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**4. EVALUATION OF IMPACTS PRESENTED IN THE DEIR**

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## **4. EVALUATION OF IMPACTS PRESENTED IN THE DEIR**

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This chapter evaluates the effect of changes upon the findings for each technical issue area presented in the DEIR. It assesses whether, in light of those changes, the impacts analysis of the DEIR remains valid, and concludes that none of the changes affect the continued validity of the DEIR's analysis. Each issue area is presented in chronological order as it was presented in the DEIR.

### **4.1 AESTHETICS**

#### **4.1.1 Introduction**

The Aesthetics section (4.1) of the DEIR provided an overview of the visual resources within the vicinity UCP area and evaluated the potential direct and cumulative impacts on these resources as a result of UCP development. In addition, as a response to comments on the NOP, this section of the DEIR also addressed the potential impact of the UCP on views, open space values, and wilderness areas within the project area. The analysis focused on notable visual resources within and in the vicinity of the UCP area, views of the UCP area, and views from the UCP area.

#### **4.1.2 Evaluation of DEIR**

##### **A. Summary of DEIR Conclusions**

Potential impacts addressed in the DEIR included: (4.1-1) altered visual character and visual incompatibility surrounding land uses; (4.1-2) intrusion into visual corridors and scenic resource areas; and (4.1-3) creation of new nighttime light and glare in the UCP area. All project-specific impacts addressed in the DEIR were found to be significant and unavoidable despite the implementation of mitigation measures addressed in the UCP Policies or additional mitigation measures proposed in the DEIR.

Similarly, all cumulative impacts were found to be significant and unavoidable, including: (4.1-4) visual incompatibility with surrounding land uses in the UCP area; (4.1-5) adverse effect on major view corridors and scenic resources in the area; and (4.1-6) creation of new nighttime light and glare in the UCP area.

##### **B. Relevant Changes Since Publication of DEIR**

###### **I. Relevant Changes to the Project**

As presented in Chapter 3, several relatively minor changes have been made to UCP policies relevant to aesthetics and visual quality. In particular, Policy TO 1.3 has been revised to encourage the retention of

natural drainages and to eliminate a requirement that development be sited to mimic natural topography. Further, Policy LU 9.4 has been revised to reduce the minimum size of a continuous greenbelt corridor/park system from 250 acres to 150 acres; the revised policy continues to require a greenbelt/park system that would provide residents, employees, and visitors with a diversity of open space experiences within the University Community, and continues to meet the County standards of 5 acres of parkland per 1,000 residents, but now provides additional flexibility to future developments as to how and where the greenbelt and open space system will be designed.

## 2. Relevant Changed Conditions

The development of planned projects (as outlined in Chapter 2) and other projects within Merced County would provide additional visually incompatible uses and may substantiate the need for additional road lighting within the proposed project area. Although changes to the aesthetic resources in the project area since publication of the DEIR could result in changes to the previous impact analysis, impacts would still remain significant and unavoidable.

### **C. Evaluation**

**Impact 4.1-1:** The proposed UCP would alter the visual character of the UCP area and could be visually incompatible with surrounding land uses. This is considered a **significant and unavoidable impact**.

The policy changes to the UCP since publication of the DEIR would potentially affect the order of lands developed within the UCP (as a result of changes to phasing policies) and could result in less overall open space and parkland within the developed UCP area. However, the fundamental visual change from an open undeveloped range and farmland to developed urban/suburban community would remain largely unchanged. The magnitude of this change would remain essentially the same as that described in the DEIR, and the significance of the impact would be identical to that presented in the DEIR. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR.

**Impact 4.1-2:** The proposed UCP could intrude into major view corridors and adversely affect scenic resources. This is considered a **significant and unavoidable impact**.

The changes that have occurred since publication of the DEIR have had no effect on the analysis of views and view corridors contained in the DEIR because full development of the UCP area under the UCP as currently proposed would be visually unchanged from that presented in the Draft UCP evaluated in the DEIR. Similarly, these changes to the UCP policies have not affected the conclusions about the significance of impacts to major view corridors and scenic resources. Finally, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the policies that would serve as visual quality mitigation measures presented in the DEIR.

**Impact 4.1-3:** The proposed UCP would create a new source of nighttime light and glare in the UCP area. This is considered a **significant and unavoidable impact**.

The changes that have occurred since publication of the DEIR that may affect the phasing of development or the amount of open space and parkland within the UCP have had no effect on the analysis of nighttime

light and glare impacts contained in the DEIR. The phasing of development would not affect the effects of the built-out project on light and glare, and the relatively small changes in open space (changes to about 100 acres out of over 2,100 acres of land to be developed within the UCP) have not affected the magnitude of the impact described nor conclusions about the significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the light and glare mitigation measures presented in the DEIR.

**Impact 4.1-4:** Development of the proposed UCP, in combination with other cumulative development, would contribute to alteration of the visual character of the UCP area, and to visual incompatibility with surrounding land uses in the vicinity of the UCP area. This is considered a **significant and unavoidable impact**.

As is described above under Impact 4.1-1, changes to the proposed UCP have not affected the impacts or significance of impacts of the project on visual character. In addition changes in the cumulative context or cumulative projects, including the recently approved Hunt Family Annexation, have not changed the magnitude or significance of the cumulative visual character impacts described in the DEIR. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures for cumulative visual character impacts presented in the DEIR.

**Impact 4.1-5:** Development of the proposed UCP, in combination with other cumulative development, would contribute to adverse effects on major view corridors and scenic resources in the area. This is considered a **significant and unavoidable impact**.

For the reasons described above for Impact 4.1-2, the proposed changes to the UCP would not change the magnitude or significance of the view corridor or scenic resources impacts of the proposed project. Similarly, the only change to the visual character of the vicinity that could affect the cumulative analysis would be the recently approved Hunt Family Annexation, southwest of the UCP area across Yosemite Avenue. This additional 28 acres of additional low-density residential development would not materially affect the impacts described in the DEIR, the conclusions about the significance of those impacts, nor the nature or effectiveness of the mitigation measures presented in the DEIR.

**Impact 4.1-6:** Development of the proposed UCP, in combination with other cumulative development, would create nighttime light and glare in the UCP area. **This is considered a significant and unavoidable impact.**

For the reasons described under Impact 4.1-3, the proposed changes to the UCP would not change the magnitude or significance of the light and glare impacts of the project. The changes in cumulative projects, namely the Hunt Family Annexation, would add urban residential uses, including all appurtenant light and glare, to about 28 acres of land southwest of the UCP across Yosemite Avenue. This slight increase in the acreage of urban development in the north Merced area will not affect the observed glare or nighttime light present in the area of the UCP. As such, the changes that have occurred since publication of the DEIR have had no effect on the cumulative light and glare analysis contained in the DEIR, and have not affected the conclusions about the significance of this cumulative impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the cumulative light and glare mitigation measures presented in the DEIR.

## **4.2 AGRICULTURAL RESOURCES**

### **4.2.1 Introduction**

The Agricultural Resources section (4.2) of the DEIR provided an overview of the agricultural resources within the vicinity UCP area and evaluated the potential direct and cumulative impacts to such resources and operations as a result of UCP development. Specifically, the conversion of farmland to urban areas, potential conflicts with proximate agricultural uses and land under the Williamson Act contract, and the potential loss of crop productivity were evaluated in the DEIR. In addition, as a response to comments on the NOP, this section of the DEIR also addressed concerns regarding the loss of productive agricultural land in Merced County, potential agricultural and urban land use conflicts, and the project's consistency with existing Merced County General plan Agricultural Policies as a result of the UCP development.

### **4.2.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

Section 4.2 of the DEIR identified potential project-level and cumulative impacts to agricultural resources as a result of implementing the proposed project prior to and upon the implementation of mitigation measures. Potential project-level impacts addressed in the DEIR included: (4.2-1) conversion of Important Farmland including Prime Farmland, Unique Farmland and Farmland of Statewide Importance; (4.2-2) exposure of existing and future residents to nuisances associated with urban and agricultural uses; and (4.2-3) potential conflict with existing General Plan Agricultural Policies. Impacts 4.2-2 and 4.2-3 would be reduced to a less than significant level with the implementation of UCP policies. Only Impact 4.2-1 was found to be significant and unavoidable following the implementation of mitigation measures that were contained within the UCP.

Potential cumulative impacts addressed the following: (4.2-4) cumulative conversion of Important Farmland including Prime Farmland, Unique Farmland and Farmland of Statewide Importance and (4.2-5) conflict with agricultural zoning or cancellation of Williamson Act contracts. Only Impact 4.2-4 was found to be significant and unavoidable following the implementation of mitigation measures that were contained within the UCP.

#### **B. Relevant Changes Since Publication of DEIR**

##### **I. Relevant Changes to the Project**

As discussed above, several changes were made to UCP Policies regarding agricultural resources in the proposed project area. A number of these changes directly address or eliminate mitigation measures that were identified in the DEIR. These policy changes do not affect the magnitude of the unmitigated impact on agricultural resources related to implementation of the DEIR. The key relevant policy changes include the elimination of UCP Policies 1.1 through 1.3 that sought to phase development from the north to south in the UCP area, preserving for farming the highest quality agricultural land for the longest period of time prior to ultimate development. In addition, following a public hearing concluded in December 2001, the Board of Supervisors directed staff to amend the draft University Community Plan and Environmental

Impact Report to modify Policy A 2.1, requiring conservation easements at a 1:1 ratio to mitigate for the loss of agricultural land resulting from the development of the University Community.

The Board direction was based on its desire to establish a County-wide program for mitigating the loss of agricultural land through its conversion to urban land uses, rather than applying a project-by-project agricultural conservation easement mitigation program. The Board expressed its particular concern in applying an agricultural easement mitigation requirement to the University Community when no comparable requirement exists for the City of Merced, and more broadly the absence of such a program in other incorporated areas within the County.

The Board directed that Policy A 2.1 be amended to eliminate the requirement for the acquisition of conservation easements at a ratio of 1:1 for the loss of agricultural land, and to specify that, at such time that a County-wide agricultural mitigation program is adopted, the University Community would be required to participate in the County-wide program.

## **2. Relevant Changed Conditions**

There have been no changes to the agricultural resources in the project area since publication of the DEIR. The development of planned projects (as outlined in Chapter 3) and other projects within Merced County would reduce existing agricultural uses and possibly slightly increase the cumulative loss of farmland in the proposed project area (i.e., Hunt Family Annexation would result in an additional 28 acres of farmland to be converted to urban uses). There have been no regulatory changes relevant to agricultural resources that have changed since the publication of the DEIR.

## **C. Evaluation**

**Impact 4.2-1:** Development of the UCP area could result in the conversion of Important Farmland, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. This is considered a ***significant and unavoidable impact***.

The changes that have occurred since publication of the DEIR have had no effect on the acreage of the loss of Important Farmland caused by the project, as presented in the DEIR, and have not affected the conclusions about the significance of this impact before mitigation.

The DEIR identified implementation of UCP policies A 3.1 through A 3.3 as mitigation that would reduce the magnitude of these impacts, but ultimately concluded that the impact would be significant and unavoidable. The changes that have occurred since publication of the DEIR have changed the nature of policy A 3.1, and eliminated policies A 3.2 and 3.3. The change in policy A 3.1, in particular, has decreased the likely effectiveness of the measure in reducing the magnitude of the impact since the participation of the UCP development in agricultural mitigation programs would be conditional on such programs being approved on a countywide basis; no such programs currently exist.

Nevertheless, the DEIR acknowledged that the implementation of policies A 3.1 through 3.3 would “not prevent the direct loss of farmland in the UCP area”, nor “create new farmland to replace that lost to UCP development.” While the changes since the DEIR was published have the effect of substantially reducing the likelihood of areawide, indirect efforts to mitigate the unavoidable loss of farmland due to the project, the magnitude of the impact (i.e., the conversion of 1,436 acres Important Farmland to urban uses)

described in the EIR has not changed, nor has the magnitude of this loss of farmland after mitigation changed.

Finally, with the proposed changes to the UCP policies, the impact would be considered significant and unavoidable, the same conclusion as presented in the DEIR.

**Impact 4.2-2:** Development of the proposed UCP could expose future residents to nuisances associated with agricultural operations and could expose farmers to nuisances associated with urban uses. This is considered a **less than significant impact**.

The approval of the Hunt Family Annexation means that a smaller portion of the southern boundary of the UCP will front on active agricultural lands immediately south of Yosemite Avenue. Thus, the agriculture/urban edge issues described in Impact 4.2-2 would be proportionately reduced. While the impact to farmers would be somewhat reduced due to the development of an increased number of urban uses adjacent to the proposed project site, the DEIR conclusion of significant before mitigation would continue to be appropriate. The mitigation measures identified in policies A 2.2, A 2.3, and A 4.1 would continue to be effective, notwithstanding relatively minor changes to those policies presented in Chapter 3; thus this impact would continue to be considered less than significant after mitigation.

**Impact 4.2-3:** The proposed UCP could be inconsistent with General Plan Agricultural policies. This is considered a **less than significant impact**.

Impact 4.2-3 was determined to be significant, but mitigated to a less-than-significant level with implementation of policies A 2.2, 2.3, 3.1 and 4.1, AA 1.1 through 1.5, and 2.1 through 2.4 in the UCP.

Because of the substantial change in UCP policy A 3.1, it is important to examine the discussion of consistency with Merced County General Plan Agricultural Element Objective 2A, Policy 2 since that discussion involved recognition of the role of UCP policy A 3.1 in preserving important farmland in the County. The discussion on page 4.2-26 of the DEIR establishes that the UCP would be consistent with County policy directing development to less valuable farmland primarily because of the fact that the lands of the UCP have been studied extensively and are considered to be less valuable than much of the very high quality farmland in the County. Notwithstanding the changes that have been made to policy A 3.1, policy A 4.1 would continue to require the establishment of an open space buffer at the southern and eastern edges of the UCP area. The implementation of UCP policy A 3.1 was not the only policy that resulted in the conclusion of consistency with Merced County General Plan Agricultural Element Objective 2A, Policy 2. Rather, it was one of a number of policies aimed at ensuring consistency with Merced County General Plan Agricultural Element Objective 2A, Policy 2. Policy A 3.1, as revised, in combination with the other factors discussed above and on page 4.2-26 continues to result in consistency of the UCP with this important policy.

The discussion of consistency with Merced County General Plan Agricultural Element Goal 3, which discourages location and operation of land uses that are potentially disruptive to the agricultural economy, addressed the ways that Draft UCP policies AA1.1 through AA1.3 sought to support the agricultural economy of the region. As currently proposed, policies AA1.1 and 1.2 would be eliminated. Those policies were intended to increase access of future residents to local agricultural goods. Policy AA1.5, which remains part of the UCP, seeks to “encourage the use of local agricultural goods for use in local

restaurants, schools, and grocery stores,” and allows the UCP to meet the intent of Goal 3 of the County Agricultural Element. Accordingly, the DEIR’s conclusion regarding the significance of this impact remains valid.

As is discussed above, the changes to the UCP would not materially affect Impact 4.2-3, or the conclusions about significance. In addition, as is stated on page 4.2-27 of the DEIR, “ultimately, the UCP’s consistency with the Merced County General Plan must be determined by the County Board of Supervisors. For this reason, the conclusion of this impact would be speculative pursuant to CEQA Guidelines Section 15145 and beyond the scope of this analysis.” This statement continues to be true under current conditions.

**Impact 4.2-4:** Development of the proposed UCP, in combination with other cumulative development in Merced County, would contribute to the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. This is considered a **significant and unavoidable impact**.

The addition of the Hunt Family Annexation to the cumulative context of the proposed project area has had the effect to increase the amount of Important Farmland converted to urban uses under cumulative conditions by 28 acres. However, in light of the analysis in the DEIR, which disclosed that by the year 2025 the County would lose over 20,000 acres of Important Farmland if all existing SUDPs were developed, the addition of 28 acres of lost farmland would not affect the magnitude or conclusions about the significance of this impact.

In addition, the DEIR identified policy AA 2.2 as having the potential to mitigate some of the effect described under Impact 4.2-4. Since publication of the DEIR policy AA 2.2 has been replaced, similar to policy A 3.1, with a requirement that UCP development participate in a countywide agricultural mitigation program if such a program is adopted in the future. This change lessens the likelihood of mitigation because such a program does not currently exist and, thus, may not be available in the future. However, the DEIR acknowledged that policy AA 2.2, along with policy AA 2.1, would affect the timing of conversion of farmland, but would not affect the amount of farmland converted to urban uses which is the basis for the effect described under Impact 4.2-4. The DEIR concluded that even with implementation of policy AA 2.2, the impact would be significant and unavoidable. Thus, the change to this policy has made the policy somewhat less effective as a mitigation measure, but not changed the conclusion of significance after mitigation that was presented in the DEIR.

