historic agricultural use of the Project property, an environmental regulatory database search was conducted to focus on the presence of above and underground storage tanks, potential for contaminated soil and/or groundwater, and evidence of poor material handling and/or storage which may have resulted in soil and/or groundwater contamination within the project area. Based

on the results of the report, the proposed project footprint exhibits no evidence of recognized environmental conditions related to hazardous materials that would prohibit project implementation or cause environment impacts from project construction or operation. The project was found to have less than significant impacts related to the public or the environment from the accidental release of hazardous materials.

The geographical context for the cumulative impact analysis is SJV-MDP Project boundary. Although each development site has potentially unique hazardous materials considerations, it is expected that future development within the San Jacinto, Hemet, and surrounding unincorporated Riverside County will generally comply with the range of federal, state, and local statutes and regulations applicable to hazardous materials, and will be subject to existing and future programs of enforcement by the appropriate regulatory agencies. For these reasons, cumulative impacts to the public or environment resulting from the accidental release of hazardous materials would be less than significant. Consequently, the proposed project's impact to the public or environment associated with the release of hazardous materials would be less than cumulatively considerable and thus not significant.

5.1.3.7 Hydrology and Water Quality

The Project's impacts to hydrology and water quality were found to be less than significant since the SJV-MDP includes features that will reduce potential impacts to water quality. The Project is designed to improve drainage, and the proposed detention basins will reduce velocities, erosion, siltation, and flooding within the Project area.

Summary of Cumulative Environmental Effects from General Plans

The geographic scope for cumulative impacts to hydrology and water quality is the San Jacinto River Basin. As development proceeds in the San Jacinto River Basin, the amount of pollutants in runoff will increase, this in turn may impact surface and groundwater quality. The amount of impervious surfaces will increase as development proceeds and erosion and sedimentation impacts on surface water will occur during grading and construction activities (SJGP FEIR, pg. 79). However, San Jacinto will implement mitigation described in its General Plan EIR that requires all new development to implement BMPs in compliance with the Construction Stormwater Permit and/or San Jacinto's Municipal Separate Storm Sewer (MS4) Permit to ensure that impacts to hydrology and water quality are less than significant (SJGP FEIR pg. 80).

Development planned and envisioned in accordance with the Riverside County General Plan will result in an increase impermeable surfaces that will increase the volume and rate of storm runoff. Existing fixed drainage channels in urban areas may be unable to contain the runoff generated by relatively small, but intense rainfall events. Additionally, the increase in stormwater runoff caused by new land uses has the potential to increase pollutants conveyed to the groundwater basins and surface waters in creeks and rivers. Through implementation of Riverside County General Plan Policies, other Riverside County regulations, and NPDES requirements, impacts to hydrology and water quality will be less than significant (COR FEIR, Section 4.9).

Summary of Cumulative Environmental Effects After Mitigation Measures are Implemented

With the exception of impacts to local drainage, on a cumulative basis, the proposed facilities, along with offsite development authorized by the San Jacinto General Plan, Hemet General Plan, and Riverside County General Plan, could contribute to regional water quality impacts through introduction of urban runoff. However, due to each offsite Project's responsibility to mitigate its individual water quality impact through compliance with NPDES regulations, the potential cumulative effects will be less than significant. Therefore, cumulative impacts to water quality and the existing drainage pattern (on a regional basis) of the area from the proposed Project are less than significant.

The proposed project includes features that will reduce potential impacts to water quality. The proposed detention basins will reduce velocities, erosion, siltation and flooding in the project area. The proposed project was found to have less than significant impacts without the need for mitigation measures. Compliance with the adopted mitigation measures contained in the Riverside County, San Jacinto, and Hemet General Plans and existing water resource regulations will reduce potential cumulative impacts associated with future offsite development. Additional mitigation measures addressing potential cumulative impacts are unnecessary.

Proposed Mitigation Measures

With the exception of impacts to local drainage patterns, which are significant and unavoidable, the proposed Project was found to have less than significant impacts without the need for mitigation measures. Compliance with existing water resource regulations will reduce potential cumulative impacts associated with future offsite development to less than significant; therefore additional mitigation measures addressing potential cumulative impacts are unnecessary.

5.1.3.8 Population and Housing

The SJV-MDP does not include the construction of new homes or businesses, and therefore will not directly induce substantial population growth in the Project area. The proposed project could indirectly induce growth by removing one potential barrier to growth, by providing planned drainage infrastructure. The San Jacinto General Plan, Hemet General Plan, and Riverside County General Plan outline the type of development and growth that will be allowed in the Project area. Thus potential indirect impacts from development in the Project area are not expected to exceed the potential impacts that have already been disclosed in these General Plan EIRs. Yet, because implementation of the proposed Project could **indirectly induce substantial population growth in San Jacinto, Hemet, and portions of unincorporated Riverside County, impacts are considered significant**.

Summary of Cumulative Environmental Effects from General Plans

The geographic scope for cumulative population and housing is Riverside County. According to SCAG projections, Riverside County is projected to grow by approximately 1.5 million people over the next 25 years. Although the land uses allowed under the San Jacinto General Plan will provide for sufficient land to accommodate a portion of the region's projected population growth through the provision of additional housing and employment opportunities, implementation of the San Jacinto General Plan would allow a large increase in the population that exceeds the

2030 SCAG projections. As a result, the San Jacinto General Plan will result in a significant and unavoidable cumulative impact to population and housing.

Development planned and envisioned in the Riverside County General Plan would result in cumulatively significant population increases. Although the rate of growth within Riverside County will be consistent with the SCAG projections, Development permitted under the Riverside County General Plan will cumulatively contribute significant population increases within the County and region (CORGP FEIR, p. 536).

Development planned and envisioned under the Hemet General Plan is expected to increase population. However, the Hemet General Plan EIR concluded that implementation of the housing and land use measures contained in local General Plans will mitigate these impacts to less than significant. Therefore, no significant cumulative impacts are expected due to changes in population, housing, or household characteristics (HGP EIR, p. F-7).

Proposed Mitigation Measures

No mitigation measures were found to be feasible. See the Section 3.8 of this DEIR for further discussion.

Summary of Cumulative Environmental Effects After Mitigation Measures are Implemented

The proposed Project could indirectly induce substantial population growth in the San Jacinto Valley areas, by removing an obstacle to development. The existing facilities in this area will not provide 100-year flood protection which would remove an obstacle to growth. The adopted San Jacinto, Hemet and Riverside County General Plans outline the type of development and growth that will be allowed in the Project area. The proposed Project was planned and sized to provide drainage facilities and infrastructure consistent with the General Plan land uses. The proposed Project's potential indirect impacts would not exceed the impacts that have already been addressed during the adoption of the San Jacinto General Plan EIR (May 2006), the Hemet General Plan Final EIR (August 1992), or the Riverside County General Plan Final EIR (October 2003). Nonetheless, there are no mitigation measures that would reduce indirect project impacts to less than significant levels. Adoption of a statement of overriding considerations would be required prior to project approval.

5.2 UNAVOIDABLE ADVERSE IMPACTS AND IRREVERSIBLE ENVIRONMENTAL CHANGES

This topic is intended to address any impacts that cannot be mitigated to below a level of significance (*State CEQA Guidelines*, Section 15126.2). Implementation of the Project will result in significant impacts, which cannot be avoided or eliminated if the Project is implemented have been discussed in detail in Section 3.2 (Agricultural Resources), Section 3.3 (Air Quality), and Section 3.8 (Population and Housing) of the Draft EIR. A summary of the areas in which impacts could not be reduced to a level below significance is briefly presented below.

5.2.1 Agricultural Resources

Impacts to agricultural resources are considered significant if the proposed Project will convert agricultural uses to non-agricultural uses. Because the proposed Project could support and encourage planned development per the Riverside County, San Jacinto, and Hemet General Plans within the boundaries of the SJV-MDP, which as shown in **Table 3.2-B, Important Farmland within the San Jacinto Valley Mater Drainage Plan** and **Figure 3.2-1, Calif. Dept. of Conservation Important Farmland** contains approximately 4,600 acres of "Agricultural Land" as defined in Section 210060.1 of CEQA, implementation of the Project will have significant indirect impacts to agricultural resources. Construction of the Line D Basin, which is anticipated to encompass approximately 15 acres, in addition to the open channels designated as Lines 1, 2, E, G-3, H, J-3, K, W, and X (depending on their location) will result in the direct conversion of Agricultural Land to a non-agricultural use by converting the property to flood control facilities. The Line D Basin is anticipated to encompass approximately 15 acres, and would result in the direct conversion of Important Farmland to a non-agricultural use. Potential direct and indirect impacts associated with the loss of designated farmlands remain unavoidable and are unmitigable.

5.2.2 Air Quality

Impacts to air quality are considered significant if the proposed Project will violate any air quality standards or contribute substantially to an existing or projected air quality violation. Depending on the facility or combination of facilities constructed at any given time, SCAQMD regional significance thresholds for NO_x, PM-10, and PM-2.5 and SCAQMD LSTs may be for PM-10 and PM-2.5 could be exceeded during construction. Although these are direct, short-term impacts that will cease once construction is complete, they remain unavoidable and are unmitigable.

5.2.3 Population/Housing

Impacts to population and housing are considered significant if the proposed Project will indirectly induce substantial population growth. The SJV-MDP could indirectly induce growth by removing one potential barrier to growth through the provision of flood control infrastructure. The Hemet, San Jacinto, and Riverside County General Plans identify the type of development and growth that will be allowed within the boundaries of the SJV-MDP. The SJV-MDP does not propose any changes to the land uses from what is identified in the aforementioned General Plans; thus, potential indirect impacts from development in the Project area are not expected to exceed the potential impacts that have already been disclosed in the EIRs prepared for the Hemet, San Jacinto, and Riverside County General Plans. However, because implementation of the proposed Project could indirectly induce substantial population growth in the Project area, impacts are considered significant. No mitigation measures were identified as appropriate and impacts are considered significant and unavoidable.

5.2.4 Irreversible Environmental Changes

Section 15126.2(c) of the *State CEQA Guidelines* stipulates that a project must also be evaluated for its irreversible environmental changes which would occur as a result of project implementation. An impact would fall into this category if:

- the proposed project would involve a large commitment of nonrenewable resources;
- the primary and secondary impacts of the proposed project would generally commit future generations to similar uses;
- the proposed project involves uses in which irreversible damage could result from any potential environmental incidents associated with the proposed project; and/or
- the proposed consumption of resources is not justified (e.g., the proposed project results in wasteful use of energy).

Besides the temporary use of non-renewable resources (e.g., fossil fuels) during construction, the proposed Project will not result in the use of non-renewable resources. Once the SJV-MDP facilities are constructed, the land use within the drainage facility footprints would need to remain permanently committed to flood control uses, since adjacent developed areas and infrastructure would depend on the flood control infrastructure for flood protection. Thus, the proposed facilities and the previously described significant impacts to agricultural resources could be considered a significant irreversible change. Likewise, the potential indirect growth inducement impacts, which are discussed in Section 5.3, could be considered an irreversible change to those portions of the Project area that are relatively rural and undeveloped.

