

4.6 AGRICULTURAL RESOURCES

4.6.A Project Impacts on Agricultural Resources and Mitigation

This response addresses comments O32-1, I46-1, SA12-1, SA12-2, SA-12-3, SA12-10, SA12-14, SA13-2, SA13-4, SA13-5, SA13-6, SA13-12, and SA13-13, as well as other similar comments. Commenters question the significance criteria and methodology used to assess impacts to grazing land on the campus site and request that mitigation be provided for the impact. Other comments raise issues about impacts to agricultural land and the methods used to assess those impacts.

As aptly stated by the American Farmland Trust (AFT), the proposal for the UC Merced Campus is the culmination of a decade-long planning process. Although the Campus would provide enormous benefits to the region, the development of a new UC campus in any part of the Central Valley would present changes to agricultural resources. The University fully appreciates this concern as well as the concerns of others relative to sensitive biological resources, and has in the design and configuration of the Campus sought to locate it in an area that is, at best, marginally suitable for agriculture and that is on the outer margins of lands that contain sensitive vernal pools. AFT's endorsement of the campus site is noted.

As shown on the farmland map prepared by the California Department of Conservation, Division of Land Resource Protection, no part of the campus is designated by the state as prime farmland, unique farmland, or farmland of local importance. The map identifies the area as "grazing" land. This designation is given by the state to those lands that, based on their soil characteristics, cannot support crops, and are suitable only for grazing. As described in Section 4.6, Geology, Soils, and Seismicity of the Draft EIR, the soil types that are extant on the site include Redding, Corning, and Raynor soil series. These soil types are characterized by poorly sorted gravel, sand, and silt and clay, and are generally gravelly, acidic, and of low fertility. Hardpan within a few feet of the surface is common. Although the Raynor series includes soil units that, if irrigated, can qualify for prime farmland, these units do not occur within the Main Campus area. The subunit present on the site is Raynor Cobblely Clay (RbA) with 0 to 3 percent slope. According to the Merced County Soil Survey, this subunit is poor or very poor for the cultivation of crops and good only for nonirrigated pasture. Range is reported to be the best use of this soil type (Arkley 1962).

The Draft EIR utilizes the standards of significance listed in Appendix G of the CEQA Guidelines to evaluate impacts. The specific standard that is applied to evaluate impacts to agricultural resources is "Would the project convert prime farmland, unique farmland, or farmland of statewide importance to nonagricultural use?" According to this standard, conversion of grazing lands would constitute a less-than-significant impact. The Draft EIR therefore concludes that the removal of about 684 acres of grazing land would be a less-than-significant impact that does not require mitigation. The County-specific definitions which may differ from those used in this EIR do not apply to the University and do not affect the University's analysis or conclusion.

The Draft EIR does not use alternative methods to determine the value of grazing land and, as suggested in Appendix G to the CEQA Guidelines, accepts the Department of Conservation's designation as an appropriate measure. Although economic multipliers and the California Agricultural Land Evaluation and Site Assessment (LESA) model could be used to assess the

economic value of agricultural land affected by development, such an analysis would provide no additional insight with respect to environmental impacts beyond that provided by the Department's system for classifying farmlands. The CEQA checklist suggests, but does not require, the use of the LESA model. The University, nonetheless in response to the California Department of Food and Agriculture's (CDFA) suggestion, conducted a preliminary evaluation of the site using LESA. LESA is a multivariate mathematical method that uses six factors to evaluate the comparative value of agricultural land. The model generates a number between 1 and 100, which is then compared to certain scoring thresholds to determine the value of the land for agriculture. Half of the points awarded in the LESA model are determined by the Land Evaluation, which has two factors, land capability classification and the Storie Index, both of which are based on the soils at the site. The other half of the points are awarded based on the Site Assessment that includes the site's physical characteristics and the availability of water. According to the LESA methodology, a property cannot be considered significant if either the Land Evaluation or the Site Assessment subscore is less than 20 points. Based on the soil types that occur on the site, the Land Evaluation yields a score of 18 points. Therefore, it is unnecessary to complete the Site Assessment portion of the analysis. No matter what the latter subscore is, development of the project site would result in a less-than-significant impact.