**Impact 4.2-5:** Development of the proposed UCP, in combination with other development in the County, could conflict with agricultural zoning or result in the cancellation of Williamson Act contracts. This is considered a **less than significant impact**.

To the County’s knowledge, there has been no change in the status of Williamson Act contracts in the project vicinity since the publication of the DEIR. Further, the changes that have occurred since publication of the DEIR have had no effect on the presence of Williamson Act contracts in the project area, and has not affected the analysis contained in the DEIR discussion of Impact 4.2-5. These changes have not affected the magnitude of the effect described nor the conclusions about the significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR.

## **4.3 AIR QUALITY**

### **4.3.1 Introduction**

The Air Quality section (4.3) of the DEIR provided an overview of the existing air quality levels in the UCP area and addressed potential impacts on air quality related to mobile source emissions, stationary source emissions, area source emission and odors. Section 4.3 of the DEIR evaluated the potential direct and cumulative emissions and odor impacts as a result of the UCP development. In addition, as a response to comments on the NOP, this section of the DEIR also addressed concerns regarding the amount of fugitive mobile source, area source, and stationary source emissions, as well as potential impacts to biotic resources from changes in air quality.

### **4.3.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

Section 4.3 of the DEIR identified potential project-level and cumulative air quality impacts related to the construction and operation of the proposed project. Potential project-level impacts addressed in the DEIR included: (4.3-1) construction related PM<sub>10</sub> generation; (4.3-2) construction related NO<sub>x</sub>, ROG, and CO emissions; (4.3-3) increased CO concentration as a result of project related traffic; (4.3-4) overall exceedance of the San Joaquin Unified Air Pollution Control District (SJVUAPCD) standards; (4.3-5) possible exposure of prospective UCP residents to pesticide spray drift, negative odors, and dusts from surrounding agricultural developments that could; (4.3-6) possible exposure of future residents to toxic air contaminants (TAC) from stationary sources; (4.3-7) possible exposure to odors from UCP sources; and (4.3-8) possible exposure of future residents to adjacent odors and dusts. Impact 4.3-1 would be reduced to a less than significant level with the implementation of UCP policies and additional mitigation measures. Only project-level impacts 4.3-2 and 4.3-4 were found to be significant and unavoidable following the implementation of mitigation measures that were either contained within the UCP itself or proposed in the DEIR.

Potential cumulative-level impacts included: (4.3-9) cumulative project emissions that could contribute to degradation of air quality; (4.3-10) increased CO concentration as a result of cumulative development related traffic; (4.3-11) operational emissions exceedance of ROG, NO<sub>x</sub>, and CO standards; and (4.3-12) unacceptable cumulative TAC health risks. Impacts 4.3-9 and 4.3-11 were both found to be significant and unavoidable following the implementation of mitigation measures that were either contained within the UCP itself or proposed in the DEIR.

#### **B. Relevant Changes Since Publication of DEIR**

##### **I. Relevant Changes to the Project**

As discussed above, several changes were made to UCP Policies regarding agricultural resources in the proposed project area. These changes would be incorporated into the appropriate DEIR mitigation measures and incorporated into the revised impact analysis.

## 2. Relevant Changed Conditions

Since publication of the DEIR in August 2001, the San Joaquin Valley State Status Classification for PM<sub>10</sub> changed from Non-attainment Serious to Non-attainment and for carbon monoxide changed from attainment/none to unclassified.<sup>1</sup> In addition, as discussed in Chapter 3 of this document, in April 2004 USEPA granted California's request to change the non-attainment status of the San Joaquin Valley for the national 1-hour ozone standard from severe to extreme. The primary effect of the change in ozone non-attainment status is to grant the State five additional years to bring the air basin into attainment. In addition, the threshold for federal permitting requirements is reduced from 25 tons per year to 10 tons per year. This change does not affect the adequacy of the DEIR due to the fact that the standard of significance for ozone precursors (NO<sub>x</sub> and ROG) used in the DEIR is 10 tons per year. There are no other material changes as a result of the change in status from severe to extreme that would affect the adequacy of the air quality analysis in the DEIR.

The development of planned projects (as outlined in Chapter 2) and other projects within Merced County could likely contribute additional air quality impacts to the proposed project area during construction and upon operation.

Tables 4.3-1 and 4.3-2, presented in Chapter 3 of this document, identify the changes in emission levels and air pollutants since the release of the previous DEIR. These changes update the information contained in the DEIR, but do not change the bases, methods or conclusions of the analyses contained in the August 2001 DEIR.

## **C. Evaluation**

**Impact 4.3-1:** Project-related construction activities would generate PM<sub>10</sub>. This is considered a *less than significant impact*.

Because the expected extent of construction activity has not changed, and because construction is not likely to be subject to any additional regulatory requirements, the changes that have occurred since publication of the DEIR have had no effect on the analysis of particulate matter (PM<sub>10</sub>) contained in the DEIR, and have not affected the conclusions about the significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of Policy AQ 5.1 or Mitigation Measure 4.23-1, which would mitigate the impact to a less-than-significant level.

**Impact 4.3-2:** Construction activities would generate NO<sub>x</sub>, ROG and CO emissions. This considered *significant and unavoidable impact*.

Because there is no anticipated change in the nature of construction activities that would occur within the UCP area, the changes that have occurred since publication of the DEIR would not affect on the analysis contained in the DEIR, and have not affected the conclusions about the significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of Policies AQ 5.2 through AQ 5.4 and Mitigation Measure 4.3-2 presented in the DEIR. The DEIR noted that this impact would be significant and unavoidable; this conclusion remains correct.

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<sup>1</sup> *Ibid.*

**Impact 4.3-3:** Project-related traffic would increase CO concentrations at specific intersections. This is considered a ***less than significant impact*** with mitigation measures from the UCP.

The relevant change—specifically, the improvement from Non-attainment serious to non-attainment status—that has occurred since publication of the DEIR indicates that the San Joaquin Valley is less sensitive to CO concentrations than at the time that the DEIR was published. In addition, none of the changes that have occurred since publication of the DEIR have affected the analysis that determined the magnitude of CO concentrations at specific intersections at 2015 and at UCP buildout. Finally, the mitigation measures identified in the DEIR, including UCP policies AQ 2.2, 2.4, 2.5 and LU 4.1, 4.3, 5.8 and 5.16 have not changed. Thus, the less-than-significant impact conclusion presented in the DEIR remains correct in light of current conditions.

**Impact 4.3-4:** Operational emissions associated with the UCP area would exceed SJVUAPCD standards. This is considered a ***significant and unavoidable impact***.

None of the changes that have occurred since publication of the DEIR would affect the estimates of operational emissions contained in the DEIR, and because the standards of significance are unchanged, the changed conditions have not affected the conclusions about the significance of this impact. The DEIR recognizes that UCP policies AQ 2.4, 2.5, 2.6, 6.1 and 7.1 and LU 4.1, 4.3, 5.8 and 5.16 would serve to mitigate operational emissions of the UCP. In addition, the DEIR notes that Mitigation Measure 4.3-4 would limit air pollutant emissions from development in the UCP area. Since publication of the DEIR UCP Policy AQ 2.6 has been slightly revised and UCP Policy 2.6a has been added, but these changes have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. The other relevant policies described above and Mitigation Measure 4.3-4 have not changed. Therefore, under current conditions, Impact 4.3-4 would remain significant and unavoidable, the same as presented in the DEIR.

**Impact 4.3-5:** Future residents of the UCP area could be exposed to pesticide spray drift from adjacent agricultural operations. This is considered a ***less than significant impact***.

Because the ultimate location of developed residential uses in comparison to the location of actively farmed agricultural lands has not changed as a result of changes to the project or in changed conditions, the changes that have occurred since publication of the DEIR would not affect the analysis of pesticide spray drift contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. Although this impact was considered less than significant, the DEIR did recognize that UCP Policy A 4.1 would reduce the magnitude of this potential impact. Policy 4.1 has not been materially changed, and thus the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR.

**Impact 4.3-6:** Future residents could be exposed to toxic air contaminants (TAC) from stationary sources within the UCP area. This is considered a ***less than significant impact***.

The changes to the UCP and changed conditions since publication of the DEIR have not affected the analysis of toxic air contaminants that is contained in the August 2001 DEIR, and have not affected the conclusions about the magnitude or significance of this impact. In addition, although this impact is

deemed less than significant prior to implementation of mitigation measures, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of Policy AQ 3.1, which would serve to further reduce the magnitude of this less-than-significant impact.

**Impact 4.3-7:** Future residents could be exposed to odors from sources within the UCP area. This is considered a **less than significant impact** with mitigation included in the UCP.

The analysis of odor impacts related to implementation of the UCP has not been affected by changes in policies or changed conditions that have occurred since publication of the DEIR. The primary factors that affect odors, especially the proximity of sensitive receptors, such as residences and schools, to potential odor-generating uses, such as wastewater treatment facilities or heavy industry, have not changed as a result of any changes since publication of the DEIR. The changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. As is noted in the DEIR, the potential exists for odor impacts to be significant because specific land use determinations have not yet been made; these decisions will be undertaken at the time that specific plans are processed within the UCP area.

The DEIR identifies that UCP policies AQ 3.1 and A2.2 and 4.1 would mitigate the potential odor impacts to a less-than-significant level. The changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of these policies that would serve to reduce the magnitude of impacts presented in the DEIR.

**Impact 4.3-8:** Future residents of the UCP area could be exposed to odors and dust from adjacent land uses. This is considered a **less than significant impact** with mitigation included in the UCP.

The changes that have occurred since publication of the DEIR have not affected the potential issue of odors from adjacent agricultural uses adversely affecting uses within the UCP area; there has been no changes that would the analysis of these spillover odor issues contained in the DEIR, and the conclusions about the magnitude or significance of this impact have not changed. Policies A2.2 and 4.1 were identified in the DEIR as mitigation measures that would reduce the impact to a less-than-significant level and the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of these policies in reducing the magnitude and significance of this impact.

**Impact 4.3-9:** Project emissions, in combination with UC Merced and other development in the County, could contribute to the degradation of air quality. This is considered a **significant and unavoidable impact**.

As is described in Chapter 3, there have been two changes in the designated air quality non-attainment status of the San Joaquin Valley since publication of the DEIR; the status has been changed from severe to extreme for the federal 1-hour ozone standard (a degradation in status), and from serious non-attainment to non-attainment for carbon monoxide (an improvement in status). These changes, in and of themselves, do not change the measured level of impact or the mitigation measures that would be applied to the project to reduce or avoid the impact. While the changes in the designated non-attainment status have changed, the actual existing and predicted air quality conditions in the San Joaquin Valley Air Basin does not change simply as a result of a change in designation status.

As is noted in the DEIR (page 4.3-34), before mitigation this impact would be considered significant; that conclusion remains under current conditions. The changes in the project do not affect short-term or long-term emissions and the relatively minor additional cumulative projects would not materially affect the analyses contained in the DEIR.

The DEIR identified UCP Policies AQ 4.1, 4.3, 5.1, 5.2, 5.3, T 4.2, 4.3, 4.4, 4.5, 5.5, 5.6, 7.1, 7.2, 7.3, and 7.4 as measures that would serve to mitigate the magnitude of this impact. Most of these mitigation measures are unchanged, and the County has made only minor revisions to the few that it has altered. However, the previous DEIR conclusion of significant and unavoidable would continue to apply at this time. The mitigation measures identified in the DEIR would not reduce impacts to below a level of significance. Therefore, the changes that have occurred since publication of the DEIR have not affected the validity of the DEIR's analysis of the nature or effectiveness of mitigation measures; the cumulative impact would remain significant and unavoidable.

**Impact 4.3-10:** Project-generated traffic, in combination with other cumulative development, would increase CO levels at local intersections. This is considered a **less than significant impact**.

Cumulative traffic conditions, the primary driver of cumulative CO levels, would remain similar to the mitigated conditions predicted in the DEIR. Congestion would not be materially different from that described in the DEIR, and thus the conclusion of the DEIR that “due to the improvement in technology which would result in less CO being produced from idling cars, and a decrease in the future background concentrations of CO levels, no CO violations are anticipated to occur during the year 2025” remains valid at this time. The recent change in CO non-attainment status, from serious non-attainment to non-attainment, would be indicative of the trends reflected in the DEIR.

UCP Policies AQ 2.4 and 2.5, LU 4.1, 4.3, 5.8, and 5.16, and T 7.1, 7.3 and 7.4 have not materially changed, and thus the nature or effectiveness of the mitigation measures presented in the DEIR have not been diminished.

**Impact 4.3-11:** Operational emissions would exceed ROG, NO<sub>x</sub> and CO standards. This considered **significant and unavoidable impact**.

The changes in cumulative development may marginally increase the NO<sub>x</sub>, ROG and CO levels presented in the DEIR due to the increased levels of traffic projected to be generated from the Hunt Family Annexation project. However, these changes would be quite small in comparison to the total cumulative traffic volume upon which the DEIR analyses were conducted. These impacts were recognized to be significant even in light of the implementation of UCP Policies AQ 2.4 and 2.5, as well as LU 4.1, 4.3, 5.8 and 5.16 all of which would serve to reduce vehicular trips to and from the UCP area. No additional mitigation measures that could effectively or measurably reduce the magnitude or significance of this cumulative impact were identified in the DEIR, nor are additional measures available at this time. Thus, this impact would remain significant and unavoidable under current conditions.

**Impact 4.3-12:** Development in the UCP area in conjunction with UC Merced and other cumulative development in the vicinity could generate unacceptable cumulative TAC health risks. This is considered a **less than significant impact**.

As is described for Impact 4.3-6, above, changes in the UCP have not resulted in changes that would affect the analysis or conclusions about TAC health risks from the project. Additionally, no changes have occurred related to changed conditions or cumulative development that would affect the cumulative analysis or conclusions about the magnitude or significance of this impact. In the DEIR this impact was identified as less than significant, and the same conclusion is correct under current conditions.

## **4.4 BIOLOGICAL RESOURCES**

### **4.4.1 Introduction**

The Biological Resources chapter of the DEIR (4.4) provides an overview of, and evaluates the potential impact of the UCP on, the plant and animal resources within the UCP area, as well as addressing the UCP's contribution to cumulative impacts of other projects, including the UC Merced campus, on biological resources in eastern Merced County. This section of the DEIR also addressed the potential impact of the UCP on:

- Vernal pools and other waters / wetlands;
- Special status species;
- Habitat fragmentation, species distribution, and gene flow;
- Nutrient and sediment loading;
- Local and regional hydrology as it affects plant and animal resources;
- Exotic species introductions and herbicide use;
- Alteration of disturbance (i.e. fire and grazing) cycles;
- Increase in predation and competition associated with native species due to increased encroachment by humans and domestic animals; and,
- Resident and migratory avifauna.

### **4.4.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

The University Community Plan (UCP) contains policies PA 1.1 through PA 3.6 to protect plant and animal resources.

All adverse, project-specific impacts addressed in the DEIR, with one exception, were found to be less than significant following implementation of mitigation, either as part of the UCP itself or with the additional mitigation proposed in the DEIR.

Potential impacts addressed in the DEIR include:

- (4.4-1) adverse effects to federally-protected wetlands;
- (4.4-2) adverse effects to 20.4 acres of vernal pools, swales and seasonal wetlands (a subset of the 36.3 acres of jurisdictional waters discussed in Impact 4.4-1) and adverse effects to associated special-status species;

- (4.4-3) adverse effects to 15.9 acres of freshwater marsh, wooded channel, drainages, and stockpond (a subset of the 36.3 acres of jurisdictional waters discussed in Impact 4.4-1) and adverse effects to associated special-status species;
- (4.4-4) loss of annual grasslands and adverse effects to associated special-status avian species;
- (4.4-5) loss of annual grassland and adverse effects on associated special-status mammal species;
- (4.4-6) loss of annual grasslands and adverse effects on associated special-status plant species;
- (4.4-7) loss of annual grasslands, agricultural land, and seasonal wetland habitats and adverse effects on associated special-status species due to construction of off-site infrastructure;
- (4.4-8) indirect effects on special-status species and the habitats that support these species;
- (4.4-9) interruption of potential movement of San Joaquin kit fox; and
- (4.4-10) concluding that the proposed UCP would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional or state habitat conservation plan, was considered in the DEIR to have no impact on biological resources.