5.3 GROWTH INDUCING IMPACTS

According to CEQA Guidelines (Section 15126.2 [d]), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria below:

- A project would remove obstacles to population growth.
- Increases in the population may tax existing community service facilities, causing significant environmental effects.
- A project would encourage and facilitate other activities that could significantly affect the environment.

A project could indirectly induce growth by removing barriers to growth, by creating a condition that attracts additional population or new economic activity, or by providing a catalyst for future unrelated growth in an area. While a project may have a potential to induce growth, it does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the public or private sectors. The land use policies established by Hemet and San Jacinto will regulate growth within those cities' limits while land use policies established by Riverside County will regulate growth within the unincorporated area. Growth

induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if can be demonstrated that the potential growth significantly affects the environment in some other way.

Implementation of the SJV-MDP will remove one obstacle to development and subsequent population growth in the Project area. However, the proposed SJV-MDP facilities are located in areas that are either already developed or planned for development in the Hemet, San Jacinto, and Riverside County General Plans. The portion of the Project within unincorporated Riverside County is located within the San Jacinto Valley Area Plan. Land use designations within the boundaries of the SJV-MDP include: Rural Residential; Low Density, Medium Density, High Density, and Very High Density Residential; Downtown and Community Commercial; Industrial, Public Institutional, and Open Space Recreational.

The EIRs prepared for the San Jacinto, Hemet, and Riverside County General Plans addressed potential environmental impacts, including growth inducement, from implementation of policies and land use designations set forth in each jurisdiction's General Plan. Development as planned for and envisioned by each General Plans will result in growth. The purpose of a General Plan is to identify how and where growth and development may occur within a jurisdiction. Therefore; based on the definition of growth inducement, a General Plan is inherently growth inducing. The growth authorized by the San Jacinto, Hemet, and Riverside County General Plans leads to significant unavoidable adverse impacts as discussed in the following paragraphs.

As stated in the San Jacinto General Plan EIR (SCH No. 2001111165), the specific intent of the San Jacinto General Plan is to provide for the orderly development and redevelopment, define the limits of development, and serve as a mechanism to accommodate and control future development. The San Jacinto General Plan EIR further states that increased population and employment resulting from new residential and non-residential development has the potential to induce growth in areas outside of San Jacinto (SJGP EIR, pg. 7-9). After implementation of all of mitigation measures identified in the San Jacinto General Plan EIR, impacts with respect to air quality, noise population, and traffic will remain significant and unavoidable (SJGP EIR, pgs. 7-10 and 7-11).

As stated in the Hemet General Plan EIR (SCH 90020515), implementation of the General Plan will result in significant growth; however, the purpose of the Hemet General Plan is to permit growth in ways deemed desirable by Hemet and to mitigate effects of such growth. The Hemet General Plan EIR states that implementation of the Hemet General Plan will induce growth directly through an increase in housing units and indirectly through the provision of better roads and infrastructure, and concludes growth-inducing impacts will be significant but not adverse (HGP EIR, pg. G-1). After implementation of all mitigation measures identified in the Hemet General Plan EIR, impacts with respect to: land resources, water resources, biological resources, air resources, landforms and topography, flood hazards, aesthetic resources, school facilities, solid waste, circulation, and agriculture will remain significant and unavoidable (HGP EIR, pg. B-15).

As stated in the Riverside County General Plan Final EIR (SCH No. 2002051143) development following the General Plan will result in growth. The growth authorized by the Riverside County

General Plan will result in significant unavoidable adverse impacts, such as air quality, biological resources, water resources, and traffic. The General Plan is a land use master plan providing the framework by which public officials will be guided on making decisions relative to development within Riverside County. The implementation of the General Plan's land use policies will incrementally increase demands for the proposed drainage facilities, public services, utilities, and infrastructure, and the need for medical, educational, and recreational facilities (COR GP EIR, Section 5.3.3).

The proposed Project could indirectly induce growth by removing one potential barrier to growth, by providing flood control infrastructure. The San Jacinto, Hemet, and Riverside County General Plans outline the type of development and growth that will be allowed in the Project area. Thus, potential indirect impacts from development in the Project area are not expected to exceed the potential impacts that have already been disclosed in the San Jacinto, Hemet, and Riverside County General Plan EIRs. However, because implementation of the proposed SJV-MDP could indirectly induce substantial population growth in the Project area, **impacts with respect to growth inducement are considered significant**.

5.4 ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6(a) of the *State CEQA Guidelines* requires that an EIR "...describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." According to this section of the *State CEQA Guidelines*, "...an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation." Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to an alternative

With respect to the selection of alternatives to be considered in an EIR, Section 15126.6(b) of the *State CEQA Guidelines* states "...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." That is, each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed Project. The proposed Project was found to have significant environmental impacts related to the loss of designated Farmland (direct and indirect), to air quality on a regional basis from construction (direct and temporary), to local hydrology (indirect), and indirect impacts to population/housing as well as growth inducement. With mitigation, impacts to biological resources and cultural resources remain less than significant. The rationale for selecting the alternatives to be evaluated, and a discussion of the "no project" alternative are also required, per Section 15126.6.

As stated in Section 2 of this Draft EIR, the Project objectives include:

- Provide a single comprehensive MDP that contains a drainage plan for the North and West Areas and the necessary updates and revisions to the SJMDP and NW Hemet MDP.
- In conjunction with ultimate street improvements for the area within the boundaries of the SJV-MDP, contain the 100-year flood flows and alleviate the primary sources of flooding within the boundaries of the SJV-MDP.
- Serve as a guide for the location and size of drainage facilities that need to be constructed to protect existing development and future development as the area within the boundaries of the SJV-MDP develops per the San Jacinto General Plan, Hemet General Plan, the Riverside County General Plan, and specifically, the San Jacinto Valley Area Plan.
- Ensure that facility alignments are reserved for future construction of the drainage facilities identified in the SJV-MDP.
- Identify facility alignments that do not traverse the Eastern Municipal Water District (EMWD) Waste Water Treatment Plant.
- Identify facilities and facility alignments that require the minimal amount of ROW acquisition in potentially sensitive areas.
- Identify the most economical combination of facilities taking into consideration ROW acquisition, construction, and maintenance costs.
- Identify facilities that will accommodate phased development within the boundaries of the SJV-MDP
- Create a funding mechanism to help finance the costs of construction of the facilities identified in the SJV-MDP.

5.4.1 Alternatives Considered but Rejected by the Lead Agency

Section 15126.6(c) of the *State CEQA Guidelines* specify that an EIR should identify alternatives that were considered by the lead agency, but were rejected during the scoping process and identify the reasons for eliminating the alternatives from further consideration. Section 15126.6(c) further indicates that a lead agency may eliminate an alternative from detailed consideration in an EIR because the alternative(s) fails to meet the basic project objectives, is infeasible, and does not avoid significant environmental impacts.

The SJV-MDP was studied in three subareas: the North Area, West Area, and City Area. The North Area includes the area north of Ramona Expressway and west of State Street. The West Area includes the area south of Ramona Expressway and west of Sanderson Avenue. The remainder of the territory in the SJV-MDP is the City Area. Hydrologic studies were completed for each drainage area and facilities were identified on a drainage area basis. The process used to identify the specific facilities to be included in the SJV-MDP included an evaluation of alternative facilities and alignments, especially in the North Area and West Area of the SJV-MDP where no previous master drainage plan had been prepared. The alternative analysis included identification of facilities, estimates of the amount of ROW needed, and for some alternatives, preparation of relative cost analysis. The results of the alternative analysis were

documented in technical memoranda prepared for San Jacinto and RCFCWCD. Additionally, the alternatives were presented to the San Jacinto Drainage Subcommittee for consideration prior to San Jacinto and RCFCWCD selecting the alternatives ultimately used in the SJV-MDP. The alternatives considered for the West Area and North Area are discussed in the following sections.

5.4.1.1 Alternatives Considered but Rejected for the West Area

As part of the preparation of the SJV-MDP, four conceptual drainage alternatives were developed for the West Area and conceptual level analysis were completed as described below.

West Alternative 1 consists of a combination of RCB culverts and open channels. West Alternative 1 begins as a RCB and travels easterly along Esplanade Avenue. Near the intersection of Esplanade Avenue and Warren Road, the lateral turns northerly and the alignment continues along the east side of Metropolitan's San Diego Canal. At Seventh Street, the facility changes from an RCB to an open channel, and the alignment continues northerly along the east side of the MWD San Diego Canal until it reaches Metropolitan's Casa Loma Canal. After crossing underneath the Casa Loma Canal in a multi cell RCB, the alignment curves westerly until it reaches Warren Road. From there, it traverses northerly along the east side of Warren Road until it reaches a point approximately 2,000 feet south of the intersection of Warren Road and Metropolitan's Colorado River Aqueduct. From this point, the alignment travels easterly approximately 2,000 feet and ties into the Northwest Basin (Webb 2006).

West Alternative 2 consists of a combination of RCP, RCB culverts, and open channels with the addition of a detention basin between Cottonwood Avenue and Metropolitan's Casa Loma Canal. West Alternative 2 begins as a RCB and travels easterly along Esplanade Avenue. Near the intersection of Esplanade Avenue and Warren Road, the alignment northerly and continues along the east side of Metropolitan's San Diego Canal. At Seventh Street, the facility changes from an RCB to an open channel and the alignment continues northerly along the east side of Metropolitan's San Diego Canal until it crosses Cottonwood Avenue and enters into a proposed detention basin. The proposed basin has a preliminary footprint of 20 acres and is 16 feet deep in order to allow the outlet to cross underneath the Casa Loma Canal. The outflow from the basin would be limited to approximately 50 cfs which would significantly reduce the size of downstream facilities (Webb 2006).

West Alternative 2 exits the basin underneath the Casa Loma Canal as an RCP and curves westerly until it reaches Warren Road. From there, the alignment continues northerly in Warren Road increasing in size until it turns into an RCB and continues to travel northerly in Warren Road until it reaches a point approximately 2,000 feet south of the intersection of Warren Road and Metropolitan's Colorado River Aqueduct; at which point, the alignment travels easterly approximately 2,000 feet and ties into the Northwest Basin (Webb 2006).