Because the project will have a less-than-significant impact on agricultural resources, mitigation of the impact is not required. (Note that the limitations on effective mitigation for development of agricultural land are discussed in Section 4.6.B, below.)

As explained in Section 4.4.A in this Final EIR, managed grazing will continue in the Campus Land Reserve and Campus Natural Reserve. By virtue of their location along the eastern and northern perimeter of the Main Campus, the Land Reserve and the Natural Reserve would serve to prevent the development of lands adjacent to the campus, and would also serve as a buffer between the Campus and agricultural lands further north and east, avoiding indirect loss of farming capabilities from urban intrusion. Such a buffer is not necessary to the west, because of the presence of Lake Yosemite, nor to the south because of the proposed University Community. The CDFA agrees that no indirect nuisance effects would occur to farming operations from the development of the Campus. Also see Section 4.6.B regarding conservation easements.

The Department of Conservation (comment SA12-1) states that the Draft EIR's discussion should be expanded to cover other productive land beyond prime farmland. In fact, the Draft EIR did discuss impacts to farmland of statewide importance, unique farmland, and grazing land. CEQA Guidelines do not require a discussion of impacts to farmland of local importance, and no standards for farmland of local importance apply to the University. As explained in the Draft EIR (Section 4.2.3), the campus would not directly affect any prime or unique farmland or farmland of statewide importance. The impact on grazing land would be less than significant for the reasons discussed in the Draft EIR.

As discussed on page 4.2-6 and 4.2-7 of the Draft EIR, the University Community project, as an indirect consequence of the campus development would result in the conversion of approximately 1,419 acres of productive land, of which approximately 654 acres would be prime. Development of the Campus Parkway would result in the conversion of an additional approximately 170 to 179 acres of important farmland in Merced County. Farmland may also be converted indirectly because of growth associated with UC Merced; however, the EIR demonstrates that there is sufficient land for projected growth to occur within the City of Merced without development of Prime Farmland, unique farmland, or farmland of statewide importance.

4.6.B Cumulative Impacts and Mitigation

This response addresses comments I9-1, LA12-1, SA10-20, SA12-1, SA12-5, SA12-7, SA12-12, SA13-2, SA13-3, SA13-7, SA13-8, SA13-9, SA13-12, O17-1, O17-3, O21-7, O28-100, O32-4, O33-1, as well as other similar comments, which pertain to indirect and cumulative impacts on agricultural land and request that steps be taken to mitigate these impacts. The CDFA notes that the Draft EIR's evaluation of the long-term cumulative impacts is adequate.

The Draft EIR presents the cumulative impacts of the project in conjunction with the University Community and other regional development on agricultural resources. To conduct a reasonable analysis of cumulative impacts, the Draft EIR limited the cumulative context to Merced County. The University notes that Merced County is ranked fifth among California counties in terms of agricultural crop value, and as described in the Draft EIR and discussed further below, agrees that the proposed project would indirectly contribute to the significant cumulative loss of productive farmland. Urbanization of agricultural lands is an accelerating trend in the Central Valley and is resulting in the conversion of approximately 15,000 acres of Central Valley farmland each year (AFT 2001). The 1997 Census of Agriculture found that total farmland acreage in Merced County decreased by 10 percent between 1992 and 1997. Similar total overall trends are indicated by data gathered by the Department of Conservation Mapping and Monitoring Program from 1996 through 1998. Interestingly, in Merced County, prime farmland acreage increased by about 642 acres (although total acreage decreased), primarily due to the irrigation of agricultural lands of lesser importance, thereby allowing high value crops to be grown on them. This increase led to a revision in the designation of farmland of lesser importance to be upgraded to prime farmland.