Impact 4.4-11, Cumulative Impacts, states that “development of the UCP, in conjunction with UC Merced and other cumulative development, would result in the loss or adverse modification of important native plant and wildlife habitat, including wetlands, vernal pool habitat, alkaline clay playa habitat, and annual grassland habitat, and adverse effects to special-status species associated with these habitats.” The DEIR concludes that for the buildout of the UCP, the cumulative impacts are significant before mitigation, and after inclusion of both relevant UCP policies and additional mitigation presented in the DEIR, remain significant and unavoidable. The DEIR concludes that in 2015, cumulative impacts would be significant, but would be reduced to less than significant by implementation of Policies PA 1.6 and 2.3.

## **B. Relevant Changes Since Publication of DEIR**

### I. Relevant Changes to the Project

As presented in Chapter 3, several relatively minor changes have been made to Plant and Animal policies of the UCP. Several of these changes affect policies that are identified as mitigation measures in the DEIR. The key relevant policy changes include: revision of policies PA 1.1 and 1.6 to make them policies that “require” rather than “encourage” or “ensure” wetland mitigation; revision of policy PA 2.1 to clarify the intent of the policy to “encourage the retention of annual grasslands” rather than minimize effects to grasslands; revision to policy PA 2.3 to eliminate an exception related to policy PA 2.4; and revision to policy PA 3.1 to eliminate explanatory language. Changes to the project and Plant and Animal Resources Policies in the UCP would not materially change the analysis of impacts of the UCP on biological resources presented in the DEIR.

Policies PA 1.7 and 2.4, which referred to potential participation in an approved Eastern Merced County Natural Communities Conservation Plan/Habitat Conservation Plan have been eliminated to reflect the County’s decision not to move forward with preparation of such plans at this time. The elimination of these policies has no effect on the DEIR since policies PA 1.7 and 2.4 are not identified as mitigation measures. Policy PA 1.6 was further revised to eliminate an exception in the case that Policy 1.7 was implemented. This change does not affect the effectiveness of Policy 1.6 because it continues to require preparation of a habitat mitigation plan that would mitigate impacts to wetland features and values. Policy PA 2.3 was revised to eliminate reference to Policy PA 2.4. This change does not affect the

effectiveness of Policy 2.3 to mitigate because the policy continues to require a habitat mitigation plan that would compensate for the loss of annual grasslands functions within the University Community.

## 2. Relevant Changed Conditions

As is described in Chapter in Chapter 3, since publication of the DEIR several studies and analyses pertaining to biological resources in the project vicinity have been conducted as part of the permitting activities associated with the UC Merced campus and the County Infrastructure Project. These additional studies provide new information and reflect potential mitigation strategies that are being considered by the University, the County, and the state and federal regulatory agencies. The relevant studies and analyses include:

- ❑ Verification by the U.S. Army Corps of Engineers of the final golf course wetlands delineation on December 18, 2000 and the final UCP wetlands delineation on November 27, 2001;
- ❑ Verification by the U.S. Army Corps of Engineers of the final UC Merced LRDP Study Area Wetland Delineation on February 22, 2002.
- ❑ A Biological Assessment (BA) of Federally Listed Plant and Animal Species Requiring Consultation with the U.S. Fish and Wildlife Service under Section 7 of the Federal Endangered Species Act, published on February 8, 2002;
- ❑ An Evaluation of Water Supply and Drainage Programs and Effects on Fisheries for the UC Merced Campus Project and the County of Merced Infrastructure Infrastructure in Support of the UC Merced Project, dated February 8, 2002;
- ❑ A study of the Wildlife and Rare Plant Ecology of Eastern Merced County's Vernal Pool Grasslands (Vollmar, J.E., ed.), published in March of 2002;
- ❑ A Supplement to the Biological Assessment for the UC Merced Campus Project, published in July, 2002;
- ❑ A Final Biological Opinion (BO) on the Proposed University of California Merced Campus, Phase I and Campus Buildout and Infrastructure Project, issued by the U.S. Fish and Wildlife Service on August 19, 2002;
- ❑ An Eastern Merced County NCCP/HCP Science Advisors Report, published in November 2002; and
- ❑ A Proposed Conservation Strategy for the UC Merced Project, submitted for review to the Fish and Wildlife Service on December 29, 2003

These changes since publication of the DEIR do not affect the analysis of impacts or nature or efficacy of the mitigation measures contained in the DEIR, and thus do not affect the conclusions of the DEIR.

## **C. Evaluation**

**Impact 4.4-1:** The proposed UCP would result in substantial adverse effects to federally-protected wetlands. This is considered a **less than significant impact** with mitigation included in the UCP.

Because this impact is based on adverse effects to any federally-protected wetlands, the relatively minor changes in the acreages of such wetlands on the UCP site, as reflected in the final wetland delineation verified by the USACE (in this case an increase in from 36.3 to 38.4 acres of federally-protected wetlands), have no effect on the analysis contained in the DEIR and do not affect the conclusions

regarding the significance of this impact. In addition, the changes since publication of the DEIR have not affected the nature or effectiveness of Mitigation Measures (Policies PA 1.1 through 1.6) presented in the DEIR.

**Impact 4.4-2:** The proposed UCP would result in substantial adverse effects to 20.7 acres of vernal pools, swales and seasonal wetlands (a subset of the 38.4 acres of jurisdictional waters discussed in Impact 4.4-1) and adverse effects to associated special-status species. This is considered a **less than significant impact** with mitigation included in the UCP and Mitigation Measure 4.4-2 in the DEIR.

The DEIR identified effects on vernal pool fairy shrimp, Midvalley fairy shrimp, California linderiella, succulent owl's clover, and California tiger salamander. The DEIR did not specifically identify impacts to potential habitat for Colusa grass, San Joaquin Valley Orcutt grass and the vernal pool tadpole shrimp, species that occur in vernal pool and seasonal wetland habitats but are not known to occur in the UCP area. The 2002 BA, Supplemental BA, and BO included measures to ensure that the UC Merced Campus, the Merced County Infrastructure Project and the UCP do not appreciably reduce the numbers or distribution of these species, including a measure to achieve no net loss of wetland function and values, including habitat value for these species at a ratio of no less than 3:1. While impacts to these three species were not specifically identified in the UCP area, the mitigation measures in the DEIR would restore, create and/or preserve potential habitat for Colusa grass, San Joaquin Valley Orcutt grass, and vernal pool tadpole shrimp at this same 3:1 ratio, and no additional mitigation is required.

**Impact 4.4-3:** The proposed UCP would result in substantial adverse effects to 17.7 acres of freshwater marsh, wooded channel, drainages, and stockpond (a subset of the 38.4 acres of jurisdictional waters discussed in Impact 4.4-1) and adverse effects to associated special-status species. This is considered a **less than significant impact** with mitigation included in the UCP.

Because this impact is based on adverse effects to any amounts of specific types of wetland habitats, the relatively minor changes in the acreages of such habitats on the UCP site, as reflected in the final wetland delineation verified by the USACE, (in this case an increase from 15.9 to 17.7 acres of freshwater marsh, wooded channel, drainages and stockponds) have no effect on the analysis contained in the DEIR and do not affect the conclusions regarding the significance of this impact. In addition, changes since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR.

**Impact 4.4-4:** The proposed UCP would result in the loss of annual grasslands and adverse effects to associated special-status avian species. This is considered a **less than significant impact** with mitigation included in the UCP and implementation of DEIR Mitigation Measure 4.4-4(a) and 4.4-4(b).

The changes to the UCP or conditions do not change the amount of grassland habitat and associated species that would be affected by the project, and the relatively minor changes in UCP Plant and Animal policies that would serve to partially mitigate this impact, that have occurred since publication of the DEIR, have had no effect on the analysis contained in the DEIR. Because the nature and magnitude of the impact are unchanged, and because no appreciable changes in the mitigation measures have occurred, the conclusions relating to the significance of this impact have not changed.

**Impact 4.4-5:** The proposed UCP would result in the loss of annual grassland and adverse effects on associated special-status mammal species. This is considered a **less than significant impact** with mitigation included in the UCP and implementation of DEIR Mitigation Measure 4.4-5.

The changes to the UCP or conditions do not change the amount of grassland habitat and associated species that would be affected by the project, and the relatively minor changes in UCP Plant and Animal policies which would serve to partially mitigate this impact, that have occurred since publication of the DEIR, have had no effect on the analysis contained in the DEIR and have not affected the conclusions relating to the significance of this impact.

The 2002 BA for the UC Merced Campus and Merced County Infrastructure Projects indicates that pre-construction surveys for kit fox shall occur within 30 days of commencement of ground-disturbing construction activities. Mitigation Measure 4.4-5 of the DEIR indicates that surveys should be conducted within two weeks of any ground-disturbing activities. The *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS, June 1999) states “Preconstruction/preactivity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox.” Consequently, to be consistent with the BA and the 1999 guidelines, the text of Mitigation Measure 4.4-5 has been modified to read as follows:

*The surveys shall be conducted within ~~two weeks or less~~ no less than 30 days, but no less than 14 days of any prior to ground-disturbing activities.*

**Impact 4.4-6:** The proposed UCP would result in the loss of annual grasslands and adverse effects on associated special-status plant species. This is considered a **less than significant impact** with mitigation included in the UCP and implementation of DEIR Mitigation Measure 4.4-6.

The changes to the UCP or conditions do not change the amount of grassland habitat and associated species that would be affected by the project, and the changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR and have not affected the conclusions relating to the significance of this impact.

**Impact 4.4-7:** The proposed UCP could result in the loss of annual grasslands, agricultural land, and seasonal wetland habitats and adverse effects on associated special-status species due to construction of off-site infrastructure. This is considered a **less than significant impact** with mitigation included in the UCP.

This impact addresses effects of off-site infrastructure that may be required to serve the University Community. The changes to the UCP or conditions, including the measures presented in the BA, Supplemental BA, and BO do not change the amount of habitat and associated species that would be affected by construction of off-site infrastructure necessary for the project, and the changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR. Because the nature and magnitude of the impact is unchanged, and because no appreciable changes in the UCP policies that would mitigate this impact (PA 1.1, 1.2, 1.4, 1.6, 2.1 and 2.3) have occurred, the conclusions relating to the significance of this impact are consistent with those presented in the DEIR.

**Impact 4.4-8:** The proposed UCP could indirectly affect special-status species and the habitats that support these species. This is considered a **less than significant impact** with mitigation included in the UCP.

The changes to the UCP or conditions do not materially change the analysis of indirect effects of the project. The changes that have occurred since publication of the DEIR, including the publication of the BA, the Supplemental BA, and the BO, have had no material effect on the analysis contained in the DEIR. Because the magnitude and nature of the indirect effects described in the DEIR, and the UCP policies that would serve to mitigate those effects have not changed materially. The conclusions relating to the significance of this impact are consistent with those presented in the DEIR.

**Impact 4.4-9:** The proposed UCP could interrupt potential movement of San Joaquin kit fox. This is considered a **less than significant impact** with mitigation included in the UCP.

Since publication of the DEIR, minor changes have been made to UCP Plant and Animal policies PA 2.1 and 2.3, which would serve to mitigate this impact. As is described in Chapter 3, these changes have no material adverse effect on the mitigative characteristics of the policies. Because changes to the project and changed conditions have had no effect on the analysis of impacts contained in the DEIR and have not adversely affected the mitigation measures in the DEIR, the conclusions relating to the significance of this impact continue to be valid under the current conditions.

**Impact 4.4-10:** The proposed UCP would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional or state habitat conservation plan. This is considered to have *no impact*, as no such plan(s) is/are currently in place for the region.

This was considered “No Impact” in the DEIR. As is reflected in Chapter 3, the County is not presently participating in the preparation of an NCCP or HCP for the eastern Merced County region, and UCP policies PA 1.7 and 2.4 have been correspondingly eliminated. Since there was no impact identified in the DEIR, these changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR and have not affected the conclusions relating to the significance of this impact.

**Impact 4.4-11:** Development of the UCP, in conjunction with UC Merced and other cumulative development, would result in the loss or adverse modification of important native plant and wildlife habitat, including wetlands, vernal pool habitat, alkaline clay playa habitat, and annual grassland habitat, and adverse effects to special-status species associated with these habitats. This cumulative impact is considered **less than significant** for the 2015 cumulative scenario, but **significant and unavoidable** for the cumulative buildout scenario with mitigation included in the UCP and implementation of DEIR Mitigation Measures 4.4-2, 4.4-4(a) and 4.4-4(b).

As is described for Impacts 4.4-1 through 4.4-10, the relatively minor changes in acreages of different habitat types has not materially changed the analyses of biological resources impacts either for the project or for cumulative conditions. The changes in habitat acreages, both for the UCP and cumulative effects including the UC Merced campus, are relatively small in comparison to the total magnitude of impacts, and, as such, the changes described herein are not substantial. The changes in the UCP Plant and Animal

policies that have occurred since publication of the DEIR have had no adverse effect on the analysis contained in the DEIR (if anything, they have become more stringent) and have not affected the conclusions relating to the significance of this impact. The analyses and conservation measures and parameters presented in the BA, Supplemental BA, and BO, as presented above, are consistent with and serve to reinforce the mitigation measures presented in the DEIR. For these reasons, the analysis, mitigation measures, and conclusions of Impacts 4.4-1 through 4.4-10, as presented in the DEIR, continue to be valid under current conditions.

## **4.5 CULTURAL RESOURCES**

### **4.5.1 Introduction**

The Cultural Resources section (4.5) of the DEIR provided an overview of the prehistoric and historic cultural resources within the UCP area and evaluated the potential impact of UCP development on these resources. In addition, as a response to comments on the NOP, this section of the DEIR also addressed the potential impact of the UCP on paleontologic resources and the importance of unplowed soil resources in eastern Merced County.

### **4.5.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

The University Community Plan (UCP) contains policies C 1.1 – C 2.1 to protect cultural resources.

All project-specific impacts addressed in the DEIR were found to be less than significant following implementation of mitigation measures, either contained within the UCP itself or additional mitigation measures proposed in the DEIR. Potential impacts addressed in the DEIR included: (4.5-1) disturbance or destruction of paleontological resources that could be present within the UCP area; (4.5-2) damage to or destruction of unidentified prehistoric cultural resources; (4.5-3) damage to or destruction of historical sites or artifacts; and (4.5-4) damage to or destruction of archaeological and/or historical resources associated with construction of offsite infrastructure. Only DEIR Impact 4.5-4 required implementation of mitigation beyond that proposed in the UCP (i.e. documentation of appropriate surveys and protection measures) to reduce the potential impact to less than significant levels.

Similarly, Cumulative Impact 4.5-5, damage to or destruction of archaeological and/or historical resources associated with UCP project development plus other development in eastern Merced County, was found in the DEIR to be less than significant with implementation of mitigation proposed in the UCP and Mitigation Measure 4.5-5 (which states to implement Mitigation Measure 4.5-4).

#### **B. Relevant Changes Since Publication of DEIR**

##### **I. Relevant Changes to the Project**

The revision to UCP Cultural Resource Policy C 1.1 seeks to extend the requirement for archaeological surveys from only the UCP area to include site where off-site infrastructure would be required. This

change effectively broadens the effectiveness of this policy in ensuring that development of the UCP would not adversely affect archaeological resources if they were discovered during UCP implementation. The revision of Policy C1.1 would not alter the magnitude or significance of impacts identified in Section 4.5 of the DEIR.

## 2. Relevant Changed Conditions

There have been no changed conditions affecting cultural resources in the project area since publication of the DEIR. The addition of the Hunt Family Annexation cumulative development projects may require the need for additional surveys and protection measures on that site, however the addition of this new area subject to ground-disturbing activities would not change the magnitude or significance of the cumulative impacts disclosed in the DEIR.

## **C. Evaluation**

**Impact 4.5-1:** Development under the UCP could disturb or destroy paleontological resources that could be present in the UCP area. This is considered a **less than significant impact** with mitigation included in the UCP.

Because no change has been made in the geographic area to be disturbed during implementation of the UCP, no aspects of the analysis or conclusions related to Impact 4.5-1 would change. In addition, UCP policies C1.3 and 2.1 that would mitigate this impact to a less-than-significant level have not been altered since publication of the DEIR. As such, the DEIR analysis and conclusions regarding Impact 4.5-1 remain valid under current conditions.

**Impact 4.5-2:** The proposed UCP could result in damage to or destruction of unidentified prehistoric cultural resources. This is considered a **less than significant impact** with mitigation included in the UCP.