West Alternative 3 consists of a combination of RCP, RCB culverts, and open channels with the addition of a detention basin between Cottonwood Avenue and the Metropolitan's Casa Loma Canal and a detention basin on the east side of Warren Road approximately 2,000 feet south of the intersection of Warren Road and Metropolitan's Colorado River Aqueduct. Alternative 3

begins as a RCB and travels easterly along Esplanade Avenue. Near the intersection of Esplanade Avenue and Warren Road the alignment turns northerly and continues along the east side of Metropolitan's San Diego Canal. At Seventh Street, the facility changes from an RCB to an open channel, continues northerly along the east side of Metropolitan's San Diego Canal until it reaches the Metropolitan's Casa Loma Canal. After crossing underneath the Casa Loma Canal in a multi cell RCB, the alignment enters into a proposed detention basin that is north of the Casa Loma Canal and east of Warren Road. The proposed basin has a preliminary footprint of 20 acres and will be 18 feet deep. The outflow from the basin would be limited to approximately 50 cfs which would significantly reduce the size of downstream facilities (Webb 2006).

West Alternative 3 exits the basin and travels northerly in Warren Road increasing in size until it turns into an RCB; the alignment then continues to northerly in Warren Road until approximately 2,000 feet south of the intersection of Warren Road and Metropolitan's Colorado River Aqueduct at which point it enters into a second proposed detention basin. This second proposed basin (preliminarily) would have an approximately 30 acre footprint and be approximately 10 feet deep. Peak outflows from the second basin would be reduced to approximately 35 cfs. Flow from this basin would travel northerly in Warren Road, cross under the Colorado River Aqueduct, and enter and tie into Line Z, or travel east and enter the Northwest Basin (Webb 2006).

West Alternative 4 proposes directing Line D flows southerly of EMWD's Waste Water Treatment Plant (WWTP) into a large detention basin proposed northerly of Cottonwood Avenue, southerly of Metropolitan's Casa Loma Canal and easterly of Metropolitan's San Diego Canal. The detention basin proposed in this location would be much larger than that proposed in Alternative 2 due to the increased tributary area. Flows from the first detention basin would be greatly reduced (perhaps down to 50 cfs) and would exit the first basin following a similar underground alignment as described in Alternative 2 westerly to Warren Road. The alignment continues northerly in Warren Road until approximately 2,000 feet south of the intersection of Warren Road and Metropolitan's Colorado River Aqueduct where it enters into a second detention basin, which will be very similar to the basin described in Alternative 3 (Webb 2006).

Rationale for Eliminating West Alternatives 1 through 3

The four conceptual alternatives for the West Area described above, were reviewed by San Jacinto and RCFCWCD and West Alternatives 1 through 3 were dismissed from further consideration because West Alternative 4 is the only alternative that meets the Project objective of identifying facility alignments that do not traverse EMWD's WWTP. The alignment for Line D in West Alternatives 1 through 3 traverses EMWD's WWTP. EMWD does not want an open channel dividing their WWTP property; thus acquisition of ROW to construct an open channel in this location could be problematic. Additionally, the physical constraints associated with running an underground conduit through the WWTP would make such an alignment extremely difficult to construct. For these reasons, San Jacinto (as lead agency), RCFCWCD, and EMWD (as the owner of the property in question) preferred West Alternative 4, which conveyed Line D flows around the EWMD WWTP (Webb 2006).

Implementation of West Alternative 1, West Alternative 2, or West Alternative 3, would result in significant construction related impacts to air quality, significant direct and indirect impacts to agricultural resources, and significant indirect impacts to population/housing. With respect to air quality impacts, the thresholds for particulate matter will be exceeded if more than one facility is under construction at any given time. Many, if not most, of the MDP facilities are expected to be constructed as part of private development projects within three different jurisdictions; thus, it is highly unlikely that San Jacinto, Hemet, or Riverside could or would coordinate construction to reduce construction-related impacts to air quality to less than significant.

With respect to agricultural resources, most of the Project area is designated Farmland and construction of the basins discussed in West Alternatives 1 through 3, could result in the direct conversion of Farmland to public facilities. Additionally, since West Alternatives 1 though 3 could support and encourage planned development per the Riverside County, San Jacinto, and Hemet General Plans in an area containing approximately 153 acres of Farmland, implementation of any of these alternatives will have significant and unavoidable indirect impacts to agricultural resources.

With respect to population/housing, West Alternatives 1 through 3 will indirectly induce substantial population growth by removing one potential barrier to growth through the provision of flood control infrastructure; thus impacts in this regard are significant and unavoidable.

Since West Alternatives 1 through 3 do not meet the project objective of avoiding facilities traversing through EMWD's WWTP and would result in significant unavoidable impacts to air quality,3. agricultural resources, and population/housing, these alternatives were eliminated from further study in this Draft EIR.

5.4.1.2 Alternatives Considered but Rejected for the North Area

As part of the preparation of the SJV-MDP, six conceptual drainage alternatives were developed for the North Area and conceptual level analysis were completed as described below (Webb 2007).

North Alternative 1 consists of the following facilities (Webb 2007, pgs. 2 – 3):

- Line 1 is an earthen channel that connects to an existing agricultural drainage ditch just west of the southwesterly edge of the Stage IV Levee. Line 1 traverses easterly for approximately 6,900 feet until it reaches Sanderson Avenue. Line 1 will cross underneath Sanderson Avenue as a reinforced box culvert. On the easterly side of Sanderson Avenue, Line 1 connects to a proposed detention basin. Line 1 will require 14.5 acres of ROW to construct.
- Line 2 is an earthen channel that connects to "Line Z." Line 2 runs along the northerly side of Ramona Expressway for approximately 6,900 feet and will require 11.2 acres of ROW to construct.

- The North Alternative 1 Basin is bounded by Sanderson Avenue to the west and the future alignment of Record Road to the north. The North Alternative 1 Basin will have an approximate 12.5 acre footprint and have approximately 70 acre-feet of storage.
- Line 3 is a proposed earthen channel that ties into the southwest corner of the Alternative 1 Basin. Line 3 traverses southerly from the basin along the east side of Sanderson Avenue for approximately 1,300 feet. From there it traverses in an easterly direction for approximately 600 feet. Line 3 will pick up flows east of Sanderson Avenue, west of Line 4A, north of Ramona Expressway, and south of the future alignment of Record Road. In North Alternative 1, Line 3 will require 3.0 acres of ROW to construct.
- Line 4 begins in the northeast corner of the North Alternative 1 Basin. It traverses along the future alignment of Record Road in a southeasterly direction for approximately 3,300 feet as an earthen channel. From there it continues along the future alignment of Record Road for approximately 4,200 feet as an underground RCB until it reaches the existing alignment of Record Road. From there it traverses easterly in Record Road for approximately 1,700 feet. In North Alternative 1, Line 4 will require 8.5 acres of right of way to construct.
- Line 4A ties into Line 4 approximately 1,900 feet upstream of where Line 4 outlets into the North Alternative 1 Basin. Line 4A traverses southerly approximately 2,400 feet until it reaches Ramona Expressway. From there Line 4A traverses as an underground conduit in a southeasterly direction along Ramona Expressway for approximately 1,800 feet. At this point Line 4A turns and traverses easterly for approximately 1,200 feet. In North Alternative 1, Line 4A will require 5.7 acres of ROW to construct.
- Line 4B ties into Line 4 approximately 3,250 feet upstream of where Line 4 outlets into the Alternative 1 Basin. Line 4 traverses in an easterly direction as an underground pipe for approximately 2,150 feet. From there it traverses in a southerly direction for approximately 800 feet. Since all of Line 4B is underground in North Alternative 1, it will require an easement for construction rather than ROW.

North Alternative 1A consists of the following facilities (Webb 2007, pgs. 4-5):

- Line 1 is an earthen channel that connects to an existing agricultural drainage ditch just west of the southwesterly edge of the Stage IV Levee. Line 1 traverses easterly for approximately 6,900 feet until it reaches Sanderson Avenue. Line 1 crosses underneath Sanderson Avenue as a reinforced box culvert. On the easterly side of Sanderson Avenue, Line 1 connects to a proposed detention basin. Line 1 will handle flows in the "west area" northerly on the future alignment of Record Road and southerly of the Stage IV Levee. Line 1 will also serve as an outlet for the North Alternative 1A Detention Basin. In North Alternative 1A, Line 1 will require 14.5 acres of ROW to construct.
- Line 2 is an earthen channel that connects to "Line Z." Line 2 runs along the northerly side of Ramona Expressway for approximately 6,900 feet and will require 11.2 acres of ROW to construct.

- The North Alternative 1A Basin is bounded by Sanderson Avenue to the west and the future alignment of Record Road to the north. The Alternative 1A Basin will have an approximate 12.5 acre footprint and have approximately 70 acre-feet of storage.
- Line 3 is a proposed earthen channel that ties into the southwest corner of the North Alternative 1A Basin. Line 3 traverses southerly from the basin along the east side of Sanderson Avenue for approximately 1,300 feet. From there it traverses in an easterly direction for approximately 600 feet. In North Alternative 1A, Line 3 will require 3.0 acres of ROW to construct.
- Line 4 begins in the northeast corner of the North Alternative 1A Basin and traverses easterly along the southerly side of the Stage IV Levee for approximately 5,000 feet as an earthen channel. From there it continues a reinforced box culvert in a southerly direction for approximately 1,900 feet until it reaches the future alignment of Record Road and then continues easterly along Record Road for approximately 3,000 feet as an underground conduit. In North Alternative 1A, Line 4 will require 12.0 acres of ROW to construct.
- Line 4A ties into Line 4 approximately 1,300 feet upstream of the North Alternative 1A Basin and traverses southerly approximately 2,900 feet until it reaches Ramona Expressway. From there Line 4A traverses as an underground conduit in a southeasterly direction along Ramona Expressway for approximately 1,800 feet and then turns and traverses easterly for approximately 1,200 feet. In North Alternative 1A, Line 4A will require 6.0 acres of ROW to construct.

North Alternative 2 consists of the following facilities (Webb 2007, pgs. 6-7):

- Line 1 is an earthen channel that connects to an existing agricultural drainage ditch just west of the southwesterly edge of the Stage IV Levee. Line 1 traverses easterly for approximately 6,200 feet until it reaches the North Alternative 2 Basin. Line 1 will serve as an outlet for the North Alternative 2 Detention Basin and will require 11.7 acres of right-of-way to construct.
- Line 2 is an earthen channel that connects to "Line Z." Line 2 runs along the northerly side of Ramona Expressway for approximately 6,900 feet and will require 11.2 acres of ROW to construct.
- Alternative 2 Basin The Alternative 2 Basin is bounded by Sanderson Avenue to the east and the Stage IV Levee to the north. The Alternative 2 Basin will have an approximate 13 acre footprint and have approximately 70 acre-feet of storage. The basin will reduce "middle area" flows from approximately 1,200 cfs to 500 cfs.
- Line 3 begins in the northeast corner of the North Alternative 2 Basin and traverses easterly across Sanderson Avenue in a multi-cell RCB culvert. From there it traverses along the future alignment of Record Road in a southeasterly direction for approximately 4,200 feet as an earthen channel and then continues for approximately 4,200 feet as an underground RCB until it reaches the existing alignment of Record Road, from which

- point it traverses easterly in Record Road for approximately 1,700 feet. In North Alternative 2, Line 3 will require 10.4 acres of ROW to construct.
- Line 3A is a proposed earthen channel that ties into Line 3 on the easterly side of Sanderson Avenue and traverses southerly from the basin along the east side of Sanderson Avenue for approximately 2,300 feet, then it traverses in an easterly direction for approximately 600 feet. In North Alternative 2, Line 3A will require 4.7 acres of ROW to construct.
- Line 3B ties into Line 3 approximately 2,800 feet upstream of Sanderson Avenue and traverses southerly approximately 2,400 feet until it reaches Ramona Expressway, then traverses as an underground conduit in a southeasterly direction along Ramona Expressway for approximately 1,800 feet. At this point Line 3B turns and traverses easterly for approximately 1,200 feet. In North Alternative 2, Line 3B will require 5.7 acres of ROW to construct.
- Line 3C ties into Line 3 approximately 4,200 feet upstream of Sanderson Avenue and traverses in an easterly direction as an underground pipe for approximately 2,150 feet, then traverses in a southerly direction for approximately 800 feet. Since all of Line 3C is underground in North Alternative 2, it will require an easement for construction rather than ROW.