To characterize cumulative impacts on agricultural resources, the Draft EIR considers impacts at four levels: direct impacts of the project, indirect impacts associated with the project, impacts due to growth induced by the project, and impacts of other regional development that could combine with project impacts to result in significant cumulative impacts.

As discussed in the Draft EIR, the development of the Campus would not directly convert prime farmland, unique farmland, or farmland of statewide importance and would, therefore, in itself not contribute directly to a cumulative impact on agricultural resources in Merced County and, therefore, the campus will not encroach on productive farmland. See Section 4.17.B in this Final EIR with respect to effects of developing the site of the Merced Hills Golf Course.

As explained in the Draft EIR, agricultural land would be converted by development of the University Community. The University Community at the proposed location is intended to accommodate the increases in population generated by the Campus. The proposed site of the community adjacent to the Campus is preferred for a number of reasons including principles of smart growth that aim to minimize vehicle trips between school, home, work, and conveniences, thereby reduce congestion on the streets, associated air emissions, noise impacts, and generally create a well-designed community (also see Section 4.4.D in this Final EIR). The Draft EIR notes that the effect of the University Community project on agricultural resources (which involves the removal of about 1,419 acres of prime and unique farmland and farmland of statewide importance) is a significant indirect effect associated with the proposed Campus.

The University Community has been designed to accommodate the amount of population increase that would result from the development and operation of the Campus (see Sections 3 and 6 of the Draft EIR). However, some further induced growth in the region could occur as a

result of University-related demand for housing and services in excess of the demand satisfied by campus housing and the adjacent community. That additional growth is estimated in the Draft EIR to involve about 1,800 persons and it would require the development of another 122 acres of land. The locations where this induced growth would occur cannot be predicted with any precision but would be expected to occur in and around Merced, Atwater, and other nearby communities. These communities contain parcels of developable lands including infill areas that are already served by infrastructure. Because developable lands in these communities involve various classes of farmlands, it would be appropriate to assume that this induced growth would result in the conversion of some agricultural lands including croplands. More than half the developable lands within the city of Merced are grazing lands, and to the extent growth occurs on those lands, the impact to agricultural land would be of a lesser magnitude. It would be speculative to attempt to analyze the specific locations where Campus-related induced growth outside of the UCP might occur or what specific types of land might be converted. For further discussion of growth issues, see Section 4.22.A in this Final EIR.

Separate from direct, indirect, and induced growth is the conversion of additional agricultural lands to nonagricultural uses as the population of Merced County grows independently of growth associated with the University. According to Merced County Association of Governments (MCAG) estimates of regional population growth, about 14 percent of the growth in the county through 2025 would be attributable to the Campus and about 86 percent of the growth would occur due to normal population increase and other factors. Although the cities and towns in Merced County have developed other estimates of the land requirements to serve their projected populations (for instance the City of Merced has planned for the development of 8,280 acres of land between 2000 and 2015 to serve its projected population increase of 60,400 persons), the Draft EIR estimates that countywide about 9,250 acres of land would be required to provide housing and other services to address this increase in population.

The Draft EIR concludes that the indirect and induced effects of the development of the UC Merced project on agricultural land would be significant. The indirect effect will include development of the University Community on agricultural land, and the induced effect will be development of agricultural land due to growth beyond the University Community induced by development of UC Merced. On a cumulative basis, the indirect and induced effects to agricultural land in themselves and in conjunction with other regional development would result in a significant cumulative impact on agricultural resources from the conversion of productive farmland.

