
MASTER RESPONSE 12: AGGREGATE RESOURCES

The County received comments regarding the potential for increased demand for aggregate resources that would result from construction of the UCP. The UCP EIR acknowledges that development within the University Community would result in the consumption or destruction of non-renewable resources, including asphalt, sand, and gravel (please see DEIR page 7-2 in Chapter 7, Other CEQA Considerations). However, the amount of aggregate resources that would be necessary for the site would be speculative because the design of buildings and roadways is unknown, as is the type of materials that could be used during the approximately 40-year buildout period.

As stated on page 4.6-1 of the DEIR, a majority of the UCP site contains alluvial and terrace deposits consisting of reworked sand, gravel, and cobble parent sediments or small, localized areas of sand and gravel. These resources could be one potential source for future aggregate needs. However, the amount of such material that might be suitable for use in construction will not be established until after grading operations in the UCP area are underway.

Based on the information available at this time, it is reasonable to assume that the UCP could require aggregate from off-site sources. As of 2002, there were 30 permitted and active mine sites operating in Merced County. Those consist of:¹

- 9 off-channel terrace operations producing rock, sand, and gravel;
- 1 high terrace producing gravel, clay;
- 1 high terrace producing diatomaceous earth;
- 13 aeolian dune sand excavations;
- 5 dredger tailing excavations producing rock, sand, and gravel; and
- 1 ephemeral stream sand excavation.

Any of these could supply some or all of the aggregate for the UCP. There also are likely out-of-county sources. Because of the long time frame for buildout of the UCP (40 years or more), the development in the UCP would be gradual. Moreover, the source for aggregate will be determined to a large extent on the cost and type of material needed, so it is likely that any off-site aggregate demand would be met by more than one source over the course of the Plan. Therefore, it would be speculative at this time to assume a particular source for the aggregate needs of the UCP. While some aggregate mining operations occur in or adjacent to streambeds, other mining operations are located on alluvial terraces or in open pit quarries. However, the technology for extracting aggregate could change over the extended buildout of the UCP, opening new sources for aggregate that would not be available using current technology. For these reasons, it would be speculative to quantify impacts associated with aggregate mining resulting from development of the proposed UCP.

1 Desmond Johnston, Planner, Merced County, personal communication, January 3, 2002.

Because it would be speculative to identify specific sources that could supply aggregate needed for development of the UCP, it is not reasonable nor practical to attempt to evaluate the specific environmental impacts of aggregate mining that might occur to meet the demand for aggregate in the UCP. For the same reasons, the specific environmental effects of supplying aggregate for cumulative development in the County also cannot be assessed. In general, however, effects associated with aggregate operations could include natural resources effects, such as impacts on wildlife, including special-status species, disruption of migration corridors, and negative effects on aquatic habitat and anadromous fish. Aggregate operations could also increase ambient noise levels, negatively affect air quality, water quality, and contribute to local automobile congestion. New or expanded aggregate mining operations are subject to the provisions of the Surface Mining and Reclamation Act (SMARA). SMARA is designed to minimize adverse environmental effects of mining, and requires compliance with CEQA as well as preparation of a reclamation plan satisfying the standards in the Act prior to issuance of mining permits. In-stream mining operations are subject to regulation by the State Department of Fish and Game and the U.S. Army Corps of Engineers. Mining operations subject to these agencies' jurisdiction must be designed to prevent significant adverse impacts on habitat and wildlife.