North Alternative 2A consists of the following facilities (Webb 2007, pgs. 8-9):

- Line 1 is an earthen channel that connects to an existing agricultural drainage ditch west of the southwesterly edge of the Stage IV Levee. Line 1 traverses easterly for approximately 6,200 feet until it reaches the North Alternative 2A Basin. In North Alternative 2A, Line 1 will require 11.7 acres of ROW to construct.
- Line 2 is an earthen channel that connects to "Line Z." Line 2 runs along the northerly side of Ramona Expressway for approximately 6,900 feet and require 11.2 acres of ROW to construct.
- The North Alternative 2A Basin is bounded by Sanderson Avenue to the east and the Stage IV Levee to the north and will have an approximate 13 acre footprint and approximately 70 acre-feet of storage.
- Line 3 begins in the northeast corner of the North Alternative 2A Basin and traverses easterly across Sanderson Avenue in a multi-cell RCB culvert. From there it traverses along the southerly side of the Stage IV Levee for approximately 5,900 feet as an earthen channel, then it continues as a reinforced box culvert in a southerly direction for approximately 1,900 feet until it reaches the future alignment of Record Road. From there it continues easterly along Record Road for approximately 3,000 feet as an underground conduit. In North Alternative 2A, Line 3 will require 13.7 acres of ROW to construct.
- Line 3A is a proposed earthen channel that ties into Line 3 on the easterly side of Sanderson Avenue. Line 3A traverses southerly from the basin along the east side of Sanderson Avenue for approximately 2,300 feet; then it traverses in an easterly direction

for approximately 600 feet. In North Alternative 2A, Line 3A will require 4.7 acres of ROW to construct.

• Line 3B ties into Line 3 approximately 2,500 feet upstream of Sanderson Avenue and traverses southerly approximately 2,900 until it reaches Ramona Expressway; at which point it traverses as an underground conduit in a southeasterly direction along Ramona Expressway for approximately 1,800 feet. At this point Line 3B turns and traverses easterly for approximately 1,200 feet. In North Alternative 2A, Line 3B will require 6.0 acres of ROW to construct.

North Alternative 3 consists of the following facilities (Webb 2007, pgs. 10 - 11):

- Line 1 is an earthen channel that connects to an existing agricultural drainage ditch just west of the southwesterly edge of the Stage IV Levee. Line 1 traverses easterly for approximately 6,900 feet until it reaches Sanderson Avenue. Line 1 crosses underneath Sanderson Avenue as an RCB. On the easterly side of Sanderson Avenue, Line 1 traverses along the future alignment of Record Road in a southeasterly direction for approximately 4,200 feet as an earthen channel, then it continues along the future alignment of Record Road for approximately 4,200 feet as an underground RCB until it reaches the existing alignment of Record Road. From there it traverses easterly in Record Road for approximately 1,700 feet. In North Alternative 3, Line 1 will require 34.3 acres of ROW to construct.
- Line 1A is a proposed earthen channel that ties into Line 1 on the easterly side of Sanderson Avenue and traverses southerly from the basin along the east side of Sanderson Avenue for approximately 2,300 feet; then it traverses in an easterly direction for approximately 600 feet. In North Alternative 3, Line 1A will require 4.7 acres of ROW to construct.
- Line 1B ties into Line 1 approximately 2,800 feet upstream of Sanderson Avenue and traverses southerly approximately 2,400 feet until it reaches Ramona Expressway, then it traverses as an underground conduit in a southeasterly direction along Ramona Expressway for approximately 1,800 feet. At this point Line 1B turns and traverses easterly for approximately 1,200 feet. In North Alternative 3, Line 1B will require 5.7 acres of right-of-way to construct.
- Line 1C ties into Line 1 approximately 4,200 feet upstream of Sanderson Avenue and traverses in an easterly direction as an underground pipe for approximately 2,150 feet, then it traverses in a southerly direction for approximately 800 feet. Since all of Line 1C is underground in North Alternative 3, it will require an easement for construction rather than ROW.
- Line 2 is an earthen channel that connects to "Line Z." Line 2 runs along the northerly side of Ramona Expressway for approximately 6,900 feet and will require 11.2 acres of ROW to construct.

North Alternative 4 consists of the following facilities (Webb 2007, pgs. 11 - 12):

- Line 1 is an earthen channel that connects to an existing agricultural drainage ditch just west of the southwesterly edge of the Stage IV Levee and traverses easterly for approximately 6,900 feet until it reaches Sanderson Avenue. Line 1 crosses underneath Sanderson Avenue as a multi-cell reinforced box culvert. On the easterly side of Sanderson Avenue, Line 1 traverses along the future alignment of Record Road in a southeasterly direction for approximately 6,800 feet as an earthen channel until it reaches the MWD Colorado River Aqueduct and traverses easterly along the Colorado River Aqueduct as an underground conduit for approximately 3,800 feet until it reaches State Street, at which point it connects to Line H of the SJMDP. In North Alternative 3, Line 1 will require 65.1 acres of ROW to construct.
- Line 1A is a proposed earthen channel that ties into Line 1 on the easterly side of Sanderson Avenue and traverses southerly from the basin along the east side of Sanderson Avenue for approximately 2,300 feet, then it traverses in an easterly direction for approximately 600 feet. Line 1A will require 4.7 acres of ROW to construct.
- Line 1B ties into Line 1 approximately 2,800 feet upstream of Sanderson Avenue and traverses southerly approximately 2,400 feet until it reaches Ramona Expressway. From there Line 1B traverses as an underground conduit in a southeasterly direction along Ramona Expressway for approximately 1,800 feet, at which point Line 1B turns and traverses easterly for approximately 1,200 feet. In North Alternative 4, Line 1B will require 5.7 acres of right-of-way to construct.
- Line 1C ties into Line 1 approximately 4,200 feet upstream of Sanderson Avenue and traverses in an easterly direction as an underground pipe for approximately 2,150 feet, then it traverses in a southerly direction for approximately 800 feet. Since all of Line 1C is underground in Alternative 4, it will require an easement for construction rather than right-of-way.
- Line 2 is an earthen channel that connects to "Line Z." Line 2 runs along the northerly side of Ramona Expressway for approximately 6,900 feet and will require 11.2 acres of ROW to construct.

Rationale for Eliminating North Alternatives 1, 2, 2A, 3, and 4

Based on the conceptual level analysis completed for the North Alternatives, from an engineering perspective, North Alternatives 1, 1A, 2, and 2A are preferable to North Alternatives 3 and 4 because the retention basins proposed in North Alternatives 1, 1A, 2, and 2A achieve the Project objective of accommodating phased development within the boundaries of the SJV-MDP. North Alternatives 1 and 1A are slightly preferable to Alternatives 2 and 2A in that the crossing of Sanderson Avenue will be easier with facilities included in these alternatives since flows will be reduced upstream of Sanderson Avenue. Alternatives 1A and 2A propose a narrower channel adjacent to Record Road, which is preferable from an engineering standpoint (Webb 2007, pg.17).

North Alternatives 1A and 2A are better than North Alternatives 1 or 2. Economically, there is not a significant difference between the top alternatives. Environmentally they are very similar. From an engineering standpoint, North Alternative 1A and 2A are also very similar. San Jacinto (as lead agency) and RCFCWCD have selected North Alternative 1A to be included in the SJV-MDP since this alternative is the most conducive to phased development (Webb 2007, pg. 14); thus, North Alternatives 1, 2, 2A, 3, and 4 were eliminated from further detailed study.

Implementation of North Alternative 1, North Alternative 2, North Alternative 2A, North Alternative 3, and North Alternative 4, would result in significant construction related impacts to air quality, significant direct and indirect impacts to agricultural resources, and significant indirect impacts to population/housing. With respect to air quality impacts, the thresholds for particulate matter will be exceeded if more than one facility is under construction at any given time. Many, if not most, of the SJV-MDP facilities in the North Area are expected to be constructed as part of private development projects within San Jacinto or Riverside County. It is unlikely that these two jurisdictions could or would coordinate construction to reduce construction-related impacts to air quality to less than significant.

With respect to agricultural resources, most of the North Area is designated Farmland and construction of the facilities to serve the North Area could result in direct impacts to Farmland. Additionally, since North Alternatives 1, 2, 2A, 3, and 4 could support and encourage planned development per the Riverside County and San Jacinto General Plans in an area containing approximately 758 acres of Farmland, implementation of any of these alternatives will have significant and unavoidable indirect impacts to agricultural resources.

With respect to population/housing, North Alternatives 1, 2, 2A, 3, and 4 will indirectly induce substantial population growth by removing one potential barrier to growth through the provision of flood control infrastructure; thus impacts in this regard are significant and unavoidable.

Since North Alternatives 1, 2, 2A, 3, and 4 would result in significant unavoidable impacts to air quality, agricultural resources, and population/housing, these alternatives were eliminated from further study in this Draft EIR.

5.4.2 Description and Evaluation of Alternatives

Pursuant to Section 15126.6(a) of the *State CEQA Guidelines*, each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed Project. The proposed Project was found to have potential significant environmental impacts related to air quality impacts during construction, loss of designated Farmland, population/housing, as well as growth inducement. Construction of multiple Project facilities at the same time will exceed significance thresholds for particulate matter. Construction of certain facilities will convert Farmland to non-farmland uses. Implementation of the SJV-MDP could indirectly induce growth by removing one potential barrier to growth through the provision of flood control infrastructure. Development within the boundaries of the SJV-MDP will result in population growth as well as additional conversion of Farmland to non-farmland uses. The proposed Project's potential growth inducement impacts would not exceed those already contemplated in the EIRs prepared

for the San Jacinto General Plan, Hemet General Plan, and Riverside County General Plan. With mitigation, long-term impacts to air resources and impacts to biological resources, cultural resources, and hazardous materials sites remain less than significant.

