



State Mining and Geology Board

Annual Report

2010-2011



Department of Conservation
Natural Resources Agency

December 2011



*Edmund G. Brown, Jr.
Governor
State of California*

*John Laird
Secretary
Natural Resources Agency*

*Mark Nechodom
Director
Department of Conservation*

Cover Photo: Historic hydraulic mining escarpment at the Blue Point Sand and Gravel Mine, Smartsville, Yuba County.

ANNUAL REPORT
of the
STATE MINING AND GEOLOGY BOARD

2010-2011

BOARD MEMBERS



ERIN GARNER
Chairman



BRIAN BACA
Vice Chair



JOHN LANE



KATHY LUND



ROBERT TEPEL



CHARLIE WYATT



FORMER BOARD MEMBERS

**Benjamin Licari
Barbara Lundburg**

BOARD STAFF



STEPHEN M. TESTA
Executive Officer



**State Mining and Geology Board
801 K Street, Suite 2015
Sacramento, California 95814**

ANNUAL REPORT of the STATE MINING AND GEOLOGY BOARD 2010-2011 OVERVIEW

The 2010-2011 *Annual Report of the State Mining and Geology Board* is prepared for both the State Legislature and the Governor, as is provided for in statute [ref. Public Resources Code (PRC) Sections 674 and 2717]. Reporting periods follow the State's fiscal year calendar from July 1st of one year to June 30th of the following year. This Report summarizes activities and actions set forth by the State Mining and Geology Board (SMGB) during the 2010-2011 reporting period, and also conclusions and recommendations where the SMGB believes improvements can be made for the future well-being of the State's people and wise use of its natural resources, and understanding of the State's geologic hazards.

The SMGB, in concert with the Department of Conservation (DOC), the California Geological Survey (CGS) and the Office of Mine Reclamation (OMR), and its stakeholders, has been fully engaged in implementing the legislative mandates of the Alquist-Priolo Earthquake Fault Zoning Act (A-P EFZ Act), the Seismic Hazards Mapping Act (SHMA), and the Surface Mining and Reclamation Act of 1975 (SMARA).

The A-P EFZ Act was signed into law following the destructive 1971 San Fernando earthquake. The intent of the A-P EFZ Act is to insure public safety by prohibiting the siting of most structures for human occupancy across the traces of active surface faults. During the 2010-2011 reporting period, no new or updated A-P EFZ maps were received for hearings to be scheduled by the SMGB to receive comment. In 2007, the SMGB established a Technical Advisory Committee (TAC) to review the A-P EFZ Act and the SMGB's regulations in light of the current state of engineering and geological science. The work of the TAC is near completion. CGS anticipates issuing new and revised A-P EFZ maps in the 3rd quarter of fiscal year 2011-2012.

The SHMA was enacted to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failures and hazards caused from earthquakes. SHMA programs and mandates closely resemble those of the A-P EFZ Act. During the 2010-2011 reporting period, no new or updated SHMA maps were received for hearings to be scheduled by the SMGB to receive comment. However, in 2009, the SMGB accepted the revised "*Guidelines for Evaluating and Mitigating Seismic Hazards in California*". These *Guidelines* have been published by CGS as Special Publication No. 117A (SP 117A). The *Guidelines* represent a target for the scope and content of geotechnical site investigations; however, the need for more specific advice on "how to" was requested by the City and County of Los Angeles, which resulted in publication of two important supplementary documents. One addresses procedures for field and laboratory analyses: "*Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction in California*". Both of these documents, published in 1999 and 2002, respectively, are now out-of-date and need to be brought into sync with the updated SP 117A guidelines, which provides an important opportunity to solicit input from northern California practitioners and to publish under State seal

a single set of documents having statewide applicability. CGS has taken the lead in facilitating the development of a technical committee to achieve this goal.

SMARA has been amended 28 times since its enactment in 1975, and SMARA related activities again occupied the majority of the SMGB's time and resources during the 2010-2011 reporting period. Local lead agencies (cities and counties with surface mines within their jurisdictions) have primary responsibility for implementing SMARA. Each of these lead agencies must have a surface mining ordinance certified by the SMGB as being in accordance with SMARA. There currently are 108 SMARA lead agencies in California. At the end of this reporting period the SMGB exercised full SMARA authority for 10 jurisdictions that possessed no SMARA mining ordinances. In addition, the SMGB served as a lead agency under SMARA for three counties, seven cities, and for 9 marine dredging operations within the jurisdiction of the San Francisco Bay Conservation and Development Commission (BCDC). The SMGB also considered assumption of SMARA lead agency authority for the County of Sierra and the City of Lake Elsinore. During the reporting period the SMGB commenced conducting SMARA inspections at surface mine sites within other lead agency jurisdictions where a potential financial conflict of interest exists between the mine owner/operator and the local lead agency. The SMGB also continued its evaluation of various aspects of SMARA including areas where SMARA could be streamlined and where the SMGB or DOC could assist SMARA lead agencies in their implementation of the mineral conservation and reclamation components of SMARA, idle mines status, annual mine fees, process for the placement on and removal of surface mine operation from the AB 3098 List, lead agency performance, among other areas of the SMARA program, in its consideration of the need for regulatory and legislative changes.

The SMGB is also responsible pursuant to SMARA for reviewing and accepting mineral resource lands classification reports prepared by CGS, and for designation of such lands of regional significance. Two classification petitions were reviewed, and subsequently accepted by the SMGB, during this reporting period: CGS's Special Report 218 on *Mineral Lands Classification of the Power House Aggregate Project Site, Butte County, California, for Construction Aggregate*, and *Mineral Land Classification for the Proposed Riddle Surface Mine Property, Stanislaus County, California*.