The effects described in Impact 4.5-2 would be caused by ground disturbing activities undertaken during implementation of the UCP. Since the geographic area subject to these activities has not changed, the impact assessment would not change in terms of the nature, magnitude or significance of the impact. The DEIR identified that UCP policies C 1.1 through 1.3 would mitigate this impact to a less-than-significant level; since the changes to Policy C1.1 serve to broaden and strengthen the effectiveness of this mitigation it is reasonable to conclude that no changes that have occurred since the publication of the DEIR would result in material changes in the magnitude or significance of Impact 4.5-2.

**Impact 4.5-3:** The UCP could result in damage to or destruction of historical sites and/or artifacts. This is considered a **less than significant impact** with mitigation included in the UCP.

Impact 4.5-3 was determined to be less-than-significant because the Fairfield and Le Grand canals do not meet criteria for historical significance. No changes since the publication of the DEIR have changed these conditions. As such, this impact would remain to be less than significant under current conditions.

**Impact 4.5-4:** The proposed UCP would require construction of offsite infrastructure that could damage or destroy undiscovered archaeological and/or historical resources. This is considered a **less than**

**significant impact** with mitigation included in the UCP and implementation of DEIR Mitigation Measure 4.5-4.

This impact addresses potential impacts on archaeological and/or historic resources caused by construction of off-site infrastructure. The DEIR identified this as a significant impact since the specific location of off-site infrastructure is not known at this time and the potential exists for such infrastructure to be sited so as to adversely affect currently unknown archaeological or historic resources. The impact was identified as effectively mitigated to a less-than-significant level through implementation of UCP Policies C 1.3 through 1.3 and 2.1. In addition, Mitigation Measure 4.5-4 was proposed to extend the requirement for cultural resource surveys to off-site infrastructure locations. The changes to UCP Policy C 1.1 accomplish much of what was intended in the DEIR Mitigation Measure 4.5-4. Thus, the combined effect of these policies and measures would be to reduce the impact to a less-than-significant level under current conditions.

**Impact 4.5-5:** Cumulative-plus-project development could damage or destroy unidentified prehistoric and/or historic cultural resources. This is considered a **less than significant impact** with mitigation included in the UCP and implementation of DEIR Mitigation Measure 4.5-5 (which states to implement Mitigation Measure 4.5-4).

Cumulative impacts on prehistoric and historic cultural resources would be caused by physical disturbance to ground during earthmoving activities. Since none of the changes in the project or in the cumulative conditions materially change the factors that result in this impact, no change would occur in the nature, magnitude or significance of Impact 4.5-5. UCP Policies C 1.1 through 1.3 and 2.1, as well as Mitigation Measure 4.5-4, discussed above, would serve to reduce this impact to a less-than-significant level. As is noted above, Policy C 1.1 has been changed subsequent to publication of the DEIR to include much of what is intended in DEIR Mitigation Measure 4.5-5 (which states to implement Mitigation Measure 4.5-4). As such, these mitigation measures would reduce Impact 4.5-5 to a less-than-significant level under current conditions.

## **4.6 GEOLOGY, SOILS, SEISMICITY, AND MINERAL RESOURCES**

### **4.6.1 Introduction**

The Geology, Soils, Seismicity and Mineral Resources section (4.6) of the DEIR provided an overview of the regional and site specific geologic, soils (e.g. erosion potential, unstable and expansive soils) and seismic conditions of the UCP area, addressed the presence of mineral resources in the project vicinity, and focused on those issues indicated in Appendix G of the CEQA guidelines.

### **4.6.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

The UCP contains a number of policies that are relevant to the CEQA analysis of geology, soils, seismicity and mineral resources, including policies S 1.1 through S 1.4 to protect against geologic and

unstable soils hazards and water infrastructure policies IW 8.9 and IW 13.6 to reduce the erosion potential of stormwater on soils and geology.

All project-specific impacts addressed in the DEIR were found to be less than significant, including: (4.6-1) exposure of people and structures to seismic hazards; (4.6-2) increased soil erosion during construction or occupancy; and (4.6-3) exposure of people and structures to hazards associated with unstable soils.

Similarly, all impacts associated with the cumulative buildout and cumulative 2015 buildout scenarios were found in the DEIR to be less than significant, including: (4.6-4) exposure of people to seismic hazards; (4.6-5) soil erosion; and (4.6-6) building construction on unstable soils.

## **B. Relevant Changes Since Publication of DEIR**

### I. Relevant Changes to the Project

Impacts related to geology, soils, seismicity and mineral resources involve physical changes to the ground underlying the UCP area, as well as existing geologic characteristics of the UCP site. The one policy change in the UCP that would be potentially relevant to issues surrounding geology, soils, seismicity or mineral resources is the elimination of UCP Policy S 1.4 that required the creation of a “University Community Plan Grading and Geotechnical Investigation Standards Manual”.

### 2. Relevant Changed Conditions

There have been no changes in regulatory or cumulative conditions that have occurred since publication of the DEIR that affect assessment of geology, soils, seismicity or mineral resources impacts within the UCP area.

## **C. Evaluation**

**Impact 4.6-1:** Development of the proposed UCP could result in exposure of people and structures to seismic hazards. This is considered a **less than significant impact**.

Since exposure of people and structures to seismic hazards relates to the number of people to be residents and employees in the UCP Area and to the underlying geology and seismicity of the region, and since neither of these factors has changed since the publication of the DEIR, no elements of the analysis or conclusions related to Impact 4.6-1 have changed. The changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR and have not affected the conclusions relating to the magnitude or significance of this impact. This impact is identified as less than significant, however the DEIR recognizes that UCP policies S 1.1 and 1.2 would act to further reduce the potential exposure of people and structures to seismic hazards. These policies have not changed since publication of the DEIR. Thus, Impact 4.6-1 is correct under current conditions

**Impact 4.6-2:** Development of the proposed UCP could result in increased soil erosion during construction or occupancy. This is considered a **less than significant impact** with mitigation included in the UCP.

Soil erosion is caused by ground disturbing activities, and because the size and location of the UCP has not changed, the magnitude of Impact 4.6-2 would be the same as that described in the DEIR. The DEIR identified this impact as less than significant primarily because of existing regulations in Merced County Building Ordinance No. 1539. The DEIR also recognized that UCP Policy S 1.4 would further reduce the magnitude of this less-than-significant impact by requiring a common grading plan for all development in the UCP. Since publication of the DEIR, the County has proposed eliminating Policy S 1.4, which would eliminate the requirement for a common UCP grading plan. Notwithstanding the elimination of this policy, the impact would remain less-than-significant, and there would be no requirement for additional mitigation to offset the effect or to replace Policy S 1.4.

**Impact 4.6-3:** Development of the proposed UCP could result in exposure of people and structures to hazards associated with unstable soils. This is considered a **less than significant impact** with mitigation included in the UCP.

Exposure of people and structures to hazards from unstable soils, as described in Impact 4.6-3, are a factor of the type and density of development in the UCP and the soil characteristics underlying the UCP area. None of these factors has changed; as such, the nature, magnitude and significance of Impact 4.6-3 are unchanged from that described in the DEIR. The DEIR identified this as a less-than-significant impact before any UCP policies or mitigation measures.

The DEIR did acknowledge that UCP policies S 1.1 through 1.4 would further reduce the magnitude of this already less-than-significant effect. While Policy S 1.4 has been eliminated, Policies 1.1 through 1.3 remain part of the UCP and would continue to reduce the magnitude of the exposure described in Impact 4.6-3. The elimination of Policy S 1.4 does not change the analysis, magnitude or significance of this impact or need for mitigation measures for Impact 4.6-3.

**Impact 4.6-4:** The proposed UCP, in combination with other development in Merced County, could result in exposure of people and structures to seismic hazards. This is considered a **less than significant impact** with mitigation included in the UCP.

As described for Impact 4.6-1, above, the underlying factors affecting impacts related to the exposure of people and structures to seismic hazards have not changed since the DEIR was published. The relatively minor addition of the Hunt Family Annexation to the cumulative conditions, as well as projects further afield such as the Riverside Motorsports Park, have not changed the magnitude or significance of the cumulative impact described under Impact 4.6-4. The elimination of Policy S 1.4 also does not change any conclusions since that policy is not necessary to mitigate a significant effect. Thus, the DEIR's analysis of Impact 4.6-4 remains correct under current conditions.

**Impact 4.6-5:** The proposed UCP, in combination with other development in Merced County, could cause soil erosion. This is considered a **less than significant impact** with mitigation included in the UCP.

As described for Impact 4.6-2, above, the underlying factors affecting impacts related to soil erosion have not changed since the DEIR was published. The relatively minor additions to the cumulative conditions have not changed the magnitude or significance of the cumulative impact described under Impact 4.6-5. The elimination of Policy S 1.4 also does not change any conclusions since that policy is not necessary to

mitigate a significant effect. Thus, the DEIR's analysis of Impact 4.6-5 remains correct under current conditions.

**Impact 4.6-6:** *The proposed UCP, in combination with other development in Merced County, could involve building construction on potentially unstable soils.* This is considered a **less than significant impact** with mitigation included in the UCP.

As described for Impact 4.6-3, above, the underlying factors affecting impacts related to the exposure of people and structures to hazards from unstable soils have not changed since the DEIR was published. The noted additions to the cumulative conditions have not changed the magnitude or significance of the cumulative impact described under Impact 4.6-6. The elimination of Policy S 1.4 also does not change any conclusions since that policy is not necessary to mitigate a significant effect. Thus, the DEIR's analysis of Impact 4.6-6 remains correct under current conditions.

## **4.7 HAZARDS AND HAZARDOUS MATERIALS**

### **4.7.1 Introduction**

The Hazards and Hazardous Materials section (4.7) of the DEIR described issues related to human health and the environment due to exposure to or generation of hazardous materials that could result from implementation of the proposed UCP. These issues include: the use of hazardous materials during construction and occupancy of the proposed University Community; the emission of hazardous materials or wastes within a one-quarter mile of a school; development of the proposed UCP on a site containing hazardous materials; wildland fires; and, safety hazards associated with a private airstrip and on-site canals.

### **4.7.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

The UCP contains Safety policies S 3.1, S 3.2, S 4.1 and S 4.2 to ensure the proper and safe management of hazardous materials that may exist on the project site or may be used within the developed UCP, Integrated Water Infrastructure policies IW 8.2 through IW 8.6, IW 8.10, IW 13.3, and IW 13.6 to address water-borne hazards, Airport Safety policy AS 1.1 to address the relationship to nearby private airstrips, Safety policies S 5.1 through S 5.3 to address wildland fire risk, and Land Use policies LU 9.8 and LU 9.9 to address canal safety.

The following two project-specific impacts were found to be less than significant without any mitigation: (4.7-2) safety hazard for people living and working within the University Community during construction and (4.7-6) health and safety of people living and working within the proposed UCP areas during US Merced campus operations. The remaining project-specific impacts were found to be less than significant following implementation of mitigation measures contained within the UCP itself and include: (4.7-1) health hazards to site workers, the public and the environment due to contaminated soil and groundwater; (4.7-3) safety hazards for people living and working with the University Community created by the use, storage and transportation of hazardous materials; (4.7-4) emission of hazardous materials within one-

quarter mile of an existing or proposed school; (4.7-5) health and safety hazards associated with the use of treated wastewater for irrigation; (4.7-7) safety hazards associated with the adjacent airstrip; (4.7-8) hazards associated with wildland fires; and (4.7-9) safety hazards associated with the Fairfield and Le Grand Canals.

Similarly, all impacts associated with cumulative buildout and cumulative 2015 buildout scenarios were found in the DEIR to be less than significant, including: (4.7-10) the increased volume and type of hazardous materials used, transported, stored, and disposed and (4.7-11) the increase in the potential for wildland fires to occur.

## **B Relevant Changes Since Publication of DEIR**

### I. Relevant Changes to the Project

No changes to the UCP since publication of the DEIR are relevant to issues surrounding hazards and hazardous materials, wildland fires, private airstrips or canals as they relate to human health and safety and the environment.

### 2. Relevant Changed Conditions

Since publication of the DEIR, there have been no changed conditions, including regulatory changes or changes to the cumulative context, that would affect the DEIR assessment of human health and safety and environmental impacts within the UCP area that relate to hazards and hazardous materials, wildland fires, private airstrips or canals.

## **C. Evaluation**

**Impact 4.7-1:** Implementation of the proposed UCP could create a health hazard to site workers, the public, and the environment due to exposure of contaminated soil and groundwater. This is considered a **less than significant impact** with mitigation included in the UCP.

Impacts associated with exposure to contaminated soil and groundwater are based on evaluation of the existing conditions of the project site and the proposed activities on the site. The changes that have occurred since publication of the DEIR have had no effect these factors, and thus the analysis (including assessment of the magnitude and significance) contained in the DEIR continues to be valid under current conditions. As is described in the DEIR, Impact 4.7-1 would be Potentially Significant before mitigation; UCP Policies S 3.1 and 3.2 (which require appropriate site investigation and, if necessary, remediation activities) would continue to mitigate this potential impact to a less-than-significant level.

**Impact 4.7-2:** Construction of the proposed University Community would involve the use, storage, and transportation of hazardous materials, which could be a safety hazard for people living and working within the University Community. This is considered a **less than significant impact** without any mitigation.

Construction of the University Community may result in the use, storage or transport hazardous materials; this assessment has not changed as a result of the changes to the UCP since the DEIR was published. In

addition, the regulatory environment affecting the use, storage and transport of hazardous materials has not changed in ways that would affect the analysis or conclusions contained in the DEIR. Thus, the changes that have occurred since publication of the DEIR have had no effect on the analysis of Impact 4.7-2 contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. Impact 4.7-2 remains less than significant before application of any mitigation under current conditions.

**Impact 4.7-3:** Implementation of the proposed UCP would involve the use, storage, and transportation of hazardous materials, which could be a safety hazard for people living and working within the University Community. This is considered a **less than significant impact** without any mitigation.

Future uses in the University Community that may use, store or transport hazardous materials have not changed as a result of the changes to the UCP since the DEIR was published. In addition, the regulatory environment affecting the use, storage and transport of hazardous materials has not changed in ways that would affect the analysis or conclusions contained in the DEIR. Thus, the changes that have occurred since publication of the DEIR have had no effect on the analysis of Impact 4.7-3 contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. Impact 4.7-3 remains less than significant before application of any mitigation under current conditions.

**Impact 4.7-4:** Uses within the proposed UCP could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. This is considered a **less than significant impact** without any mitigation.

As is stated above, the potential uses within the UCP have not changed, nor have the laws, statutes and regulations that address the management of hazardous materials in and around schools. The changes that have occurred since publication of the DEIR have had no effect on the analysis of Impact 4.7-4 contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. Impact 4.7-4 remains less than significant before application of any mitigation under current conditions.

**Impact 4.7-5:** The proposed UCP could use treated wastewater for irrigation, which could be a health and safety hazard. This is considered a **less than significant impact** with mitigation included in the UCP.

The potential use of treated wastewater for landscape irrigation within the UCP is identified as a potentially significant effect under Impact 4.7-5 in the DEIR. The conclusions about the magnitude and significance of this effect remain valid in current conditions because the proposed land uses, wastewater treatment methods, and regulatory controls have not materially changed since the publication of the DEIR. UCP Policies IW 4.6, 5.5, 5.6, 8.2, 8.3, 8.4, 8.10, 10.2, and 13.3 have not been materially revised since publication of the DEIR; thus, the DEIR's conclusion that these policies would serve to mitigate Impact 4.7-5 to a less-than-significant level remains valid under current conditions.

**Impact 4.7-6:** The health and safety of people living and working within the proposed UCP area could be affected by activities at the UC Merced campus involving radioactive materials, biohazardous materials, and laboratory animals. This is considered a **less than significant impact** without any mitigation.

The planned proximity between residents and employees in the UCP and uses on the UC Merced campus that would involve the handling of radioactive and biohazardous materials and laboratory animals have

not changed since the publication of the DEIR. Impact 4.7-6 was determined to be less than significant in the DEIR, and none of the changes that have occurred since publication of the DEIR have affected the analysis contained in the DEIR. Thus, the magnitude and significance of Impact 4.7-6 would be the same as those presented in the DEIR.

**Impact 4.7-7:** Implementation of the proposed UCP adjacent to a private airstrip could create a safety hazard for people residing or working in the UCP area. This is considered a **less than significant impact** without any mitigation.