The rationale for selecting the alternatives to be evaluated and a discussion of the "no project" alternative are also required, per section 15126.6.

Per State CEQA Guidelines Section 15126.6 (e)(3), when a project is the revision of an existing land use or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. The proposed project consists of revisions to the previously adopted SJMDP (revised 1990) and NW Hemet MDP (1985), development of a master drainage plan for the North Area and West Area, and the construction of these facilities. The "no project" alternative consists of the construction of the drainage facilities as planned in the previously adopted SJMDP and NW Hemet MDP.

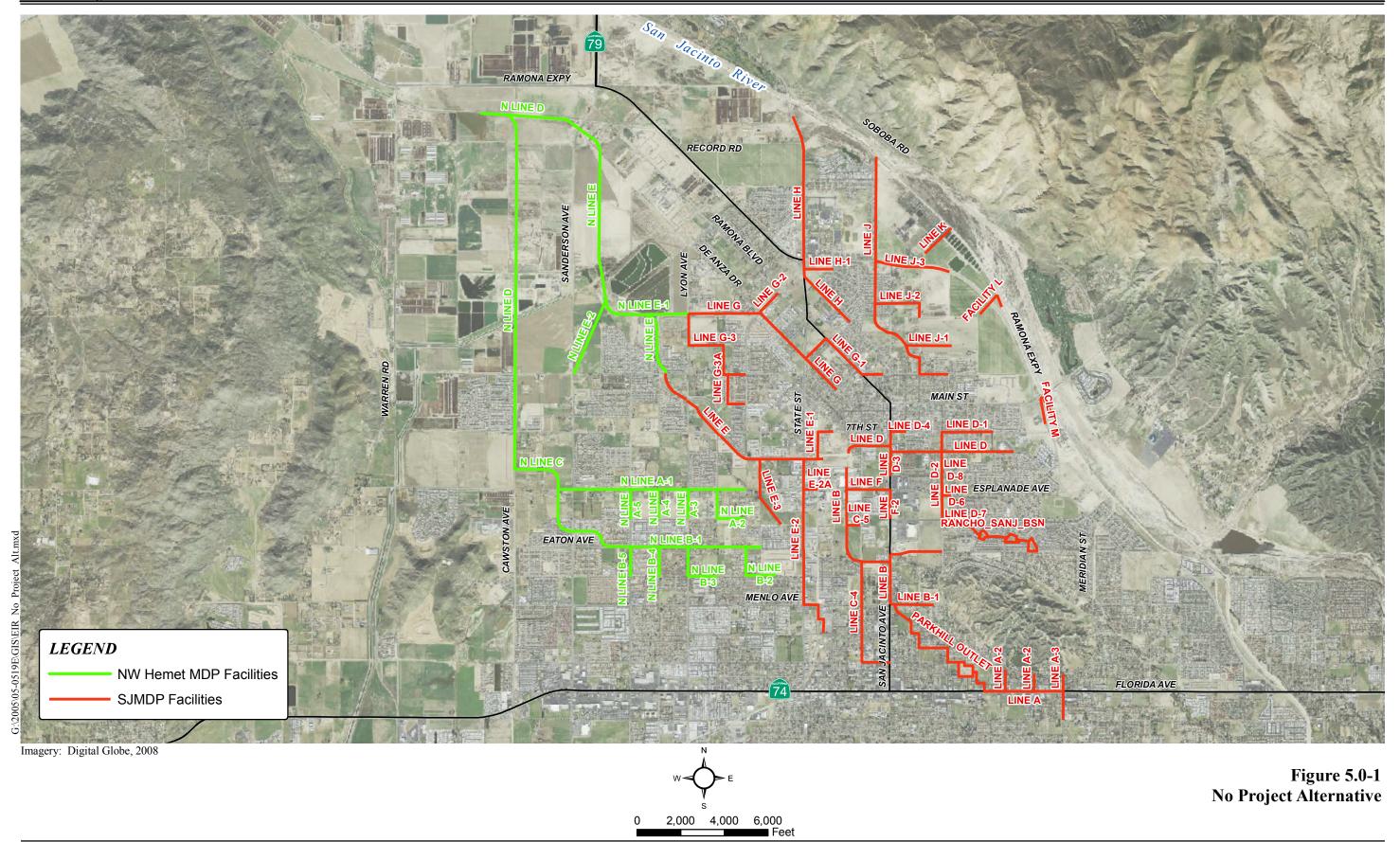
This Draft EIR analyzes the proposed Project, the No Project Alternative, and a Revised SJMDP and NW Hemet MDP Alternative as are described and analyzed below.

5.4.2.1 Proposed Project – SJV-MDP

The Proposed project, as described in detail in Section 1.4 is the SJV-MDP, which incorporates the areas within the previously adopted SJMDP and NW Hemet MDP in addition to areas (the North Area and West Area) for which there was no previous MDP. Facilities identified in the SJV-MDP include facilities originally proposed in the SJMDP and NW Hemet MDP, facilities revised from those originally identified in the SJMDP and NW Hemet MDP, and new facilities.

5.4.2.2 No Project Alternative

The No Project Alternative (see **Figure 5.0-1, No Project Alternative**) includes implementation of the SJMDP (revised 1990) and NW Hemet MDP (1985), as previously adopted. These MDPs are available for review at the RCFCWCD offices. The majority of the open channels proposed in these existing plans consist of both lined and unlined facilities. In general, the lined channels are trapezoidal in shape with concrete paving on the side slopes and bottom. The sides slope upward from the bottom at a rate of one foot vertically for every 1.5 feet horizontally. A few of the proposed lined channels also consist of lined rectangular channel sections. The lined trapezoidal channels in these plans generally range in size from a bottom width of 2 feet to 40 feet and in depth from 3 feet to 10 feet. The proposed unlined channels are also trapezoidal in shape with generally flatter side slopes running 3 feet horizontally for every 1 foot of rise. The channel right-of-way required will accommodate the channel as well as one or two maintenance roads. The proposed underground storm drains consist of reinforced concrete pipe (RCP) ranging in size from 30 inches to 102 inches in diameter. Some sections of the proposed underground storm drains also consist of RCB.



Under the previously adopted SJMDP, Lines C, D-2, and G would not be realigned; Line G-3a and G-3 would not be combined; Line E would continue to outlet into the San Jacinto River. The SJMDP does not include N Line E-2, N Line E-3, and three laterals along Line E (Kirby Lateral, Lyon Avenue Lateral, and 7th Street Lateral). Under the No Project Alternative, N Line E-2, N Line E-3, and three laterals along Line E would not be added to the SJMDP.

Under the previously adopted NW Hemet MDP, N Line D would remain an above ground facility and would never be constructed since development has already occurred along its alignment. N Line D would terminate west of the intersection of Cawston and Cottonwood Avenues at the Casa Loma Basin, and Line D north of Cottonwood Avenue (shown on the SJV-MDP as Line V) would be a concrete lined-channel. Under the No Project Alternative, N Line D would not be revised to be an underground facility, Line D north of Cottonwood Avenue (shown on the SJV-MDP as Line V) would not be revised to be an unlined channel, and the Line D Basin would not be added to the NW Hemet MDP.

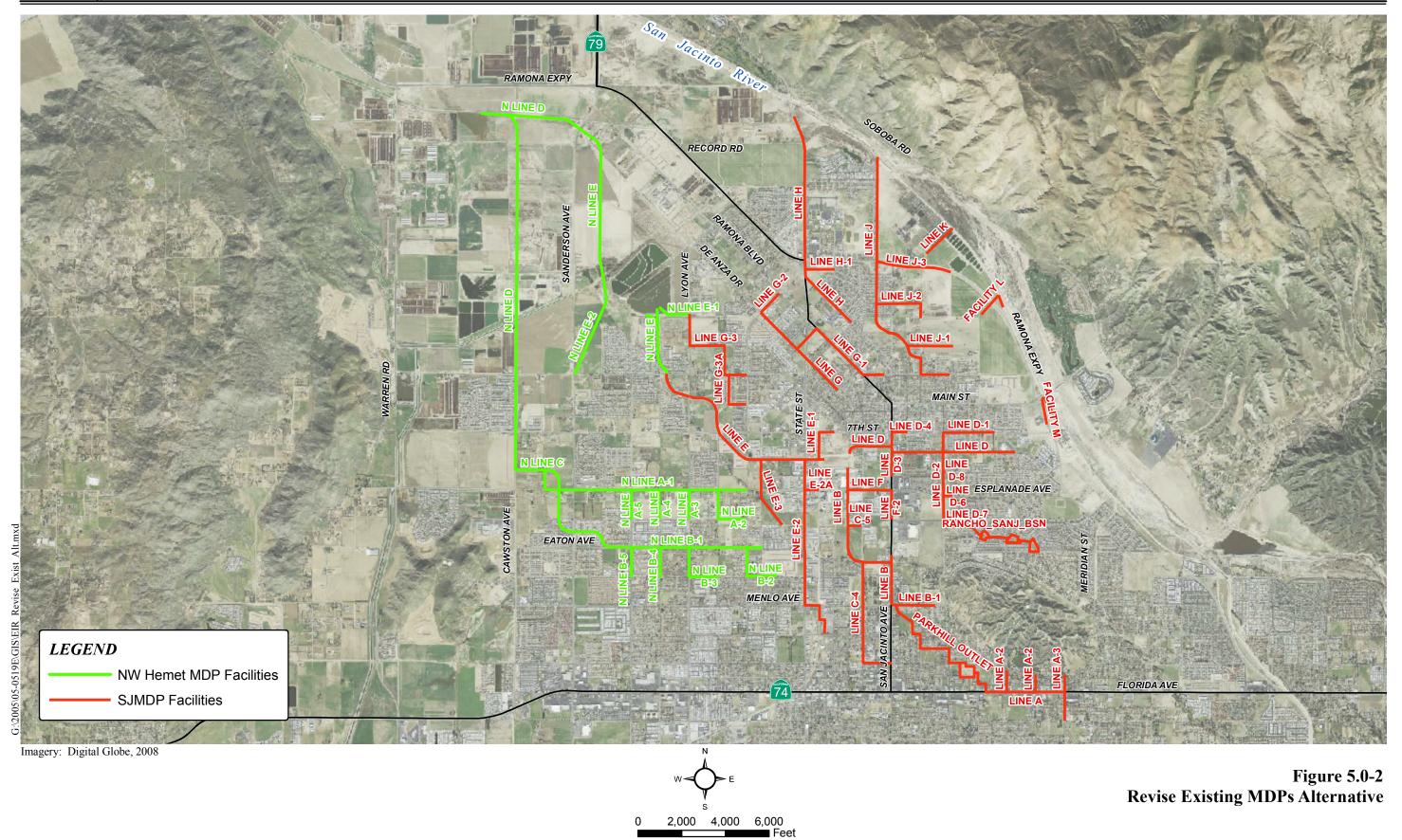
Under the No Project Alternative no master plan for drainage would be prepared for those areas outside of the SJMDP and NW Hemet MDP and the following facilities would not be constructed: Lines 1, 2, 3, 4, 5, and 6; Lateral 4-A; the North Basin; Casa Loma Basin; Line X, Y, Y-1, W, and Z; Laterals D-1, X-1; and Laterals Y-1 to Y-13.

