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Open-File Report Release

OFR 2000-03 *Mineral Land Classification of El Dorado County, California –
by Lawrence L. Busch, 9 plates, map scale 1:100,000, \$75.00 – Folded.*

Dr. James F. Davis, State Geologist, is pleased to announce the release of Department of Conservation, California Geological Survey (CGS) [formerly Division of Mines and Geology (DMG)] Open-File Report (OFR) 2000-03: MINERAL LAND CLASSIFICATION OF EL DORADO COUNTY, CALIFORNIA, by Lawrence L. Busch.

BACKGROUND

The California Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZs) according to the known or inferred mineral potential of that land. The process is based solely on geology without regard to existing land use or land ownership. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision-makers and considered before land-use decisions are made that could preclude mining.

This report updates and supersedes information from previously published mineral land classification reports describing the mineral resources of western El Dorado County. The earlier reports include Mineral Land Classification of the Auburn 15-Minute Quadrangle, El Dorado and Placer Counties, California (OFR 83-37); Mineral Land Classification of the Folsom 15-Minute Quadrangle, Sacramento, El Dorado, Placer, and Amador Counties, California (OFR 84-50); Mineral Land Classification of the Georgetown 15-Minute Quadrangle, El Dorado and Placer Counties, California (OFR 83-35); Mineral Land Classification of the Placerville 15-Minute Quadrangle, El Dorado and Amador Counties, California (OFR 83-29); and Mineral Land Classification of the Camino 15-Minute Quadrangle, El Dorado and Amador Counties, California (OFR 87-02); and Special Report 156, Mineral Land Classification: Portland Cement Concrete-Grade Aggregate in the Sacramento-Fairfield Production-Consumption Region, California.

Upon completion of the formal acceptance procedures, this report, OFR 2000-03, will be transmitted by the State Mining and Geology Board (SMGB) to city, county, and federal agencies that regulate land use within the scope of this report. Lead agencies are required to incorporate the mineral resources zones and aggregate resource areas delineated in this report into their general plans.

SUMMARY

This report includes information concerning the location, tonnage, and quality of concrete aggregate resources in El Dorado County and the projected demand for construction aggregate within the county for the next 50 years. Additionally, the mineral resource potential for other

construction materials (slate, decomposed granite, rhyolite specialty stone), industrial limestone, and gold deposits is also discussed.

In the year 2000, permitted mines were producing high-purity industrial-grade limestone (97+ percent CaCO₃), concrete-grade aggregate, base aggregate, slate, rhyolite specialty stone, placer gold, and lode gold. Concrete aggregate was being produced from five mines in the county. Total concrete aggregate reserves (resources permitted for mining) for the five permitted operations capable of producing concrete-grade aggregates is estimated to be 13 million tons. An additional 46 million tons of concrete-grade aggregate resources are identified in western El Dorado County.

Based on population projections and estimated consumption data, an estimated 68 million to 102 million tons of aggregate will be required to satisfy the projected demand for construction aggregate in El Dorado County through the year 2050. Comparison of the projected 50-year aggregate demand with the currently permitted aggregate reserves indicates that, currently permitted in-county aggregate reserves are sufficient to supply 100 percent of in-county demand for approximately 9 to 13 years. If in-county reserves supply 50 percent of in-county demand, the projected depletion of currently permitted reserves will occur between 2017 and 2024. In 2000, approximately 75 percent of the concrete aggregate consumed in El Dorado County was imported from producers outside the county. If unforeseen events occur, such as massive urban renewal or reconstruction in the wake of a disaster, existing reserves will be depleted sooner.

In this study, approximately 413 acres of El Dorado County, in ten Aggregate Resource Areas (ARAs), have been classified MRZ-2a or MRZ-2b for concrete aggregate. This represents less than 0.04 percent (1/2,500) of the land area of the county. The ten identified ARAs contain an estimated 59 million tons of concrete-grade aggregate reserves and resources in western El Dorado County. In addition to concrete-grade aggregate, parts of the county have been classified MRZ-2a, MRZ-2b, and MRZ-3a for construction materials, including slate, specialty stone, and MRZ-1, -2a, -2b, -3a, -3b, and MRZ-4 for lode gold deposits and MRZ-3a, and MRZ-3b for placer gold deposits. In El Dorado County, 850 acres are classified MRZ-2a and 22,923 acres are classified MRZ-2b for lode gold deposits.