No changes have occurred since publication of the DEIR that would affect the DEIR analysis of safety considerations in light of the proximity of the UCP to the private agricultural airstrip immediately east of the Fairfield Canal. Because none of the relevant factors have changed, the analysis contained in the DEIR remains valid under current conditions, and the conclusions about the magnitude and significance of Impact 4.7-7 remain identical to those presented in the DEIR.

**Impact 4.7-8:** Implementation of the proposed UCP could expose people and structures to wildland fires. This is considered a **less than significant impact** without any mitigation.

Wildland fire risks are created by the proximity of urban development to undeveloped wildlands; in the case of the UCP area, the undeveloped grasslands east of the Fairfield and Le Grand Canals could be exposed to increased risk of wildland fire due to the presence of urban uses within the UCP. In Impact 4.7-8 of the DEIR, this impact was determined to be less than significant. None of the changes that have occurred since publication of the DEIR affect the UCP in ways that would alter the DEIR's conclusion about the magnitude or significance of this impact. In addition, the policies noted in the DEIR to further reduce the magnitude of this impact have not been materially altered in ways that would adversely affect their role in limiting the risk of wildland fire in the vicinity of the UCP.

**Impact 4.7-9:** The presence of the Fairfield and Le Grand Canals could pose safety hazards for people residing within the University Community. This is considered a **less than significant impact** with mitigation included in the UCP.

The presence of an urban population in and around the unfenced Fairfield and Le Grand Canals could create a potentially significant impact, as presented in Impact 4.7-9 of the DEIR. Because the proposed uses and population of the UCP have not changed since the publication of the DEIR, the magnitude and significance of this impact would not change; it would remain potentially significant before any mitigation. The implementation of UCP Policies LU 9.8 and 9.9 would reduce these safety hazards by ensuring that fencing or similar safety features are incorporated into the UCP to the satisfaction of MID. The efficacy of these policies has not changed as a result of any changes in conditions or project parameters. Thus, the conclusions about the magnitude and significance of Impact 4.7-9 are unchanged from those described in the DEIR, and continue to be valid under current conditions.

**Impact 4.7-10:** The proposed UCP, in combination with other development in northeastern Merced County, would increase the volume and type of hazardous materials used, transported, stored, and disposed. This is considered a **less than significant impact** without any mitigation.

The changes to the cumulative context for Impact 4.7-10 have not resulted in changes that would affect the magnitude or significance of this impact. In particular, the addition of several unforeseen cumulative projects, such as the Hunt Family Annexation or the Riverside Motorsports Project, would not affect the analysis of increased risks associated with the use, transport or storage of hazardous materials.

**Impact 4.7-11:** *The proposed UCP, in combination with other development in northeastern Merced County, could increase the potential for wildland fires to occur.* This is considered a ***less than significant impact*** without any mitigation.

The presence of other dense projects in the vicinity of the urban/rangeland edge could exacerbate the cumulative wildland fire risk presented in the DEIR. In particular, the Lake Yosemite Estates project, northwest of Lake Yosemite, and the Riverside Motorsports Park project north of Castle Airport, about 5 miles west of the UCP area, are both in locations that increase wildland fire risks in the region. Nonetheless, the requirements that these projects comply with Public Resources Code 4291, along with the compliance with the Merced County Fire Code and compliance with the Merced County General Plan, Safety Element, Goal 5, Policies 1 through 6, would reduce the effects of all cumulative projects to a less-than-significant level. Thus, despite the presence of additional cumulative projects, the magnitude and significance of Impact 4.7-11 would be the same as that described in the DEIR. In addition, the presence of UCP Policies S 2.3 and 5.1 through 5.3 further reduce the contribution of the UCP to cumulative wildland fire risk.

## **4.8 HYDROLOGY AND WATER QUALITY**

As previously discussed in Chapter 2, new groundwater, hydrology and water quality data were compiled to update the hydrology and water quality section of the DEIR. These data included studies conducted under contract to the County, groundwater modeling conducted by CH2MHill, and additional information from the Merced Irrigation District and the California Department of Water Resources. Please refer to Chapter 2 in this report for a detailed discussion of the revisions made to Section 4.8 Hydrology and Water Quality.

## **4.9 LAND USE AND PLANNING**

### **4.9.1 Introduction**

The Land Use and Planning section (4.9) of the DEIR helped provide guidance for future land use decisions within the vicinity UCP area and evaluated the potential direct and cumulative impacts as a result of UCP development. Specifically, this section evaluated issues related to land use compatibility and consistency with the Merced County General Plan policies. In addition, as a response to comments on the NOP, this section of the DEIR also addressed the potential land use conflicts, compatibility, and appropriate buffers between urban agricultural lands as a result of the UCP development.

## **4.9.2 Evaluation of DEIR**

### **A. Summary of DEIR Conclusions**

The UCP address potential project level land use impacts related to the development of the proposed project. Potential impacts included: (4.9-1) establishment of land use designations incompatible with adjacent uses; (4.9-2) modification of the Specific Urban Development Plan (SUDP) causing inconsistency with the General Plan; (4.9-3) UCP inconsistency with LAFCO policies. Only Impact 4.9-1 could not be reduced to below a level of significance at buildout with implementation of mitigation and would remain significant and unavoidable.

No cumulative impacts were identified in the DEIR analysis.

### **B. Relevant Changes Since Publication of DEIR**

#### **1. Relevant Changes to the Project**

As described in Chapter 3, the County has made several changes to UCP diagrams and policies related to land use. In particular, the County has altered the development phasing policies (policies LU 2.4 through 2.7), removed the agricultural lands 1:1 mitigation requirement (policy A 3.1), and made several other more minor changes affecting land use (see Chapter 3).

In order to be consistent with the changes to UCP policies, DEIR Figures 2-3, 2-4, and 2-5 have been revised to accurately reflect revised UCP phasing strategies and sub-area boundaries. Overall levels of development within the UCP area have not changed since publication of the DEIR.

#### **2. Relevant Changed Conditions**

There have been several changes to the land uses in the project area since publication of the DEIR, including:

- ❑ Closure of the Merced Hills Golf Course;
- ❑ Initiation of construction of Phase 1 of UC Merced (on the site of the former golf course); and
- ❑ Approval of the Hunt Family Annexation (which annexed 182 acres of land into the City of Merced and expanded the Merced SUDP by 28 acres).

These and other changes further away from the UCP site generally involve transitions from agricultural to residential use, which will reduce potential land use compatibility issues (i.e., adjacent urban and agricultural lands) identified in the DEIR. Chapter 3 contains a detailed description of these changes.

### **C. Evaluation**

**Impact 4.9-1:** The proposed UCP would include land use designation that could result in the establishment of incompatible land uses adjacent to and within the University Community. This is considered a **less than significant impact** in 2015 and a **significant and unavoidable impact** at buildout, despite the implementation of UCP mitigation measures.

Existing and planned land uses around the UCP have not changed, with the exception of the Hunt Family Annexation which extended residential uses south of Yosemite Avenue as far east as Lake Road, further east than previously anticipated. The effect of this change in planned land use is to slightly reduce the amount of frontage along Yosemite Avenue where agricultural and urban uses would be contiguous. Nonetheless, the potential future conditions that would create the impact described in Impact 4.9-1 would continue to exist, essentially the same as described in the DEIR. Therefore, under current conditions an analysis of incompatible land uses would result in the magnitude of impact as disclosed in the DEIR; this impact would continue to be significant before mitigation under current conditions.

In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. Implementation of UCP Mitigation Measures A 2.2 through A 2.4, A 4.1, N 1.1, N 2.1 through N 2.4, N 2.7, AS 1.1, V 2.1 and V 2.2 would continue to be effective in reducing impacts in 2015 to a less than significant level. While the development of the Hunt Family Annexation to the southwest would reduce adjacent agricultural lands, the impacts of incompatible adjacent land uses at buildout would remain significant and unavoidable, the same as presented in the DEIR.

**Impact 4.9-2:** *The modification of the SUDP boundaries could be inconsistent with General Plan goals or policies.* This is considered a ***less than significant impact.***

The Merced County General Plan SUDP modification criteria relate to 10 factors: soils, parcel size, existing uses, compatibility with adjacent uses, provision of adequate public services, limitations presented by ground and surface water resources, public safety hazards, biological resources, availability of vacant lands, and consistency with existing plans and policies. Since factors related to these criteria have not changed since the publication of the DEIR, the analysis contained in the DEIR remains valid under current conditions. As is described under Impact 4.9-2 of the DEIR, the potential for inconsistency with the Merced General Plan policies related to modification of SUDP boundaries would be less than significant before application of any mitigation measures. The magnitude and significance of Impact 4.9-2 has not changed as a result of changed conditions since the publication of the DEIR.

**Impact 4.9-3:** *The proposed UCP could result in actions that might be inconsistent with Merced County LAFCO policies.* This is considered a ***less than significant impact.***

There are five major criteria within LAFCO policies that may be applied when considering boundary changes: effects on prime agricultural land, phasing, timing of conversion of prime farmlands, provision of public services and facilities, and social or economic communities of interest. The changes to the UCP have primarily affected the phasing of development in the UCP. The project's impact upon conversion of prime farmland continues remains as described in the DEIR because neither the project boundaries nor existing soil characteristics have changed since publication of the DEIR. The changes to the UCP phasing policies, in particular UCP policy LU 2.2 (subsequently revised and renumbered to LU 4.3) have replaced a strict north-south phasing strategy with a more flexible phasing strategy. The new strategy, which continues to require preparation of specific plans and phased development that results in "complete, cohesive and integrated districts and neighborhoods...provided that the UCP's intentions for urban form and development character are achieved," is also consistent with LAFCO policies. Because the changes to the UCP result in a plan that continues to reflect the goals of LAFCO policies for orderly

development, avoidance of premature conversion of farmland, and the provision of adequate levels of urban services and utilities, these changes have not affected the conclusions about consistency with LAFCO policies, and thus do not change the magnitude or significance of this impact.

## **4.10 NOISE**

### **4.10.1 Introduction**

The Noise section (4.10) of the DEIR described the existing noise sources and levels, noise sensitive land uses, and analyzed the anticipated noise impacts related to construction, operation, and associated project traffic. This section analyzed the effects of the proposed UCP in its relationship with the existing and future noise environment. Topics addressed in this section included new noise-generating land uses, siting of development relative to existing and future mobile and stationary noise sources, and construction-related noise effects. NOP comments received relating to UCP noise impacts expressed concern about increased noise levels in the UCP area.

### **4.10.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

Section 4.10 of the DEIR identified potential project-level and cumulative noise impacts related to the construction and operation of the proposed project. Potential project-level impacts addressed in the DEIR included: (4.10-1) exposure of future UCP residents to excessive noise according to County standards; (4.10-2) development of noise sensitive uses that could encroach on existing noise sources; (4.10-3) generation of ambient noise from increased vehicular traffic; (4.10-4) development of temporary ambient construction noise; and (4.10-5) generation of groundborne vibrations from construction. Both DEIR Impacts 4.10-3 and 4.10-4 could not be reduced to below a level of significance with implementation of mitigation and would remain significant and unavoidable.

Cumulative impacts included: (4.10-6) cumulative generation of ambient noise from increased vehicular traffic; (4.10-7) cumulative increases in non-traffic noise at land use within and near the UCP; (4.10-8) development of temporary ambient construction noise as a result of cumulative development. Both DEIR Impacts 4.10-6 and 4.10-8 could not be reduced to below a level of significance with implementation of mitigation at buildout and would remain significant and unavoidable.

#### **B. Relevant Changes Since Publication of DEIR**

##### **I. Relevant Changes to the Project**

Since publication of the DEIR, minor changes were made to UCP polices related to noise, as described in Chapter 3 of this document. Additionally, a new Mitigation Measure, N 2.6a, was incorporated subsequent to release of the DEIR. These changes are minor in nature and do not change the mitigative effect of these measures related to potential noise impacts of the UCP.

## 2. Relevant Changed Conditions

Other than ongoing construction activities at the UC Merced campus site, there have been no changes to the ambient noise environment in the project area since publication of the DEIR. The development of planned projects (as outlined in Chapter 3) and other projects within Merced County (particularly the Hunt Family Annexation immediately southwest of the UCP area) could slightly increase the potential for direct noise-related impacts by bringing residences closer to the proposed project area than previously considered.

### **C. Evaluation**

**Impact 4.10-1:** Sensitive receptors within the UCP area could be exposed to noise levels that exceed the County's noise standards. This is considered a *less than significant impact* with implementation of UCP mitigation measures.

As is described under Impact 4.10-1 in the DEIR, sensitive receptors within the UCP area (including residences and schools) could be exposed to noise in excess of the County standard of 65 Ldn. The noise levels to which sensitive uses could be exposed have not changed since the publication of the DEIR because the internal uses within the UCP have not changed and there has been no change in the transportation noise to be created within the UCP. As described in the DEIR, this impact would be significant before mitigation under current conditions. The mitigation measures identified in UCP Policies N 1.1, N 1.2, N 2.1, through N 2.5, and N 3.1 through N 3.3 would continue to be effective to reduce this impact to a less than significant level.

**Impact 4.10-2:** The proposed UCP includes development of noise sensitive uses that could encroach on existing noise sources, and therefore, be exposed to unacceptable noise levels. This is considered a *less than significant impact* with the implementation of UCP policies.

The presence of noise sources near the UCP area (such as Lake Yosemite and the adjacent private airstrip) has not materially changed since the publication of the DEIR; similarly noise sensitive uses within the UCP have not changed. Because these factors remain essentially the same as when the DEIR was published, the changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR, and have not affected the conclusions about the magnitude or significance of Impact 4.10-2. The mitigation measures identified in UCP Policies LU 2.13, LU 3.1, LU 3.3 through 3.5, and N 3.1 through N 3.3 would continue to be effective in reducing this impact to a less than significant level, the same as was described in the DEIR.

**Impact 4.10-3:** The proposed UCP would generate increased vehicular traffic on regional road networks, which would result in an increase in the ambient noise levels. This is considered a *significant and unavoidable impact*, despite the implementation of UCP Policies and additional mitigation measures.

The vehicular traffic generated by the UCP development has not changed since the publication of the DEIR; as such, there has been no material change in the analysis of vehicular traffic noise contained in the DEIR, and the conclusions about the magnitude and significance of this impact have not been affected. Implementation of the mitigation measures identified in the UCP Policies (N. 1.2, N 2.2 through 2.4, LU 5.16, LU 5.19, T 1.2, T 4.1, and T 4.3) and the DEIR (Mitigation Measures 4.10-3a and 4.10-3b)

would not reduce this impact to below a level of significance. Therefore, noise generated by vehicles traveling to and from the UCP would generate the same level of noise disclosed in the DEIR and Impact 4.10-3 would remain significant and unavoidable.

**Impact 4.10-4:** The construction of the proposed UCP would include activities that could result in substantial temporary or periodic increases in ambient noise levels. This is considered a **significant and unavoidable impact**.

There have been no changes to the UCP since publication of the DEIR that would affect the magnitude or significance of construction noise effects presented in the DEIR. Thus, the conclusions about the magnitude of Impact 4.10-4 and the determination that this impact would be significant, presented in the DEIR, remain valid under current conditions.

The key UCP policy intended to mitigate this impact, Policy N 2.6, has been modified since the publication of the DEIR. In particular, the County has eliminated the following from Policy N 2.6: “Schedule the noisiest construction operations to occur together to avoid continuing periods of the greatest annoyance, wherever possible.” Because this policy did not require action, but only encouraged it when possible, its implementation was not assumed as part of the consideration of how the impact would be mitigated. Conversely, the remaining elements of Policy N 2.6 require specific actions to limit construction noise; it is these requirements that have been assumed to have the mitigative effects required to reduce the magnitude of Impact 4.10-4. With that being said, implementation of the mitigation measures identified in UCP Policy N 2.6 and DEIR Mitigation Measure 4.10-4 would not reduce this impact to below a level of significance during construction. Therefore, the impact would remain significant and unavoidable; this conclusion remains valid under current conditions.

**Impact 4.10-5:** The construction of the proposed UCP would involve activities that could generate ground-borne vibration or ground-borne noise levels. This is considered a **significant and unavoidable impact**.

Because the nature of construction within the UCP would be identical to that evaluated in the DEIR, the changes that have occurred since publication of the DEIR have had no effect on the analysis of ground-borne vibration contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. Implementation of DEIR Mitigation Measure 4.10-5 would reduce the magnitude of the vibration generated by construction, but would not reduce this impact to below a level of significance during construction. Therefore under current conditions the impact would remain significant and unavoidable; the same as presented in the DEIR.