5.4.2.3 Revise Existing MDPs Alternative

The Revise Existing MDPs Alternative (see **Figure 5.0-2, Revise Existing MDPs Alternative**) consists of revising and updating the SJMDP and NW Hemet MDP. With this alternative, the SJMDP would be revised as follows: moving Line G-1 300 feet downstream, removal of Line G between the San Jacinto Reservoir and De Anza. Line G-3 and Line G-3a would be combined into Line G-3 with a new alignment which replaces 3,100 feet of the original Line G, and the outlet of Line E into the San Jacinto Reservoir. Line G-1 would be realigned, Line C to the east of Hewitt Street would be realigned to extend Line D-2 south to Washington Avenue, N Line E-2A, N Line E-3A, three laterals along Line E (Kirby Lateral, Lyon Avenue Lateral, and 7th Street Lateral) and Milwaukee SD would be added. All other previously adopted alignments would remain unchanged.

The Revise Existing MDPs Alternative would revise the HW Hemet MDP as follows: N Line D would be upsized and become an underground facility. The Line D Basin will become the downstream terminus of N Line C. The portion of the previously adopted NW Hemet MDP Line D, north of Cottonwood (shown in the SJV-MDP as Line V) would be proposed as an unlined open channel. All other previously adopted alignments would remain unchanged

Under the Revise Existing MDPs Alternative, no master plan for drainage would be prepared for those areas outside of the SJMDP and NW Hemet MDP and the following facilities would not be constructed: Lines 1, 2, 3, 4, 5, and 6; Lateral 4-A; the North Basin; Casa Loma Basin; Line X, Y, Y-1, W, and Z; Laterals D-1, X-1; and Laterals Y-1 to Y-13.



5.4.2.4 Evaluation of Alternatives

The matrix approach to comparing the above described alternatives is used for ease of directly comparing the proposed Project's potential significant adverse effects with those of the alternatives, per *State CEQA Guidelines* Section 15126.6 (d). **Table 5.0-A, Comparison of Alternatives Matrix**, identifies the areas of potential significant environmental effects per CEQA and ranks each alternative as **better**, the **same** or **worse** than the proposed Project with respect to each issue area.

Table 5.0-A, Comparison of Alternatives Matrix

Environmental Issue	Proposed Project (SJV-MDP)	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Aesthetics	Less than Significant Impacts: The Project does not propose facilities within one –quarter mile of State Designated Scenic Highways or State Eligible Scenic Highways. The facilities in the vicinity of a County Eligible Scenic Highway (Ramona Expressway) would be visible for only a few seconds.	Same as the Project: The No Project Alternative does not propose facilities within one –quarter mile of State Designated Scenic Highways or State Eligible Scenic Highways. The facilities in the vicinity of a County Eligible Scenic Highway (Ramona Expressway) would be visible for only a few seconds.	Same as the Project: The proposed revisions to the Existing MDPs do not include facilities within one —quarter mile of State Designated Scenic Highways or State Eligible Scenic Highways. The facilities in the vicinity of a County Eligible Scenic Highway (Ramona Expressway) would be visible for only a few seconds.
Agricultural Resources	Significant Unavoidable Impacts: Direct impacts resulting from the loss of 15 acres of Important Farmland and 6 acres of Locally Important Farmland under a Williamson Act Contract for the construction of basins. Indirect impacts resulting from providing drainage infrastructure that could contribute to the development of land currently zoned for agricultural uses or protected by a Williamson Act contract.	Better than the Project but still Significant and Unavoidable: No direct impact as the No Project Alternative does not include basins. Indirect impacts would occur over a smaller area, since the No Project Alternative does not propose drainage infrastructure for areas outside of the SJMDP or NW Hemet MDP.	Better than the Project but still Significant and Unavoidable: No direct impacts as the No Project Alternative does not include basins. Indirect impacts would occur over a smaller area, since the No Project Alternative does not propose drainage infrastructure for areas outside of the SJMDP or NW Hemet MDP.

Environmental Issue	Proposed Project (SJV-MDP)	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Air Quality	Significant Unavoidable Impacts: Short-term construction impacts contributing to exceeding air quality thresholds for particulate matter will result if more than one Project facility is under construction at any given time. Long- term impacts to air quality are less than significant.	Same as Project: Construction of multiple facilities at any given time will likely still occur.	Same as Project: Construction of multiple facilities at any given time will likely still occur.
Biological Resources – Candidate, Sensitive, or Special-Status Plant Species	Less than Significant Impacts with Mitigation: Special status species have the potential to occur within the boundaries of the Project area.	Slightly Better than the Project: The No Project Alternative contains less area with the potential to support special status species.	Slightly Better than the Project: The Revise Existing MDPs Alternative contains less area with the potential to support special status species.
Biological Resources – Riparian Habitat	Less than Significant Impacts with Mitigation: Riparian habitat is present within the boundaries of the Project Area. Per the MSHCP facility-specific mapping will be required. If riparian areas cannot be avoided, then approval of a DBESP that which includes appropriate mitigation will be required.	Slightly Better than the Project: Although less riparian habitat is present within the boundaries of the SJMDP and NW Hemet MDP. The No Project Alternative must comply with the provisions of the MSHCP.	Slightly Better than the Project: Although less riparian habitat is present within the boundaries of the SJMDP and NW Hemet MDP. The Revise Existing MDPs Alternative must comply with the provisions of the MSHCP.
Biological Resources – Federally Protected Wetlands	Less than Significant Impacts with Mitigation: Potentially jurisdictional areas which will require facility specific jurisdictional delineations are present within the boundaries of the Project Area. Any facilities constructed within jurisdictional areas must comply with the provisions of the MSHCP and secure appropriate regulatory permits.	Slightly Better than the Project: Less potentially jurisdictional areas are present within the boundaries of the SJMDP and NW Hemet MDP. Any facilities constructed within jurisdictional areas must comply with the provisions of the MSHCP and secure appropriate regulatory permits.	Slightly Better than the Project: Less potentially jurisdictional areas are present within the boundaries of the SJMDP and NW Hemet MDP. Any facilities constructed within jurisdictional areas must comply with the provisions of the MSHCP and secure appropriate regulatory permits.

Environmental Issue	Proposed Project (SJV-MDP)	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Biological Resources – Conflict with the Provisions of an adopted HCP	Less than Significant Impacts with Mitigation: The boundaries of the SJV- MDP contain areas that the MSHCP identifies as requiring facility-specific focused plant surveys, and if target species are present, avoidance. If avoidance is not feasible, then approval of a DBESP that which includes appropriate mitigation will be required.	Slightly Better than the Project: The No Project Alternative contains less area that the MSHCP identifies as requiring facility-specific focused plant surveys.	Slightly Better than the Project: The Revise Existing MDPs Alternative contains less area that the MSHCP identifies as requiring facility-specific focused plant surveys.
Biological Resources – Conflict with local policies or ordinances protecting biological resources	Less than Significant Impacts: The Project will meet local goals and policies through compliance with the MSHCP.	Same as the Project: The No Project Alternative is required to comply with the provisions of the MSHCP.	Same as the Project: The Revise Existing MDP Alternative is required to comply with the provisions of the MSHCP.
Cultural Resources	Less than Significant with Mitigation: The Project will not impact existing know cultural resources in those areas surveyed. Facility-specific surveys are required for certain facilities and depending upon the results of the surveys coordination with Native American groups may be required.	Same as the Project: No change in the significance determination from the proposed Project. Mitigation measures are the same as for the Project.	Same as the Project: No change in the significance determination from the proposed Project. Mitigation measures are the same as for the Project.
Hazards and Hazardous Materials	Less than Significant with Mitigation: As part of the final design of SJV-MDP facilities, the design engineer shall check proposed sites for listing on the most recent Hazardous Waste and Substances List and shall avoid the site or mitigate accordingly. Soil testing/sampling is required prior to disposing of exported soils or using imported soils.	Same as the Project: No change in the significance determination from the proposed Project. Mitigation measures are the same as for the Project.	Same as the Project: No change in the significance determination from the proposed Project. Mitigation measures are the same as for the Project.

Environmental Issue	Proposed Project (SJV-MDP)	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Hydrology and Water Quality – Runoff during construction	Less than Significant: SWPPPs, identifying BMPs to control erosion during construction will be required in accordance with the General Construction Permit.	Same as the Project: No change in the significance determination from the proposed Project.	Same as the Project: No change in the significance determination from the proposed Project.
Hydrology and Water Quality – Post-Project runoff	Less than Significant Impact: Project facilities are designed to convey stormwater runoff from agricultural lands and urban development; will have grates to collect trash and rubbish; and the basins will provide opportunities for groundwater recharge.	Worse than the Project: Fewer opportunities for groundwater recharge with fewer basins proposed. Runoff from the Project area outside of the Existing MDPs will sheet flow and agricultural wastes could enter downstream receiving waters.	Worse than the Project: Groundwater recharge will occur with the basins proposed; however, runoff from the Project area outside of the Existing MDPs will sheet flow and agricultural wastes could enter downstream receiving waters.
Hydrology and Water Quality - Discharge of Additional Sources of Pollutants; Adversely Affect Beneficial Uses of Receiving Waters; Harm Biological Integrity of Waterways or Water Bodies; Violate Water Quality Standards or Waste Discharge Requirements; Alter Flow Velocity or Volume;	Less than Significant Impact: Project facilities are designed to mimic existing drainage conditions; and thus will not result in additional erosion or scour in the San Jacinto River. For those facilities constructed as part of private development projects, WQMPS will be required that incorporate BMPs to reduce pollutant loads and achieve post-development flow rates as close to the pre-development condition as possible.	Same as the Project: No change in the significance determination from the proposed Project.	Same as the Project: No change in the significance determination from the proposed Project.
Hydrology and Water Quality – Substantially Alter Existing Drainage Pattern of the Site or Area	Less than Significant: The proposed Project will alter local drainage patterns within the boundary of the SJC-MDP by redirecting sheet flows from streets and agricultural ditches to JSV-MDP basins, channels, and storm drains. This change in the local drainage pattern is an inherent part of the Project, the purpose of which is to improve drainage.	Same as the Project: No change in the significance determination from the proposed Project.	Same as the Project: No change in the significance determination from the proposed Project.