Although the University has proposed a development plan for the Campus that attempts to strike a balance between impacts to productive agricultural lands and impacts to other environmental resources, some loss of agricultural land due to the development of the Campus in the Central Valley is inevitable. The Campus would not directly affect productive farmland and, therefore, mitigation for direct impacts of development of the campus on productive farmland is not an issue. Development of the University Community project, however, would result in the conversion of productive farmland; consequently it is for the County, as lead agency for that project, to determine whether feasible and appropriate mitigation for the loss of productive farmland is available. In this regard it should be noted that the use of agricultural conservation easements as mitigation for conversion of agricultural land (productive or nonproductive) has been viewed by some observers as unnecessary or inappropriate. Existing programs such as Williamson Act contracts, zoning requirements, and general plan policies at the local level

control the conversion of agricultural land. Some planning professionals suggest that use of the policies and designations of the local general plan to preserve areas suitable for productive agricultural use, compiled with other planning and zoning mechanisms, is the most appropriate means consistent with comprehensive long-term planning.

It should also be noted that both EIRs examined alternatives to the proposed project, including alternatives that minimize effects on productive agricultural land.

Some commenters also suggested that conservation easements be implemented to serve as impediments to growth within some specified radius of the Campus and the community. These easements for growth control are not considered necessary because the County has invested a significant amount of effort to develop a planned community adjacent to and integrated with the Campus, expressly to avoid unplanned and haphazard conversion of other lands in eastern Merced County that are valuable for both their agricultural resources and biological resources. This community would provide all of the housing and other urban amenities needed by the campus-related population; therefore, the effects of uncontrolled growth in other areas would be minimized. This strategy of planning for an area in which controlled growth can occur is the most effective way of confining such growth. In addition, the UCP EIR includes numerous policies to reduce the potential for growth-related conversion of adjacent lands that are within the County's jurisdiction to control.

4.6.C Compatibility With County General Plan Policies

This response addresses comments O19-7, O31-40, and O31-41, which refer to policies contained in the Merced County General Plan.

As a state agency, the University is not required to be consistent with local policy documents such as the County General Plan; however, it is University policy to seek consistency with local plans and policies, where feasible. As explained in the Draft EIR, the Campus would be located on land designated Specific Urban Development Plan. Through this designation, the County General Plan recognizes that the current low-intensity agricultural use of the site will eventually give way to developed uses. Through the LRDP and UCP, the University and County, respectively, are proceeding with planning for the orderly development of land. Moreover, since the Campus and University Community would be built in phases, agricultural operations would not be eliminated prematurely. As explained above in Section 4.6.A, the Draft EIR follows the CEQA Guidelines and evaluates impacts related to the conversion of prime farmland, unique farmland, and farmland of statewide importance.

4.6.D Issues Related to Indirect Effects of the University Community

This response addresses LA12-1, O32-2, O32-3, SA12-11, SA12-13, SA13-2, as well as other similar comments, which concern the indirect impacts of the development of the University Community and request consideration of alternatives for the University Community project that would locate the community on less productive land.

4.6.D.1 Indirect Loss Due to Urban Intrusion

Potential impacts associated with development adjacent to existing agricultural operations is addressed in Impact 4.2-2 on pages 4.2-22 of the UCP Draft EIR. As stated on page 4.2-23,

potential incompatibilities associated with noise, odors, and dust from agricultural activities would be intermittent, would occur at some distance away from the UCP area, and should be expected in any urban edge area. Implementation of the County's Right-to-Farm Ordinance would give every new homebuyer the opportunity to evaluate the personal significance of these potential minor nuisances. Furthermore, the Right-to-Farm Ordinance allows existing agricultural operations to continue unhindered so that farmers do not have to alter their operations in accordance with future residents desires. Therefore, agricultural production on adjacent properties would not be substantially affected.

4.6.D.2 *Community's Indirect Impact on Williamson Act Lands*

Several large parcels totaling approximately 2,640 acres are under Williamson Act contracts to the east of the University Community. Additional parcels also under these contracts are located south of Yosemite Avenue and along Bear Creek. To address the concern of conversion of agricultural lands and the early cancellation of existing Williamson Act contracts, the UCP Area Plan includes a growth boundary, incentives to encourage voluntary conservation easements, and other policies. The County has concluded that with the implementation of these policies, the University Community would have a less-than-significant impact on lands under Williamson Act contracts.