**Impact 4.10-6:** The proposed UCP, in combination with other development in the County, would generate increased vehicular traffic on regional road networks, which would result in an increase in the ambient noise levels. This is considered a **less than significant impact** in the year 2015, but a **significant and unavoidable impact** upon buildout.

The changes in the cumulative context that have occurred since publication of the DEIR, including the implementation of the Hunt Family Annexation would not materially affect projected noise levels presented in the DEIR. Development of the Hunt Family Annexation would marginally increase the volume of trips on the local street network. As is described below, under Transportation, the Hunt Family

Annexation would include a total of about 1,100 residential units, less than 10% of the units contained in the UCP and an even smaller percentage of the area wide traffic that would be responsible for vehicular noise in the region. Typically, noise experts use as a rule of thumb that vehicular traffic must double in order to result in a 3 decibel increase in noise, which is typically considered the magnitude of increase that is noticeable to the human ear. Because the additional cumulative development would not result in doubling of traffic volumes on roads analyzed in the DEIR, the cumulative vehicular noise analysis contained in the DEIR remains valid under current conditions. The DEIR identified Impact 4.10-6 as significant before mitigation.

The DEIR described that implementation of UCP Policies T 2.1, N 1.2, N 2.2 through N 2.4 and the DEIR Mitigation Measures 4.10-3a and 4.10-3b would not reduce this impact to below a level of significance; these measures would continue to be appropriate for implementation under current conditions. Therefore, the impact would remain significant and unavoidable in the year 2015 and upon buildout.

**Impact 4.10-7:** The development of the UCP would contribute to cumulative increases in non-traffic noise at land uses within and near the UCP. This is considered a **less than significant impact** with the implementation of UCP policies.

Other than the additional 28 acres of residential uses in the Hunt Family Annexation near the intersection of Yosemite Avenue and Lake Road, land uses in the vicinity of the UCP would remain as they are described in the DEIR. It is unlikely that the presence of a relatively small amount of additional residential development south of Yosemite Avenue would materially change the magnitude or significance of the noise impact described under Impact 4.10-7. As such, the conclusion that Impact 4.10-7 would be significant before mitigation would remain valid under current conditions.

The DEIR identified that UCP Policies N. 1.1, N 2.1 through N 2.6, and N 3.1 through N 3.3 would mitigate Impact 4.10-7 would be effective in reducing this impact to a less-than-significant level; this conclusion continues to be valid under current conditions.

**Impact 4.10-8:** The construction of the proposed UCP, in combination with other development in the County, could result in substantial temporary or periodic increases in ambient noise levels. This is considered a **significant and unavoidable impact**.

The approval of the Hunt Family Annexation adds an additional 28 acres of development that could be constructed simultaneously with portions of the UCP. This type of overlapping construction activity was described in Impact 4.10-8 and would not be materially increased due to changes that have occurred since publication of the DEIR. The analysis contained in the DEIR would remain accurate and valid under current conditions, and the conclusions about the magnitude and significance of this impact have not changed due to changed conditions since the publication of the DEIR. Under today's condition, implementation of the mitigation measures identified in UCP Policy N 2.6 and DEIR Mitigation Measure 4.10-4 would not reduce this impact to below a level of significance during construction. Therefore, the impact would remain significant and unavoidable, the same as described in the DEIR.

## **4.11 POPULATION AND HOUSING**

### **4.11.1 Introduction**

The Population and Housing section (4.11) of the DEIR provided an overview of the population and housing impacts resulting from the UCP development.

### **4.11.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

A less than significant number of homes and/or residents would be displaced as a result of the UCP. Therefore, no impacts associated with population and housing were identified in the previous analysis for the DEIR. Impacts associated with the growth inducing nature of the proposed project were analyzed in Chapter 6 Growth Inducement of the DEIR. While the development of the UCP would spur increased economic activity and result in more residents, the proposed project would actually accommodate growth anticipated by the development of the UC Merced campus. Therefore, the proposed project would result in a less than significant impact.

No cumulative impacts were identified in the DEIR.

#### **B. Relevant Changes Since Publication of DEIR**

##### **1. Relevant Changes to the Project**

No changes applicable to Population and Housing were made to UCP Planning Policies.

##### **2. Relevant Changed Conditions**

There have been no changes to population and housing in the project area since publication of the DEIR. The development of planned projects (as outlined in Chapter 2) and potentially 36 other tentative subdivision projects within Merced County would increase the number of homes developed but would not represent a displacement of residential units within the cumulative project area.

#### **C. Evaluation**

No impacts were identified in the DEIR. The changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR and have not affected the conclusions regarding no impacts. Therefore, there would be no change in the direct or cumulative impact analysis for population and housing.

## **4.12 PUBLIC SERVICES**

### **4.12.1 Introduction**

The Public Services section (4.12) of the DEIR provided an overview of existing public services available within the vicinity UCP area and evaluated the potential direct and cumulative impacts to the such services and operations as a result of UCP development. The services evaluated included: law enforcement, fire protection, schools, libraries, and hospitals. In particular, as a response to comments on the NOP, this section of the DEIR addressed concerns about school service and fire protection as a result of the UCP development.

### **4.12.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

Section 4.12 of the DEIR described potential environmental impacts regarding the following public services: law enforcement, fire protection, schools, libraries, and hospitals. The development of the UCP would result in a direct increase in population. The UCP has instituted policies that would provide sufficient services and facilities upon development of the proposed project. All project-specific public service impacts addressed in the DEIR were found to be less than significant following implementation of UCP Policy mitigation or with the implementation of additional mitigation proposed in the DEIR. Potential impacts addressed in the DEIR included: (4.12-1) increased demand for fire services; (4.12-2) cumulative increased demand for fire services; (4.12-3) increased need for fire services; (4.12-4) cumulative demand for fire services; (4.12-5) needed school facility expansion and construction, (4.12-6) cumulative demand for school facilities; (4.12-7) direct need for library facilities; (4.12-8) cumulative demand for library facilities; (4.12-9) need for expansion of hospital facilities; and (4.12-10) cumulative demand for hospital facilities. Only Impacts 4.12-7 and 4.12-8 would require implementation of mitigation beyond that proposed in the UCP to reduce the potential impact to less than significant levels.

#### **B. Relevant Changes Since Publication of DEIR**

##### **1. Relevant Changes to the Project**

UCP Policies PE 1.2 and PE 1.3 were revised subsequent to publication of the DEIR. These changes would be incorporated into the appropriate DEIR mitigation measures and incorporated into the revised impact analysis.

##### **2. Relevant Changed Conditions**

There have been no changes to the public services available in the project area since publication of the DEIR. The development of planned projects (as outlined in Chapter 2) and other projects within Merced County could reduce potential public service needs due to additional public service provisions included within each respective planning document. Such provisions include providing additional schools, parks, police protection, fire protection, and open space, and therefore, could reduce the potential impacts of demand for public services in the proposed project area.

## C. Evaluation

**Impact 4.12-1:** The proposed UCP would increase demand for Sheriff's Department services. This is considered a ***less than significant*** impact with the implementation of the UCP policies.

Because the location, population, and uses within the UCP have not materially changed since publication of the DEIR, the analysis of demand for Sheriff's Department services contained in the DEIR would remain valid under current conditions. The conclusions about the increased demand for Sheriff's Department services and the determination that Impact 4.12-1 would be significant before mitigation have not changed since publication of the DEIR.

In addition the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. Thus, with implementation of UCP policies PS 1.1 through 1.5, 2.1 and 2.2 Impact 4.12-1 would be reduced to a less-than-significant level.

**Impact 4.12-2:** Cumulative development within Merced County, in combination with the proposed UCP, would increase demand for Sheriff's Department services. This is considered a ***less than significant impact*** with the implementation of the UCP policies.

The marginal increases in cumulative demands on the Sheriff's Department services have had no material effect on the analysis contained in the DEIR, and thus have not affected the conclusions about the magnitude and significance of this impact. In addition, the UCP Policies identified in the DEIR would continue to be effective in reducing this impact to a less than significant level.

**Impact 4.12-3:** The proposed UCP would increase demand for fire protection services. This is considered a ***less than significant impact***.

Because the location, population, and uses within the UCP have not materially changed since publication of the DEIR, the analysis of demand for Merced County Fire Department services contained in the DEIR would remain valid under current conditions. The conclusions about the increased demand for Sheriff's Department services and the determination that Impact 4.12-3 would be significant before mitigation have not changed since publication of the DEIR. In addition the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. Therefore, under current conditions UCP Policies PS 3.1 through 3.5 identified in the DEIR would continue to be effective and maintain this impact at a less than significant level.

**Impact 4.12-4:** Cumulative development within Merced County, in combination with the proposed UCP, would increase demand for fire protection services. This is considered a ***less than significant impact***.

The marginal increases in cumulative demands on the Merced County Fire Department services have had no material effect on the analysis contained in the DEIR, and thus have not affected the conclusions about the magnitude and significance of this impact. In addition, the UCP Policies identified in the DEIR would continue to be effective in reducing this impact to a less than significant level.

**Impacts 4.12-5:** The proposed UCP would require the expansion of existing schools and construction of new elementary schools and middle schools to accommodate the additional school children generated by the proposed UCP. This is considered a **less than significant impact**.

The demand for new schools and the provision of sites and payment of school fees is unchanged since the publication of the DEIR. As is described in the DEIR, since development in the UCP would be required to pay school impact fees, payment of such fees is determined to be fully mitigated under the structure established by Proposition IA/SB 50 (Chapter 407, Statutes of 1998). Therefore, the conclusion that Impact 4.12-5 is considered less than significant, presented in the DEIR continues to be valid under current conditions.

In the DEIR, UCP policies PE 1.1 through 1.3 were identified as measures that would further reduce the magnitude of the effects on local public schools. These measures require developers to consult and coordinate with local school districts during the development of specific plans, especially related to the designation of future school sites. UCP Policies PE 1.2 and 1.3 have been modified since publication of the DEIR; these modified policies seek to improve the level of coordination between future development in the UCP and local school districts so as to better ensure the availability of quality educational facilities for future residents of the University Community. As described in the DEIR, UCP Policies 1.1 through 1.3, as revised, would serve to further reduce the effects of the UCP development on local public education and schools.

**Impact 4.12-6:** Cumulative development within Merced County, in combination with the proposed UCP, would increase demand for school services. This is considered a **less than significant impact**.

Because all cumulative development projects would be required to pay statutorily-required school impact fees, even the marginal increases in cumulative development described in Chapter 3 would not increase the magnitude or significance of Impact 4.12-6 described in the DEIR. Therefore, this impact would remain at a less than significant level under current conditions.

**Impact 4.12-7:** The proposed UCP would increase demand for additional library services. This is considered a **less than significant impact** with the implementation of the UCP policies and Mitigation Measure 4.12-7.

As described in the DEIR, the development of the UCP would have a significant impact on Merced County library services due to increased demand on a library system constrained by lack of resources. Because the population of the UCP has not materially changed, the changes to the UCP that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR, and have not affected the conclusions about the significance of this impact.

The DEIR identified that implementation of UCP Policies PLC 1.1, 1.2, 2.1 and 2.2, along with DEIR Mitigation Measure 4.12-7, would reduce this impact to a less-than-significant level; since these policies have not changed, the conclusion that Impact 4.12-7 would be reduced to a less-than-significant level would remain valid under current conditions.

**Impact 4.12-8:** Cumulative development within Merced County, in combination with the proposed UCP, would increase demand for libraries services. This is considered a **less than significant impact** with the implementation of the UCP policies and Mitigation Measure 4.12-7.

Cumulative demands on Merced County library services would be marginally increased over those described in the DEIR as a result of the Hunt Family Annexation. Impact 4.12-8 would remain significant, as is described in the DEIR. As is stated in the DEIR, implementation of UCP Policies PLC 1.1, 1.2, 2.1, and 2.2, along with implementation of Mitigation Measure 4.12-7 would serve to reduce the cumulative impact on library services to a less-than-significant level, even under current conditions.

**Impact 4.12-9:** The proposed UCP would require the expansion of existing hospitals and construction of new hospitals to accommodate the additional school children generated by the proposed UCP. This is considered a **less than significant impact**.

The changes to the UCP that have occurred since publication of the DEIR have had no effect on the analysis of impacts to the provision of hospital services contained in the DEIR, and have not affected the conclusions about the significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the UCP Policies PHS 1.1 through 1.3 in further reducing effects on local hospital services, presented in the DEIR. Therefore, the UCP Policies identified in the DEIR would continue identify hospital acreage within the project and further reduce less than significant impacts under current conditions.

**Impact 4.12-10:** Cumulative development within Merced County, in combination with the proposed UCP, would increase demand for hospitals. This is considered a **less than significant impact**.

The changes in cumulative conditions that have occurred since publication of the DEIR including the incorporation of additional developments have had no effect on the analysis of hospital services contained in the DEIR as the impacts of such projects are included in the 2025 Merced County projections. Because County population projections do not change simply due to changes in underlying land use capacity, such cumulative projects like the Hunt Family Annexation do not affect the conclusions about the magnitude or significance of Impact 4.12-10. Therefore, under current conditions this impact would remain at a less than significant level.

## 4.13 RECREATION

### 4.13.1 Introduction

The Recreation section (4.13) of the DEIR provided an overview of the recreational facilities within the UCP area, City of Merced, and throughout Merced County, and evaluated the potential increased demand for such facilities as a result of UCP development. The DEIR identified potential direct and cumulative recreation impacts related to the development of the proposed project. In addition, as a response to comments on the NOP, this section of the DEIR also addressed the anticipated increased demand on recreational services and the future closure of Merced Hills Golf Course. It should be noted that Merced Hills Golf Course was closed in July 2002 and is currently being redeveloped as Phase 1 of the UC Merced campus.

### **4.13.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

Section 4.13 identified potential project-level and cumulative recreation impacts related to the construction and development of the UCP Project. Potential project-level impacts included: (4.13-1) increased demand for community parks and recreation facilities, requiring new park construction; (4.13-2) increase in the use and physical deterioration of Lake Yosemite; and (4.13-3) elimination of the Merced Hill Golf Course. Only DEIR Impact 4.13-3 would not be reduced to below a level of significance with implementation of mitigation and would remain significant and unavoidable.

Potential cumulative impacts included: (4.13-4) increased demand for community parks and recreation facilities, requiring new park construction, associated with the UCP development as well other development in Merced County; (4.13-5) cumulative increase in usage of Lake Yosemite, causing physical deterioration; and (4.13-6) elimination of the Merced Hill Golf Course. Both DEIR Impact 4.13-5 and 4.13-6 would not be reduced to below a level of significance with implementation of mitigation proposed in the DEIR.

#### **B. Relevant Changes Since Publication of DEIR**

##### **1. Relevant Changes to the Project**

Changes were made to UCP policies related to recreation, as described above in Chapter 3. The changes that are reflected in Public Park (PP) policies are primarily relatively minor clarifications or refinements of policy language. These changes would be incorporated into the appropriate DEIR mitigation measures and incorporated into the revised impact analysis.

##### **2. Relevant Changed Conditions**

With the exception of the closure of the former Merced Hills Golf Course, there have been no changes to the recreational uses in the project area since publication of the DEIR. There have been no material changes to conditions affecting recreation in the region nor have there been significant increases in cumulative demand on recreational resources.

#### **C. Evaluation**

**Impact 4.13-1: *The proposed UCP could increase the demand for community parks and recreation facilities and require the construction of new parks.*** This is considered a ***less than significant impact***.

Since the residential population of the UCP would remain unchanged, and since the changes to the recreation-related policies of the UCP do not change the requirements for the provision of parks, the changes that have occurred since publication of the DEIR have had no effect on the analysis of increased demand for community parks and recreation facilities, and the conclusions about the magnitude and significance of this impact. Although the minimum amount of parkland or greenspace provided in the UCP area has been reduced from 250 acres to a minimum of 150 acres, because the 150 acres would

continue to meet the requirements for 5 acres of parkland for every 1,000 residents presented in UCP Policy PP 1.1, the impact would continue to be considered less than significant under current conditions.

In addition, the changes to UCP policies PP 1.1, 1.3 2.2, 2.3, 7.1, and 7.3, and ALY 2.2, 2.6 and 3.4, along with the deletion of UCP policies PP 2.1 and ALY 3.3 that have occurred since the publication of the DEIR have not affected the nature or effectiveness of the UCP in further reducing the magnitude of this impact, as presented in the DEIR.