Environmental Issue	Proposed Project (SJV-MDP)	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Hydrology and Water Quality – Place Structures within a 100-year Flood Hazard Area	Less than Significant: Portions of the SJV-MDP facilities will be constructed within 100-year flood hazard areas due to the flat topography and to contain the 100-year storm flows.	Better than the Project: The Existing MDPs proposed fewer facilities within 100-year flood hazard areas	Better than the Project: The Existing MDPs proposed fewer facilities within 100-year flood hazard areas
Population/Housing	Significant Unavoidable Impacts: from providing drainage infrastructure that could contribute to the development of land as planned for in the San Jacinto, Hemet, and Riverside County General Plans.	Better than the Project but still Significant and Unavoidable: Indirect impacts would occur over a smaller area, since the No Project Alternative does not propose drainage infrastructure for areas outside of the SJMDP or NW Hemet MDP.	Better than the Project but still Significant and Unavoidable: Indirect impacts would occur over a smaller area, since the No Project Alternative does not propose drainage infrastructure for areas outside of the SJMDP or NW Hemet MDP.
Meets Project Objectives	Yes	No	No
Environmentally Superior to the Proposed Project?	N/A	Slightly, but still has significant and unavoidable impacts	Slightly, but still has significant and unavoidable impacts

A project alternative must be able to feasibility attain most of the basic objectives of the proposed Project. Table 5.0-B provides an assessment of the ability of the Revise Existing MDPs Alternative.

Table 5.0-B, Evaluation of Project Alternatives and Project Objectives

Project Objectives	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Provide a single comprehensive MDP that contains a drainage plan for the North and West Areas and the necessary updates and revisions to the SJMDP and NW Hemet MDP.	The No Project Alternative does not meet the objective of a single comprehensive MDP that identifies updates and revisions to the SJMDP and NW Hemet MDP. Therefore the No Project Alternative will not meet this basic project objective.	The Revise Existing MDPs Alternative does not meet the objective of a single comprehensive MDP. Revising the Existing MDPs will update and revise drainage facilities only within the boundaries of the SJMDP and NW Hemet MDP (Figure 2.0-4) leaving much of the North and West Areas (Figure 2.0-5) without a master plan for drainage facilities. Therefore, the Revise Existing MDPs Alternative will not meet this project objective.

Project Objectives	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
In conjunction with ultimate street improvements for the area within the boundaries of the SJV-MDP, contain the 100-year frequency flood flows and alleviate the primary sources of flooding within the boundaries of the SJV-MDP.	The No Project Alternative will not identify any additional facilities needed in the SJMDP, NW Hemet MDP, or in those portions of the North and West Areas outside of the existing MDPs to contain 100-year frequency flood flows. Therefore, the No Project Alternative will not meet this project objective.	Revising the Existing MDPs will not identify facilities to contain the 100-year frequency flood flows for the entire Project boundary. Facilities will be identified only within the boundaries of the SJMDP and NW Hemet MDP (Figure 2.0-4) leaving much of the North and West Areas (Figure 2.0-5) without a master plan for drainage facilities. Therefore, the Revise Existing MDPs Alternative will not meet this project objective.
Serve as a guide for the location and size of drainage facilities that need to be constructed to protect existing development and future development as the area within the boundaries of the SJV-MDP develops per the San Jacinto General Plan, Hemet General Plan, the Riverside County General Plan, and specifically, the San Jacinto Valley Area Plan.	The No Project Alternative will not identify any additional facilities needed in the SJMDP, NW Hemet MDP, or in those portions of the North and West Areas outside of the existing MDPs to protect existing or future development. Therefore, the No Project Alternative will not meet this project objective.	Revising the Existing MDPs will only identify facilities within the boundaries of the SJMDP and NW Hemet MDP (Figure 2.0-4) leaving much of the North and West Areas (Figure 2.0-5) without a master plan for drainage facilities. In the absence of a master plan, drainage facilities to serve the areas outside of the Existing MDPs will be planned on an ad hoc and piece meal basis by San Jacinto, Hemet, Riverside County, and RCFCWCD as part of the approval process for private development projects. Therefore, the Revise Existing MDPs Alternative will not meet this project objective.
Ensure that facility alignments are reserved for future construction of the drainage facilities identified in the SJV-MDP.	The No Project Alternative will only reserve facility alignments for facilities currently identified in the SJMPD and Hw Hemet MDP. The No Project Alternative will not identify or reserve facility alignments for any new or upsized facilities needed in the Existing MDPs or much of the North and West Areas. Therefore, the No Project Alternative will not meet this objective.	Revising the Existing MDPs will only reserve facility alignments for future construction of drainage facilities identified in the SJMDP and NW Hemet MDP (Figure 2.0-4). No alignments will be identified, for much of the North and West Areas (Figure 2.0-5) since drainage facilities will be planned on an ad hoc and piece meal basis by San Jacinto, Hemet, Riverside County, and RCFCWCD as part of the approval process for private development projects. Therefore, the Revise Existing MDPs Alternative will not meet this project objective.

Project Objectives	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Identify facility alignments that do not traverse the EMWD Waste Water Treatment Plant.	The Existing MDPs do not include facilities that traverse the EMWD Waste Water Treatment Plan; therefore the No Project Alternative meets this project objective.	The NW Hemet MDPs could be revised to identify alignments that do not traverse the EMWD wastewater plant. Therefore the Revise Existing MDPs Alternative can meet this project objective.
Identify facilities and facility alignments that require the minimal amount of ROW acquisition in potentially sensitive areas.	The No Project Alternative will not identify any new facilities. Additionally, although the drainage facilities for those portions of the North and West Areas outside of the boundaries of the Existing MDPs will be planned on a piece meal basis, the facilities could be sized and located to minimize the amount of ROW required in potentially sensitive areas. Therefore, the No Project Alternative can meet this project objective.	The Existing MDPs could be revised to identify facilities and facility alignments that minimize the amount of necessary ROW in potentially sensitive areas. Additionally, although the drainage facilities for those portions of the North and West Areas outside of the boundaries of the Existing MDPs will be planned on a piece meal basis, the facilities could be sized and located to minimize the amount of ROW required in potentially sensitive areas. Therefore, the Revise Existing MDPs Alternative can meet this project objective.
Identify the most economical combination of facilities taking into consideration ROW acquisition, construction, and maintenance costs.	The No Project Alternative does not include any revisions to the Existing MDPs. Additionally, this alternative does not provide for a master plan of drainage facilities for much of the North and West Areas and drainage facilities on these areas will be planned by various public and private parties on a piece meal basis as development takes place. This piece meal approach provides few, if any, opportunities for identification of the most economical combination of facilities. Therefore, the No Alternative will not meet this project objective.	The Existing MDPs could be revised at the same time such that the most economical combination of facilities is included in the SJMDP and NW Hemet MDP. Since this alternative does not provide for a master plan of drainage facilities for much of the North and West Areas, drainage facilities on these areas will be planned by various public and private parties on a piece meal basis as development takes place in those areas, which provides few, if any, opportunities for identification of the most economical combination of facilities. Therefore, the Revise Existing MDPs Alternative will only partially meet this project objective.

Project Objectives	No Project Alternative (Existing Adopted ADPs/MDP)	Revise Existing MDPs Alternative
Identify facilities that will accommodate phased development within the boundaries of the SJV-MDP.	The No Project Alternative, which does not revise the Existing MDPs or identify facilities in the North and West Areas will not meet this objective.	The Existing MDPs could be revised such that the facilities identified therein will accommodate phased development; however, no alignments will be identified for much of the North and West Areas (Figure 2.0-5) since drainage facilities will be planned on a piece meal basis by San Jacinto, Hemet, Riverside County, and RCFCWCD as part of the approval process for private development projects. Therefore, the Revise Existing MDPs Alternative will not meet this project objective.
Create a funding mechanism to help finance the costs of construction of the facilities identified in the SJV-MDP.	The No Project Alternative will not update the current ADP fees in effect or create a funding mechanism for the North and West Areas. Therefore, the No Project Alternative will not meet this objective.	The Revise Existing MDPs Alternative will not update the current ADP fees in effect or create a funding mechanism for the North and West Areas. Therefore, the Revise Existing MDPs Alternative will not meet this objective.

5.4.2.5 Environmentally Superior Alternative

Section 15126.6(e)(2) of the *State CEQA Guidelines* requires the identification of the environmentally superior alternative. Of the alternatives evaluated above, the Revise Existing MDPs Alternative is recognized as the environmentally superior alternative compared to the proposed Project for all issue areas excluding hydrology. This is because proposed Project would provide some groundwater recharge through the basins and channelize sheet flows across agricultural lands in areas that are not currently within an existing MDP; thus minimizing the amount of agricultural waste that could enter the San Jacinto River, that would not be addressed under the Revise Existing MDPs Alternative. However, for the reasons presented in Table 5.0-B, the Revise Existing MDPs Alternative does not achieve the project objectives.

6.0 REFERENCES

6.1 SOURCES USED IN PREPARATION OF THE DEIR

The following sources were referenced as general information sources during the preparation of this document. They are available for public review at the locations identified at the end of each listing. Addresses for the public agency offices are provided in Section 6.1.1 below.

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COR SJVAP	County of Riverside, <i>County of Riverside General Plan, San Jacinto Valley Area Plan</i> , October 2003. (Available at http://www.rctlma.org/genplan/content/ap2/sjvap.html , accessed on May 5, 2009.)		
HGP	City of Hemet, <i>General Plan</i> , August 25, 1992. (Available at the City of Hemet Planning Department.)		
HGP FEIR	City of Hemet, <i>Hemet General Plan Final Environmental Impact Report</i> , August 25, 1992. (Available at the City of Hemet Planning Department.)		
SJ GP	City of San Jacinto, <i>City of San Jacinto General Plan</i> , January 2006. (Available at http://www.ci.san-jacinto.ca.us/city-govt/general-plan.html , accessed on May 5, 2009.)		
SJGP DEIR	City of San Jacinto, <i>San Jacinto General Plan Draft EIR</i> , January 2006. (Available at http://www.ci.san-jacinto.ca.us/city-govt/general-plan-EIR.html, accessed on May 4, 2009.)		
SJGP FEIR	City of San Jacinto, San Jacinto Final Environmental Impact Report Findings, April 2006.(Available at the San Jacinto City Clerk's Office)		
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HGP FEIR	City of Hemet, <i>Hemet General Plan Final Environmental Impact Report</i> , August 25, 1992. (Available at the City of Hemet Planning Department.)	
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HGP Update GAP	City of Hemet, General Plan Goals and Policies Workbook. (Available at the City of Hemet Planning Department.)	
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SJ MC	City of San Jacinto, <i>Municipal Code</i> , April 2008. (Available at http://www.ci.san-jacinto.ca.us/city-govt/zoning/ARTICLE%2014E%20CONTROLLED%20FARMING%20AREA.pdf , accessed on July 13, 2009.)	
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SJGP DEIR	City of San Jacinto, <i>San Jacinto General Plan Draft EIR</i> , January 2006. (Available at http://www.ci.san-jacinto.ca.us/city-govt/general-plan-EIR.html , accessed on May 4, 2009.)	
SJGP RME	City of San Jacinto, San Jacinto General Plan, Resource Management Element, January 2006. (Available at http://www.ci.san-jacinto.ca.us/city-govt/development/general-plan/Housing%20Element.pdf , accessed on May 6, 2009.)	
SJGP LUE	City of San Jacinto, San Jacinto General Plan, Land Use Element, January 2006. (Available at http://www.ci.san-jacinto.ca.us/city-govt/development/general-plan/Housing%20Element.pdf , accessed on May 6, 2009.)	
COR SJVAP	County of Riverside, <i>County of Riverside General Plan, San Jacinto Valley Area Plan</i> , October 2003. (Available at http://www.rctlma.org/genplan/content/ap2/sjvap.html , accessed on May 1, 2009.)	
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CA DOC	State of California Department of Conservation, <i>Important Farmland Mapping Categories and Soil Taxonomy Terms</i> . (Available at http://www.conservation.ca.gov/dlrp/fmmp/Documents/soil_criteria.pdf, accessed on May 12, 2009.)	