4.6.D.3 *Alternatives on Less Productive Lands*

The County considered a reasonable range of alternatives in the UCP EIR including the No Loss of Prime Farmland alternative favored by the AFT. Information on all alternatives will be provided to the County decision makers, including concerns expressed by agencies, organizations, and individuals, to assist in the decision-making process.

4.6.E *Miscellaneous*

East Merced Resource Conservation District (Comment LA12-6) asserts that the Campus and the UCP projects have not implemented a stakeholder involvement process that involves affected property owners in the development of a mitigation program. Because the Campus would not directly affect agricultural lands and ongoing operations in the project area, the University has not had any reason to institute a unique process specific to area property owners with the exception of the County as the owner of the park land, the VST as the owners of the majority of the Campus site, and the Myers as the owners of the Flying M Ranch, immediately adjacent to the campus site. The County has conducted numerous hearings and workshops throughout the development of the UCP. In addition, the County formed the Community Plan Advisory Committee (CPAC), which provided input into land use and policy development for the UCP. The CPAC was composed of members of the Merced County Board of Supervisors, Merced County Planning Commission, the University, VST, CST, City of Merced, County of Merced, MID, and representatives from the business, agricultural, and environmental communities. CPAC meetings were held 16 times up until August 2001. All meetings were open to the public, and notices and agendas were provided to any organization or individual who requested them. Public workshops on the UCP were held on March 24, 2001, June 9, 2001, and August 22, 2001. The County continues to work with the area property owners and residents in developing a plan that will be acceptable to the county residents.

Comments SA12-10, SA12-11, and SA12-12 request changes to the text of the Draft EIR. These changes are presented in Volume 2, Section 7 of this Final EIR.

Comment O31-34 asks for an analysis of effects associated with encroachment of agriculture (presumably cultivation) onto grazing lands. Although the campus will be constructed, in part, on land currently used for grazing, it will not cause encroachment of cultivation on to grazing land. The campus will not be increasing the use of chemical fertilizers in the area. Also see Section 4.8.C, which discusses indirect effects of campus development (including effects from fertilizer and pesticide use) on adjacent sensitive habitat.

Comment LA12-1 expresses concern that the campus and the University Community would, by virtue of urban development, degrade soil quality. The fact that the UCP project site contains high value soil units is disclosed in the setting section of the UCP Draft EIR. High soil quality is a principal reason for land being designated as prime farmland, unique farmland, and farmland of statewide importance. The degradation of soil quality was a factor that led to the conclusion that the community project would have significant unavoidable impacts related to agriculture.

Similarly, the LRDP Draft EIR disclosed the cumulative impact to agricultural land to be significant and unavoidable because of the indirect loss related to the community. It should be noted that soil quality on the campus site itself is poor.

Comment LA12-1 also concerns the effect of the projects on food security. In this context, the University notes that the question of food security related to “reliance on a multi-national export/import food system” is a matter of governmental policy that cannot be addressed by the project proponent. It is the responsibility of the federal and state government to ensure that the U.S. has an adequate food supply. As discussed in the Draft EIRs, the acreage of farmland that will be eliminated is relatively small in comparison with all farmland in Merced County, and even smaller with regard to the rest of farmland in the state and county. The UCP Draft EIR identified the impact to prime and important farmland to be significant and unavoidable and the LRDP Draft EIR identified the cumulative impact to be significant and unavoidable.

Comment O31-32 questions the effect of wildlife mandates and regulations on agricultural lands. This comment is outside of the scope of the proposed project.

References

- American Farmland Trust (AFT). 2001. Alternatives for Future Urban Growth in California’s Central Valley: The Bottom Line for Agriculture and Taxpayers.
<http://www.farmlandinfo.org/fic/ft/cv/cvintro.html>
- Arkley, R.J. 1962. Soil Survey of Merced Area, California. U.S. Department of Agriculture, Soil Conservation Service.