**Impact 4.13.2:** The proposed UCP would increase the use of Lake Yosemite Regional Park and could result in the physical deterioration of the Park. This is considered a **less than significant impact** with the mitigation included in the UCP.

The changes that have occurred since publication of the DEIR have not affected the future UCP population that would place demands on Lake Yosemite Regional Park. As such, these changes have had no effect on the conclusions about the magnitude or significance of Impact 4.13-2; this impact was identified as significant before mitigation in the DEIR and remains significant before mitigation under current conditions.

The DEIR identified that UCP Policies PP 1.1, and ALY 2.3, 2.6 and 3.2 would reduce this impact to a less-than-significant level. Policy ALY 2.6 was revised subsequent to the release of the DEIR, however the revision simply reflects the role of UC Merced in planning for the future of Lake Yosemite Regional Park. The mitigation measures identified in UCP Policies PP 1.1, ALY 2.3, and revised ALY 2.6 and ALY 3.2 would continue to be effective in reducing this impact to a less than significant level under current conditions.

**Impact 4.13-3:** The proposed UCP would eliminate a portion of the Merced Hills Golf Course. This is considered a **significant and unavoidable impact**.

In July 2002, the Merced Hills Golf Course was transferred to the University of California and permanently closed in anticipation of the construction of the UC Merced campus; construction of Phase 1 of the campus is underway at this time. As a result of the closure of the golf course, UCP Policy ALY 3.3 (which called for the County to work with UC Merced to maintain use of the Merced Hills Golf Course for as long as feasible) has been eliminated subsequent to the completion of the DEIR.

Since the Merced Hills Golf Course no longer exists, having been eliminated when construction of UC Merced was initiated, Impact 4.13-3 is no longer relevant or meaningful. Since the golf course no longer exists, the UCP cannot be considered responsible for its elimination as a recreational resource. As such, Impact 4.13-3 should be eliminated.

**Impact 4.13-4:** The proposed UCP, in combination with other development in Merced County including UC Merced, contribute to demand for community parks and recreation facilities and require the construction of new community parks. This is considered a **less than significant impact**.

Since cumulative demand for parks and recreational facilities is a result of population growth in Merced County, changes in the level of cumulative development would exacerbate the magnitude of the impact. The cumulative demand for community parks would be increased due to the incorporation of projects

outside of the SUDP boundary, including a portion of the Hunt Family Annexation, which would incorporate more residents within the cumulative development area. As currently described, the UCP would provide a minimum of 150 acres of parkland upon buildout, which would exceed the anticipated 117 acres needed for both the UCP and the UC Merced Campus. While a Countywide shortfall in parkland would still occur relative to county standards, the proposed project's contribution to the overall park acreage would still be increase over existing levels with the incorporation of additional projects. The mitigation measures identified in UCP Policies PP 1.1, PP 1.2, PP 1.3, PP 2.1, and PP 2.2 would continue to be effective in reducing impacts to less than significant levels.

**Impact 4.13-5:** The proposed UCP, in combination with other developments in Merced County, including the UC Merced would increase the use of Lake Yosemite Regional Park and could result in the physical deterioration of the Park. This is considered a **significant and unavoidable impact**.

The changes to the project and cumulative conditions that have occurred since publication of the DEIR have had no effect on the conclusions about the significance of this impact. In addition, the changes that have occurred since the publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR.

**Impact 4.13-6:** The proposed UCP, in combination with the UC Merced campus, would eliminate a portion of the Merced Hills Golf Course. This is considered a **significant and unavoidable impact**.

As is described under Impact 4.13-3, above, the complete elimination of the former Merced Hills Golf Course by UC Merced in July 2002, after publication of the DEIR, has eliminated possibility that the UCP could contribute to the elimination of the golf course because it no longer exists to be affected by approval of the UCP.

## **4.14 TRANSPORTATION AND CIRCULATION**

### **4.14.1 Introduction**

The Transportation and Circulation section (4.14) described the existing status of the transportation system in the vicinity of the proposed UCP, and the potential affects resulting from the development of the UCP. The DEIR evaluated transportation facilities and services within and outside of the Merced County area related to the proposed project.

### **4.14.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

The DEIR described the existing transportation system around the proposed project site including a discussion of regional and local access and bicycle facilities. The DEIR included a description of future planned transportation improvements for the project area, as well as the area surrounding the project site that was included in the Transportation Study. Section 4.14 of the DEIR included traffic operations and analyses for signalized and unsignalized intersections in the area and an evaluation of potential project-level and cumulative transportation and circulation impacts. The UCP has instituted policies that would

provide adequate circulation upon development of the proposed project. Potential project-level impacts addressed in the DEIR included: (4.14-1) increased local and regional road congestion; (4.14-2) unacceptable intersection and street service levels; (4.14-3) increased demand on regional and local transit; (4.14-4) generation of regional bicycle and pedestrian travel routes linking the UCP and UC Merced to other parts of the county; (4.14-5) unacceptable emergency vehicle response times due to circulation constraints; and (4.14-6) generation of increased parking demand.

Cumulative impacts (4.14-7 and 4.14-8) included cumulative increases in local and regional road congestion. Both DEIR Impact 4.14-7 and 4.14-8 could not be reduced to below a level of significance with implementation of mitigation measures proposed in the DEIR.

## **B. Relevant Changes Since Publication of DEIR**

### I. Relevant Changes to the Project

Slight modifications were made to the Town Center and the circulation system. However all circulation changes were deemed minor and would not alter existing UCP Planning Policies.

The changes to the circulation system include modifying the configuration of the Campus Parkway extension to incorporate a roundabout at the intersection with Bellevue Road and to reflect County roadway standards. The Campus Parkway south of Yosemite Avenue would be designated as an “Expressway” and the portion between Yosemite Avenue and Bellevue Road, within the University Community planning area, would be designated as a “Major Arterial.”

The revisions to the circulation system, would not alter the significance of the impacts identified under Section 4.14 of the DEIR, or change the findings of the impact discussion. The roundabout at Bellevue Road would be designed consistent with the traffic projections included in the DEIR. The addition of the traffic circle would not affect the significance findings or mitigation measures included in the DEIR.

Changes to the UCP phasing policies, as presented elsewhere in this document, would not affect the transportation and circulation analysis contained in the DEIR. As is described above, the changes may affect the order of lands developed within the UCP, but not the overall amount or timing of development since the overall amount of development is determined by the land use densities designated within the UCP and the timing of development would be based on market conditions. Neither of these factors is changed as a result of the changes to the UCP phasing policies.

### 2. Relevant Changed Conditions

The County, through its transportation consultant, evaluated the effects of cumulative land use changes on the DEIR traffic impact findings. Since the UCP DEIR circulation in August 2001, two changes to the cumulative land use assumptions have been identified<sup>2</sup>:

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<sup>2</sup> Note: the MCAG model land use files reviewed are those available as of May 26, 2004; an updated land use database has been approved for incorporation into the revised MCAG model, but the land uses have not yet been made available by MCAG staff.

1. In MCAG Travel Demand Model Zone 323, located north of Yosemite Avenue between R Street and Snelling Highway (SR 59), 400 new single-family dwelling units are included in the 2025 land use file; the 2025 land use file used for the UCP DEIR traffic projections did not include this growth.
2. The Hunt Family Annexation, a 1,086 dwelling unit project located south of Yosemite Avenue between McKee Road and Lake Road, was approved in 2003, but was not included in the 2025 land use forecasts used for the UCP DEIR.

Traffic assignments for these two land use increments were compared to the full build-out, mitigated roadway capacities, to determine if any new significant impacts would result. For the mitigated capacities and build-out traffic volume assignments, the County used the mitigated build-out model runs that correspond to UCP DEIR Table 4.14-12, which presents the cumulative impact locations and their mitigated level of service. (For reference, UCP DEIR Figure 4.14-7 and Table 4.14-8 show and list the Future Plus Campus and Community Buildout Impact Locations, and Figure 4.14-3 shows the Future Plus Campus and Community Buildout Mitigation Locations. All are attached for convenience.) For the Hunt Family Annexation traffic assignment, the manual traffic assignment presented in the *Expanded Initial Study for the Hunt Family Annexation to the City of Merced*, January 14, 2003, (HFA EIS) was used. For the Zone 323 assignment, the above-referenced model run was used to assign the zone's traffic volume to the network.

Exhibit 1 shows the results of the comparison. At all but three locations, the additional traffic can be accommodated by the mitigated capacity. At one of the three locations, G Street between Yosemite Avenue and Bellevue Road, there is a large Hunt Family Annexation assignment to G Street, putting it over the 18,000 ADT LOS D capacity. This is the result of the HFA EIS' manual assignment of traffic described in the HFA EIS. However, it is reasonable to presume that most to all of this traffic would choose Gardner Avenue instead of G Street, because the future capacity of Gardner, at 36,000, is well over the projected volume. A model assignment would be expected to route the traffic according to available capacity. Thus, the County does not consider this section of G Street to be impacted by the additional traffic.

The other two locations where the future capacity is exceeded are G Street between Bear Creek Drive and West 16<sup>th</sup> Street, and between Childs Avenue and SR 99. These locations were found to be significant and unavoidable impacts in the UCP DEIR, due to the lack of programmed Tier 2 projects in the RTP that would restore the segments to acceptable operating conditions. Without the traffic from Zone 323 and the Hunt Family Annexation project, these segments are projected to be over-capacity by 5,642 vehicles per day, or 15 percent of total capacity, between Bear Creek Drive and 16<sup>th</sup> Street; and by 1,792 vehicles per day, which is also 15 percent of capacity for that segment, between Childs Avenue and SR 99.

The Zone 323 traffic adds a very small increment of traffic to these segments, 40 and 4 vehicles, respectively. These correspond to 0.1 percent of the capacity of the northern segment, and 0.03 percent of the capacity of the southern segment. For the Hunt Family Annexation traffic, only an estimate can be provided, because the HFA EIS did not specify the assignment out that far. A very conservative extension of the trip distribution provided indicates a maximum of 1,559 trips on the northern segment, and 156 trips on the southern segment. These increases correspond to 4 percent and 1 percent of the

future capacities, respectively. Since the locations are already found to be significant unavoidable impacts, these incremental volumes would not change the EIR impact finding.

Given the above findings, the County can state the following conclusions:

- The level of cumulative mitigation required would be no higher under the current cumulative land use assumptions than under those assumed in the UCP DEIR; and
- The UCP share of cumulative impacts under the current analysis would be less than its share of the impacts under the UCP DEIR analysis, so its individual mitigation responsibility, in terms of fair share cost contribution, would be no greater than that identified in the UCP DEIR.

### C. Evaluation

**Impact 4.14-1:** The proposed UCP would increase traffic congestion on local and regional roads outside of the UCP area. This is considered a *less than significant impact* with the implementation of UCP policies and additional mitigation measures.

Factors that affect traffic congestion include the size and uses in the UCP, the capacity of the existing and proposed road system, and the character of other cumulative development in the vicinity of the UCP. Since the publication of the DEIR, the size and uses in the UCP have not materially changed, and the capacity of existing and proposed road system would be the same as that assumed in the DEIR analysis even with the changes described above. There would, however, be several changes in the cumulative conditions compared to those cumulative conditions that were assumed in the DEIR. As the analysis above demonstrates those changes, primarily the addition of the Hunt Family Annexation project, as well as a smaller addition of traffic further west along Yosemite Avenue, near Highway 59, would not change mitigation measures necessary to be implemented, nor the post-mitigation level of impact. As such, the changes that have occurred since publication of the DEIR have not affected the nature, magnitude or significance of impacts, nor the effectiveness of the mitigation measures presented in the DEIR. Thus, assessment of Impact 4.14-1 from the DEIR remains valid under current conditions.

**Impact 4.14-2:** Project-related traffic could result in unacceptable levels of service at intersection and streets within the UCP area. This is considered a *less than significant impact* with the implementation of UCP policies.

For the very reasons explained above, under Impact 4.14-1, the changes that have occurred since publication of the DEIR have had no effect on the analysis contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. As such, the DEIR's analysis of Impact 4.14-2 remains valid under current conditions.

**Impact 4.14-3:** UCP-generated transit us would place additional demand on regional and local transit services, would depend on high levels of transit service connecting the Community with the UC Merced campus and major destinations within Merced County. This is considered a *less than significant impact* with the implementation of UCP policies.

The assessment of transit impacts contained in the DEIR is primarily determined based on the design of the UCP circulation system and transit policies of the UCP. Because neither of these major factors has materially changed in a manner that would adversely affect the ability to create an effective transit service to the University Community or UC Merced, the changes that have occurred since publication of the DEIR have had no material effect on the analysis contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. This impact was identified in the DEIR to be significant, and UCP policies T 3.2, and 5.1 through 5.6 were determined to be effective in reducing the impact to a less-than-significant level. Because Policies T 3.2 and 5.1 through 5.6 have not been materially altered (there have been very minor modifications to T 5.1 and 5.5), the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. This impact was determined to be less than significant and this determination remains valid under current conditions.

**Impact 4.14-4:** *The proposed UCP would generate regional bicycle and pedestrian travel on routes within the Community and linking the University Community to the UC Merced campus and many other parts of the County.* This is considered a **less than significant impact** with the implementation of UCP policies.

The assessment of bicycle and pedestrian impacts contained in the DEIR is primarily determined based on the design of the UCP circulation system and bicycle and pedestrian policies of the UCP. Because neither of these major factors has materially changed in a manner that would adversely affect the ability to create an useful network of bicycle paths and pedestrian paths and sidewalks in and around the University Community, the changes that have occurred since publication of the DEIR have had no material effect on the analysis contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. This impact was identified in the DEIR to be significant, and UCP policies T8.1 through 8.3 were determined to be effective in reducing the impact to a less-than-significant level. Because Policies T 8.1 through 8.3 have not been changed, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. This impact was determined to be less than significant and this determination remains valid under current conditions.

**Impact 4.14-5:** *The proposed UCP could experience unacceptable emergency vehicle response times because of traffic circulation constraints that might reduce speeds.* This is considered a **less than significant impact** with the implementation of UCP policies.

The analysis of emergency vehicular access and response times is based on an evaluation of the proposed circulation system within the UCP, and policies that address how the system should be constructed so as to achieve effective connectivity through the University Community. The changes that have occurred since publication of the DEIR, including minor redesignations of elements of the circulation system and refinement of several Transportation policies in the UCP, have had no effect on the analysis contained in the DEIR, and have not affected the conclusions about the significance of this impact. The DEIR identifies Impact 4.14-5 to be significant before mitigation, and states that implementation of UCP Policies T 1.1 through 1.4, 2.1, 2.2, 3.1, 3.2, 3.6, 7.1 through 7.5, and 8.1 would effectively mitigate the impact to a less-than-significant level. Because those policies have not been materially altered, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of

the mitigation measures presented in the DEIR. Thus, the conclusions about Impact 4.14-5, presented in the DEIR, remain valid under current conditions.

**Impact 4.14-6:** The proposed UCP would generate demand for new parking. This is considered a **less than significant impact** with the implementation of UCP policies.

Because of the broad level of analysis appropriate for a community plan, the evaluation of parking impacts of the UCP is based on an evaluation of the proposed uses within the UCP, and policies that address how parking should be provided and managed in the future University Community. The changes that have occurred since publication of the DEIR, including very minor refinement of several transit-related policies in the UCP (the availability of transit would affect parking demand), have had no effect on the analysis contained in the DEIR, and have not affected the conclusions about the significance of this impact. The DEIR identifies Impact 4.14-6 to be significant before mitigation, and states that implementation of UCP Policies T 1.2, 5.1 through 5.6, 6.4, 6.6, 6.7, and 7.4 would effectively mitigate the impact to a less-than-significant level. Because those policies have not been materially altered, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR. Thus, the conclusions about Impact 4.14-6, presented in the DEIR, remain valid under current conditions.

**Impact 4.14-7:** The proposed UCP, in combination with the UC Merced campus and other development in Merced County, would increase congestion on local and regional roads. This is considered a **less than significant impact** with the implementation of UCP policies and additional mitigation in the years 2015 and 2025. However at buildout the UCP and cumulative development would result in a **significant and unavoidable impact**.

As is described above, under Impact 4.14-1, factors that affect traffic congestion include the size and uses in the UCP, the capacity of the existing and proposed road system, and the character of other cumulative development in the vicinity of the UCP. Since the publication of the DEIR, the size and uses in the UCP have not materially changed, and the capacity of existing and proposed road system would be the same as that assumed in the DEIR analysis even with the changes described above. There would, however, be several changes in the cumulative conditions compared to those cumulative conditions that were assumed in the DEIR. As the analysis above demonstrates those changes, primarily the addition of the Hunt Family Annexation project, as well as a smaller addition of traffic further west along Yosemite Avenue, near Highway 59, would not change mitigation measures necessary to be implemented, nor the post-mitigation level of impact. As such, the changes that have occurred since publication of the DEIR have not affected the nature, magnitude or significance of impacts, nor the effectiveness of the mitigation measures presented in the DEIR.