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Abbreviation	Source		
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CAPCOA	California Air Pollution Control Officer's Association, <i>CEQA and Climate Change</i> , January 2008. (Available at www.capcoa.org , accessed on October 13, 2008.)		
CARB 2005	California Air Resources Board, <i>Air Quality and Land Use Handbook: A Community Perspective</i> , April 2005. (Available at www.arb.ca.gov/ch/landuse.htm , accessed on October 13, 2008.)		
	California Air Resources Board, <i>AB 32 Fact Sheet and Timeline-California Global Warming Solutions Act of 2006</i> , September 25, 2006. (Available at www.arb.ca.gov/cc/cc.htm#factsheets , accessed, accessed on October 13, 2008.)		
CARB 2007	California Air Resources Board, <i>Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emission Limit</i> , November 16, 2007. (Available at http://www.arb.ca.gov/cc/inventory/1990level/1990level.htm , accessed on October 13, 2008.)		
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CEC 2005	California Energy Commission, <i>Scenarios of Climate Change in California: An Overview</i> , Publication CEC-500-2005-186-SF, Published December 2005. (Available at http://www.energy.ca.gov/2005publications/CEC-500-2005-186/CEC-500-2005-186-SF.PDF, accessed on October 13, 2008.)		

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CEC 2006c	California Energy Commission, <i>Public Health Related Impacts of Climate Change in California</i> , Publication CEC-500-2005-197-SF, March 2006. (Available at http://www.energy.ca.gov/2005publications/CEC-500-2005-197/CEC-500-2005-197-SF.PDF, accessed on October 13, 2008.)	
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IPCC	Intergovernmental Panel on Climate Change, <i>Climate Change</i> 2007 – <i>The Physical Science Basis</i> , 2007. (Available at www.ipcc.ch/ipccreports/ar4-wg1.htmm)	
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OPR 2008	State of California, Governor's Office of Planning and Research, <i>Technical Advisory</i> , <i>CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review</i> , June 19, 2008. (Available at http://opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf, accessed on August 29, 2008.)	
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CRM-B	CRM TECH, Paleontological Resources Assessment Report, San Jacinto Master Drainage Plan, October 13, 2008. (Appendix D.2)	
NPS	U.S. Department of the Interior, National Park Service, <i>National Registrar of Historic Places Website, Frequently Asked Questions.</i> (Available at http://www.nps.gov/nr/faq.htm , accessed on May 14, 2009.)	

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HGP FEIR	City of Hemet, <i>Hemet General Plan Final Environmental Impact Report</i> , August 25, 1992. (Available at the City of Hemet Planning Department.)
SJGP FEIR	City of San Jacinto, San Jacinto General Plan Final Environmental Impact Report Findings, April 2006. (Available at the San Jacinto City Clerk's Office.)
SJGP DEIR	City of San Jacinto, <i>San Jacinto General Plan Draft EIR</i> , January 2006. (Available at City of San Jacinto and at http://www.ci.san-jacinto.ca.us/city-govt/general-plan-EIR.html, accessed on May 4, 2009.)
SJGP Housing	City of San Jacinto, San Jacinto General Plan, Housing Element, January 2006. (Available at http://www.ci.san-jacinto.ca.us/city-govt/development/general-plan/ http://www.ci.san-jacinto.ca.us/city-govt/development/general-plan/ https://www.ci.san-jacinto.ca.us/city-govt/development/general-plan/ https://www.ci.san-jacinto.ca.us/city-govt/development/
COR SJVAP	County of Riverside, <i>County of Riverside General Plan</i> , <i>San Jacinto Valley Area Plan</i> , October 2003. (Available at the County of Riverside Planning Department and at http://www.rctlma.org/genplan/content/ap2/sjvap.html , accessed on May 4, 2009.)
COR FEIR	County of Riverside, Transportation and Land Management Agency, Planning Division, <i>Riverside County Integrated Project, General Plan Final Program Environmental Impact Report</i> , 2003. (Available at the County of Riverside Planning Department and at http://www.rctlma.org/genplan/content/eir/volume1.html , accessed on May 4, 2009.)

6.1.1 Reference Locations

Location	Address
City of Hemet Planning Department	Hemet City Hall 445 E. Florida Ave Hemet, CA 92543 (951)765-2300
City of San Jacinto City Clerk's Office and Planning Department	San Jacinto City Hall 595 S. San Jacinto Ave. San Jacinto, CA 92583
County of Riverside Planning Department	County Administrative Center 4080 Lemon Street Riverside, CA 92501
Regional Water Quality Control Board	3737 Main Street, Suite 500 Riverside, CA 92501-3339
Riverside County Flood Control and Water Conservation District	1995 Market Street Riverside, CA 92501

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City of San Jacinto	Asher Hartel, Planning Director
Riverside County Flood Control and Water Conservation District	Stuart McKibbin Kris Flanigan Zully Smith

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7.0 ACRONYMS

Acronyms, units of measurement and chemical symbols used throughout the Draft EIR are identified in this section.

7.1 ACRONYMS

AAAQS Ambient air quality standards

AB Assembly Bill

ACOE U.S. Army Corps of Engineers

ADP Area Drainage Plan

AQMP Air Quality Management Plan
BMP Best Management Practices

CAA Clean Air Act

CAL/EPA California Environmental Protection Agency

CAPSSA Critical Area Plant Species Survey Area

CARB California Air Resources Board
CCR California Code of Regulations

CDFG California Department of Fish and Game

CEC California Energy Commission

CEQA California Environmental Quality Act
CESA California Endangered Species Act

CFR Code of Federal Regulations

CIWMB California Integrated Waste Management Board

CRHR California Register of Historic Resources

CY Cubic yards

CWA Clean Water Act

DBESP Determination of Biologically Equivalent or Superior Preservation

DHS Department of Health Services

DTSC Department of Toxic Substance Control
California Department of Conservation

DOT Department of Transportation

7.1 ACRONYMS

EDR Environmental Data Resources, Inc.
EIA Energy Information Administration

EIC Eastern Information Center

EIR Environmental Impact Report

EMWD Eastern Municipal Water District
EPA Environmental Protection Agency

ESA Endangered Species Act

GHG Greenhouse gas

HAER Historic American Engineering Record
HAHC Native American Heritage Commission

HANS Property Owner Initiated Habitat Acquisition and Negotiation Strategy

HCP Habitat Conservation Plan
ISOR Initial Statement of Reasons

JPR Joint Project Review

LAPM Los Angeles pocket mouse

LST Localized significance thresholds

LQG Large Quantity Generators
MBTA Migratory Bird Treaty Act

MDP Master Drainage Plan

MMTCO₂e e Million metric tonnes of carbon dioxide equivalent

mph Miles per hour

MPO Metropolitan Planning Organization

MSHCP Western Riverside County Multiple Species Habitat Conservation Plan

NAAQS National Ambient Air Quality Standards NCCP Natural Communities Conservation Plan

NEPSSA Narrow Endemic Plants Species Survey Area

NRHP National Register of Historic Places

OAL Office of Administrative Law

OEHHA Office of Environmental Health Hazard Assessment

ODCsc Ozone depleting compounds

7.1 ACRONYMS

OES Office of Emergency Services

OHWM Ordinary high water mark

OPR Governor's Office of Planning and Research

OSHA Occupational Safety and Health Administration

PRC Public Resources Code

RCB Reinforced concrete box

RCIP Riverside County Integrated Plan

RCFCWCD Riverside County Flood Control and Water Conservation District

RCP Reinforced concrete pipe

RCPG Regional Comprehensive Plan and Guide

RST Regional significance threshold

RTP Regional Transportation Plan

ROW Right-of-way or rights-of-way

RPWs Relatively Permanent Waters

RWQCB Regional Water Quality Control Board

SB Senate Bill

SBKR San Bernardino kangaroo rat

SCAB South Coast Air Basin

SCAG Southern California Association of Governments

SCAQMD South Coast Air Quality Management District

SCH State Clearinghouse

SHPO State Historic Preservation Officer

SIP State Implementation Plan

SJV-MDP San Jacinto Valley Master Drainage Plan

SKR Stephen's kangaroo rat

SQG Small Quantity Generators

SRA Source receptor area

SR-74 State Route 74

SWRCB State Water Resources Control Board

SWPPP Storm Water Pollution Prevention Plan

7.1 ACRONYMS

TNWs Traditionally Navigable Waters

UST Underground storage tank

Vehicle miles traveled **VMT**

WPCP Water Pollution Control Plan

WQMP Water Quality Management Plan

WWTP Waste water treatment plant

7.2 UNITS OF MEASUREMENT AND CHEMICAL SYMBOLS

Greater than >

 $\mu g/m^3$ Micrograms per cubic meter

CFC Chloroflourocarbons

 CH_4 Methane

CO Carbon monoxide Carbon dioxide CO_2 CY Cubic yards HC

Hydrocarbons

HCFC Hyrdro-chloroflourocarbons

HFC Hydroflourocarbons

LST Localized Significance Threshold

Metric tonne Mt

 NF_3 Nitrogen triflouride NH_4NO_3 Ammonium nitrate

Nitric oxide NO

 NO_2 Nitrogen dioxide Oxides of nitrogen NO_X

Nitrous oxide N_2O

 O_3 Ozone Pb Lead

7.2 UNITS OF MEASUREMENT AND CHEMICAL SYMBOLS

PFC Perflourocarbons

PM-10 Particulate matter 2.5 to 10 microns in diameter

PM-2.5₅ Particulate matter 2.5 microns or less in diameter

ppm Parts per million

ROG Reactive organic gases

SF₆ Sulfur hexaflouride

SO₂ Sulfur dioxide

SO_X Oxides of sulfur

SRA Source Receptor Area

TCA 1,1,1-trichloroethane or methyl chloroform

VOC Volatile organic compounds