The mitigation measures identified in the DEIR, including Mitigation Measures 4.14-7(a), 4.14-7(b), 4.14-7(c), and 4.14-7(d) have been reconsidered by the County's transportation experts and have been determined to continue to be appropriate to reduce the impacts to the maximum extent feasible. However, the impact would remain significant and unavoidable at buildout of the UCP and cumulative development. Thus, assessment of Impact 4.14-7 from the DEIR remains valid under current conditions.

**Impact 4.14-8:** The proposed UCP and the UC Merced campus, in combination with other development in Merced County, would increase congestion on local and regional roads. This is considered a **significant and unavoidable impact**.

For the reasons explained above, under Impact 4.14-7, the changes that have occurred since publication of the DEIR have had no effect on the cumulative traffic analysis contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR.

The mitigation measures identified in the DEIR, including Mitigation Measures 4.14-8(a) and 4.14-8(b) would continue to be implemented to reduce the impacts. However, the impact would remain significant and unavoidable at buildout. As such, Impact 4.14-8 as presented in the DEIR remains valid under current conditions.

## **4.15 UTILITIES**

### **4.15.1 Introduction**

The Utilities section (4.15) of the DEIR evaluated the water supply infrastructure, wastewater collection and treatment facilities, solid waste disposal facilities and energy (electricity and natural gas) needed to serve the proposed UCP. The anticipated demand for wastewater treatment was estimated, and the ability of potential service providers to meet project demand was evaluated. Solid waste generation was estimated, and the ability of the County of Merced to dispose of the solid waste generated by the UCP was evaluated. This section also described the existing supply of electricity and natural gas for the UCP area, and evaluated the ability of service providers to meet the anticipated demand of the UCP.

This section also addressed issues raised in comments on the Notice of Preparation. Concerns regarding the provision of electricity and natural gas for the proposed UCP were raised, as were issues regarding the necessity for expansion or upgrades of distribution, transmission and provision of electricity and natural gas.

### **4.15.2 Evaluation of DEIR**

#### **A. Summary of DEIR Conclusions**

Section 4.15 of the DEIR described potential environmental impacts regarding the following public utilities: water supply infrastructure, wastewater collection and treatment facilities, solid waste disposal facilities, and energy. The development of the UCP would result in a direct increase in population, resulting in an increased demand for the aforementioned public utilities. The UCP has instituted policies that would provide sufficient utility services and facilities upon development of the proposed project. All project-specific utilities impacts addressed in the DEIR were found to be less than significant following implementation of UCP Policy mitigation or with the implementation of additional mitigation measures proposed in the DEIR. Potential impacts addressed in the DEIR included: (4.12-1) increased demand requiring the construction of new and/or expanded water supply extraction, treatment and distribution

facilities; (4.12-2) potential interrupted water flow, affecting irrigation; (4.12-3) increased demand requiring the construction of new and/or expanded wastewater treatment facilities; (4.12-4) demand requiring construction of a new wastewater infrastructure; (4.12-5) generate biosolids that may exceed disposal site capacity or exceed federal standards, (4.12-6) cumulative demand for wastewater treatment facilities; (4.12-7) generation of solid waste; (4.12-8) cumulative generation of solid waste, exceeding Highway 59 landfill; (4.12-9) increase demand for electricity and gas; (4.12-10) require the extension of electrical and natural gas and transmission infrastructure; and (4.15-11) increase in cumulative demand for electricity and gas. No impacts would require implementation of mitigation beyond that proposed in the UCP to reduce potential impacts to less than significant levels.

## **B. Relevant Changes Since Publication of DEIR**

### I. Relevant Changes to the Project

As described in Chapter 3, several changes to UCP policies related to utilities were made subsequent to publication of the DEIR. The key changes in policy relate to water and wastewater utilities include revisions to policy IW 5.5, which changes requirement for use of recycled water to encouragement for the use of recycled water in recognition that recycled water may not be available to the University Community at all times, changes to policies IW 8.1 and 12.6 to clarify the standard of significance for groundwater drawdown (discussed more extensively in Chapter 2 of this document). Additionally, a new UCP Policy, IW 1.11, would prioritize development of onsite storage for treated wastewater to maximize the availability of recycled water to be used in the University Community. Other changes in policies related to utilities are primarily clarifications to the language of the policies, but do not change the effectiveness or intent of the policies. These changes would be incorporated into the appropriate DEIR mitigation measures and incorporated into the revised impact analysis.

### 2. Relevant Changed Conditions

There have been no other substantive changed conditions that would affect the analysis of utilities contained in the DEIR. The addition of several cumulative projects in the region, including the Hunt Family Annexation and the Riverside Motorsports Park, which were not known at the time of the DEIR, would increase demands on local and regional utility systems. Specifically, the Hunt Family Annexation project would provide an extension of sewer and water utility services to a location immediately southwest of the UCP site. In addition, since the publication of the DEIR, the City of Merced has extended water and sewer services to the UC Merced campus; however this infrastructure extension was anticipated at the time that the DEIR was published.

## **C. Evaluation**

**Impact 4.15-1:** The proposed UCP would require the construction of substantial new and or/expanded water supply extraction, treatment and distribution facilities to meet anticipated demand standards. This is considered a **less than significant impact** with implementation of the UCP policies.

Changes that would affect the analysis of water supply extraction, treatment and distribution facilities would include changes in the size of the University Community or other policy changes that would affect the nature, size or scale of the water supply system that is anticipated to serve the UCP. The changes that

have occurred since publication of the DEIR have had no effect on the analysis of water supply facilities contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. The DEIR concluded that the impact is significant before mitigation, but would be reduced to a less-than-significant level through the implementation of policies in the UCP, including policies IW 1.1, 1.3 through 1.7, 1.14, 2.1, 2.4, 2.5, 10.1, 11.1, 11.2, 11.4, 11.7, 11.8, and 13.1 through 13.4. There have been a number of minor clarifications to some of these policies, including IW 1.3, 2.4, 2.5, 13.1 and 1.34. None of the changes to these policies change their effectiveness at avoiding the potential significant effects described in the DEIR; as such, the UCP Policies identified in the DEIR would continue to be effective and reduce this impact to a less than significant level under current conditions.

**Impact 4.15-2:** The proposed UCP could interrupt the flow of water from the UCP area to off-site users, which could affect the ability of those areas to irrigate agricultural properties. This is considered a **less than significant impact** with the implementation of the UCP policies upon buildout, and in 2015.

The DEIR considered the potential for interruptions in water flow in the Fairfield and Le Grand Canals due to implementation of the UCP. The changes to the UCP that have occurred since publication of the DEIR have had no effect on the physical size or location of the UCP, and the changes to policies reflect minor refinements and would not affect the conclusions about the magnitude or significance of this impact. The changes to policies IW 4.5 and 12.2 that are presented in Chapter 3 have not affected the nature or effectiveness of the mitigation measures presented in the UCP. Therefore, the UCP Policies identified in the DEIR would continue to be effective and reduce this impact to a less than significant level in both 2015 and buildout under current conditions.

**Impact 4.15-3:** The proposed UCP would increase the demand for wastewater treatment and disposal, which could require the construction of new facilities and potentially require expansion of existing local municipal wastewater treatment facilities. This is considered a **less than significant** impact with the implementation of the UCP policies.

Impact 4.15-3 focuses on potential adverse effects on existing local municipal wastewater treatment facilities, especially those in Merced and Atwater that could potentially serve the UCP development. The changes that have occurred since publication of the DEIR have not materially changed the wastewater treatment and conveyance strategies outlined in the UCP. The primary change involves the creation of a new policy, IW 1.11 which establishes “as the highest priority the development of onsite storage for treated wastewater that reduces the need for connections to local community wastewater treatment systems and which maximize the availability of recycled water for appropriate uses in the University Community, where feasible and timely in consideration of technology, costs, funding, practicality, and permitting requirements and processes.” This new policy, while establishing a stated priority (system?), does (are there missing words here?) not eliminate other potential options, all of which were discussed in the DEIR (see pages 4.15-7 and 4.15-8). Nonetheless, by setting a priority to not connect to local municipal wastewater systems, the impacts described under Impact 4.15-3 are less likely to occur. With that said, the changes to the UCP that have occurred since publication of the DEIR have not materially changed the conclusions about the magnitude or significance of impacts presented in the DEIR. Impact 4.15-4 was identified as significant before mitigation. The DEIR identified that UCP policies IW 1.8, 1.10, 1.11, 8.5, 10.1, 11.5 through 11.9 and 13.4 would serve to mitigate any potential impacts related to the provision of wastewater infrastructure. Only minor changes have been made in any of these policies,

therefore, the UCP Policies identified in the DEIR would continue to be effective in combination with these updated projects and reduce this impact to a less than significant level.

**Impact 4.15-4:** The proposed UCP would require construction and installation of new wastewater infrastructure. This is considered a **less than significant impact** with the implementation of the UCP policies.

The changes that have occurred since publication of the DEIR have not materially changed the wastewater treatment and conveyance strategies outlined in the UCP. The primary change involves the creation of a new policy, IW 1.11 which establishes “as the highest priority the development of onsite storage for treated wastewater that reduces the need for connections to local community wastewater treatment systems and which maximize the availability of recycled water for appropriate uses in the University Community, where feasible and timely in consideration of technology, costs, funding, practicality, and permitting requirements and processes.” This new policy, while establishing a stated priority of the does not eliminate other potential options, all of which were discussed in the DEIR (see pages 4.15-7 and 4.15-8). As such, the changes to the UCP that have occurred since publication of the DEIR have not materially changed the conclusions about the magnitude or significance of impacts presented in the DEIR. Impact 4.15-5 was identified as significant before mitigation. The DEIR identified that UCP policies IW 1.8, 1.9, 1.11, 10.1, and 13.4 would serve to mitigate any potential impacts related to the provision of wastewater infrastructure. Only minor changes have been made in any of these policies, therefore, the UCP Policies identified in the DEIR would continue to be effective in combination with these updated projects and reduce this impact to a less than significant level.

**Impact 4.15-5:** The proposed UCP would generate biosolids, the disposal of which through land application may exceed the capacity of the current disposal site, and/or may exceed quality standards established by the federal or State treatment standards. This is considered a **less than significant impact** with the implementation of the UCP policies.

The generation of biosolids is primarily driven by the population and land uses within the UCP. Since the changes to the UCP that have occurred since publication of the DEIR have not substantially affected the size and character of uses in the UCP, those changes would not affect the analysis contained in the DEIR. The conclusions about the magnitude and significance of this impact would be the same as described in the DEIR. In the DEIR, Impact 4.15-5 was determined to be significant before mitigation, and would be mitigated to a less-than-significant level through implementation of UCP Policy IW 1.8. This policy is unchanged since publication of the DEIR, thus the DEIR’s conclusions about the effectiveness of the mitigation measures presented in the DEIR remain valid under current conditions.

**Impact 4.15-6:** Development of the UCP, in combination with the UC Merced campus and the other developments in the region would increase demand for wastewater treatment facilities. This is considered a **less than significant impact** on the City of Merced Waste Water Treatment Plant. However, further analysis that the City of Atwater Waste Water Treatment Plant would not have the capacity to handle the development, resulting in a **significant and unavoidable impact** to the City of Atwater’s Waste Water Treatment Plant despite the implementation of the UCP policies.

The changes that have occurred since publication of the DEIR would improve the UCP’s ability to provide water supply and wastewater services. As is stated above, new UCP Policy 1.11 clearly

establishes a priority that the UCP be self sufficient in terms of wastewater treatment. At the same time, the development of the Sewer and Water Utility Extension to Northeast Merced and the UC Merced Campus has extended wastewater conveyance facilities to UC Merced, adjacent to the UCP, makes the availability of wastewater treatment from the City of Merced more feasible than at the time that the DEIR was published. While the UCP could be served by the Atwater Wastewater Treatment Plant System, this is less likely than at the time that the DEIR was published. In addition, UC Merced has committed to being served by the City of Merced; as such, it is very unlikely that UC Merced would connect to the City of Atwater wastewater treatment system, as is one of the options considered in the DEIR. Other factors that would affect this impact evaluation include the approval of the Hunt Family Annexation that would increase demands on the City of Merced wastewater system and simultaneously would make the southwestern portion of the UCP contiguous with the City of Merced sewer facilities.

With all of these contextual changes, the DEIR impact analysis contained in Impact 4.15-6 that drew a conclusion that impacts to the City of Merced and that impacts to the City of Atwater system would be significant and unavoidable remain valid under current conditions.

**Impact 4.15-7:** *The proposed UCP would generate solid waste.* This is considered a *less than significant impact*.

The changes that have occurred since publication of the DEIR have had no effect on the analysis of Impact 4.15-7 contained in the DEIR, and have not affected the conclusions about the magnitude or significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the UCP policies that would serve as to further reduce the significance of this less-than-significant impact. Thus, the analysis and conclusions of the DEIR remain valid under current conditions.

**Impact 4.15-8:** *The proposed UCP, in combination with cumulative development, would increase the amount of solid waste generated, and could exceed the permitted capacity of the Highway 59 Landfill.* This is considered a *less than significant impact* with the implementation of UCP mitigation measures.

Additional cumulative projects, not considered in the DEIR, such as the Hunt Family Annexation and the Riverside Motorsports Park projects, would add to the waste stream to the Highway 59 landfill. Given the capacity of the landfill, these projects would not materially affect the analysis contained in the DEIR, and do not affect the conclusions about the magnitude or significance of this impact. In addition, the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of UCP Policies ISW 1.1, 1.3, and 2.1 through 2.7, which the DEIR determined would reduce Impact 4.15-8 to a less-than-significant level. These analyses and conclusions remain valid under current conditions.

**Impact 4.15-9:** *The proposed UCP would increase the demand for electricity and natural gas.* This is considered a *less than significant impact* with the implementation of the UCP policies.

The demand for energy from the UCP development that is assessed in Impact 4.15-9 would not be altered as a result of the changes to the UCP that have occurred since publication of the DEIR. These changes would have no effect on the analysis contained in the DEIR, and have not affected the conclusions about the magnitude and significance of this impact. Impact 4.15-9 is identified as significant before mitigation, and reduced to a less-than-significant level through implementation of UCP policies IE 1.2, 1.4 through

1.6, 2.1, 3.1 through 3.9, 4.1 through 4.7 and IW 6.1 through 6.5. Policies IE 3.1, 3.3, 3.5, 4.1, 4.2 and IW 6.3 have undergone relatively minor changes that do not affect their efficacy in reducing and managing energy demand from the University Community. Therefore, the UCP Policies identified in the DEIR would continue to be effective and reduce this impact to a less than significant level. These analyses and conclusions remain valid under current conditions.

**Impact 4.15-10:** The proposed UCP would require the extension of electrical and natural gas transmission and distribution infrastructure. This is considered a **less than significant impact** with the implementation of the UCP policies.

The UCP would involve the construction of on-site and off-site infrastructure for electrical and natural gas facilities. The extension of the Merced SUDP as a result of the Hunt Family Annexation project would allow an additional proximate connection to existing energy infrastructure. No other changes in the UCP would affect the analyses or conclusions regarding Impact 4.15-10. Under current conditions, with the incorporation of the new cumulative projects and the implementation UCP Policies identified in the previous DEIR, impacts could be reduced to a less than significant level.

**Impact 4.15-11:** The proposed UCP in combination with other development in the region served by PG&E and/or MID, would increase the demand for electricity and natural gas. This is considered a **less than significant impact** with the implementation of the UCP policies.

Several additional cumulative projects in the region would increase cumulative energy demand, including the proposed UCP. These changes that have occurred since publication of the DEIR have had no material effect on the analysis of cumulative energy demands contained in the DEIR, and have not affected the conclusions about the magnitude and significance of this impact. In addition the changes that have occurred since publication of the DEIR have not affected the nature or effectiveness of the mitigation measures presented in the DEIR (UCP policies IE 1.2, 1.4 through 1.6, 2.1, 3.1 through 3.9, 4.1 through 4.7, and IW 6.1 through 6.5). Under current conditions, the UCP Policies identified in the DEIR would continue to be effective and reduce this impact to a less than significant level.