The SMGB accepted CGS Special Report 209 titled "*Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption Region, Los Angeles County*." This report updated information originally published in 1982 by the California Division of Mines and Geology (CDMG; now CGS) as Special Report 143, Part IV (SR 143, Part IV) – *Mineral Land Classification of the Greater Los Angeles Area, Part IV, Classification of Sand and Gravel Resources Areas, San Gabriel Valley Production-Consumption Region*. The reevaluation and update in Special Report 209 identified four additional aggregate resource areas totaling 281 acres and containing 311 million tons of aggregate resources have been identified during the updating of this P-C Region. The SMGB also reviews and re-certifies updated mining ordinances and recognizes Mineral Resources Management Plans (MRMP). No new mining ordinances were certified, or MRMPs were recognized, by the SMGB during this reporting period.

During the reporting period, the SMGB at the request of OMR held a hearing to designate a SMARA lead agency for the McLaughlin Mine located in the Counties of Lake, Napa and Yolo. One Order to Comply was appealed to the SMGB. In this case, the SMGB upheld the grounds for the Order to Comply issued by the Director of the DOC. No administrative penalties were issued by OMR to individual surface mine operators; thus, no administrative appeals were heard

by the SMGB. Two requests for consideration of an exemption from SMARA were considered by the SMGB: one for the California State University Channel Islands and the other referred to as the Ojai Oil Company Project, both located in Ventura County. Exemptions were granted for both sites.

The SMGB restates in its Observations and Recommendations section of this report where it believes the Legislature could address SMARA to increase efficiency and effectiveness in carrying out the stated intentions of the statute and regulations. The SMGB also strongly supports the need to provide a steady and reliable funding source that will allow continued mapping activities under the A-P EFZ Act and the SHMA, among other CGS programs.

Stephen M. Testa
Executive Officer

**STATE MINING AND GEOLOGY BOARD
ANNUAL REPORT FOR 2010 – 2011**

TABLE OF CONTENTS

OVERVIEW i

INTRODUCTION 2

 Organization and Responsibilities of the SMGB 2

 Surface Mining and Reclamation Act of 1975 3

 Alquist-Priolo Earthquake Fault Zoning Act 3

 Seismic Hazards Mapping Act 4

SMGB ACTIONS PURSUANT TO THE ALQUIST-PRIOLO
EARTHQUAKE FAULT ZONING ACT 5

SMGB ACTIONS PURSUANT TO THE SEISMIC HAZARDS MAPPING ACT 9

SURFACE MINING AND RECLAMATION ACT OF 1975 19

 Scope of SMARA Authority 19

 Changes to SMARA since 2000 21

MINERAL RESOURCES CONSERVATION 23

PROTECTION OF MINERAL LANDS 24

 Aggregate Availability Group 27

 California Mineral Resource Management Program 27

 Mining Ordinances 28

 Mineral Resource Management Policies 29

 Classification Petitions 31

 Classification 35

 Designation 43

ROLES OF OFFICE OF MINE RECLAMATION 49

 Annual Mine Reporting 50

STATE MINING AND GEOLOGY BOARD’S AUTHORITY UNDER SMARA 51

 SMARA Lead Agencies 52

 SMARA Lead Agency Designation 54

 Enforcement Actions 58

 SMARA Exemptions 59

RECLAMATION PLAN APPEAL 63

SMGB AS A SMARA LEAD AGENCY 65

SUMMARY OF SMARA REGULATIONS AND GUIDELINES	
ADOPTED BY THE SMGB	73
CALIFORNIA ABANDONED MINE LANDS PROGRAM.....	73
OTHER SMGB CONSIDERATIONS AND ACTIONS	79
OBSERVATIONS AND RECOMMENDATIONS.....	80
Alquist-Priolo Earthquake Fault Zoning Act	80
Seismic Hazards Mapping Act.....	80
Surface Mining and Reclamation Act.....	80
OTHER CGS PROGRAMS	83
Forest and Watershed Geology Program	83
Earthquake Engineering Program.....	84
Post-Fire Emergency Geologic Mapping Services	84

LIST OF TABLES

Table 1: Cities and Counties Affected by Earthquake Fault Zones as of August 16, 2007	7
Table 2: Summary of Public Hearings on Preliminary Earthquake Fault Zone Maps Held by SMGB since 2000.....	8
Table 3: Lead Agencies Affected by the Seismic Hazards Zone Maps.....	11
Table 4: Summary of Public Hearings on Preliminary Seismic Hazards Maps held by SMGB since 2000	12
Table 5: Lead Agencies Affected by the Surface Mining and Reclamation Act.....	20
Table 6: SMGB Certified Surface Mining and Reclamation Ordinances	29
Table 7: Summary of SMGB Recognized MRMP July 2000 – June 2011	30
Table 8: Mineral Lands Classification Petitions Received from July 2000 through June 2011	32
Table 9: Summary of Classification Reports Accepted by the SMGB since 2000.....	36
Table 10: Tabulated List of Candidate Sectors.....	46
Table 11: Summary of Number of Reporting Mines from 1990 through 2009.....	51
Table 12: Summary of SMARA Exemption Requests from July 2000 to June 2011	59
Table 13: SMGB SMARA Lead Agency Surface Mines.....	72
Table 14: Summary of Published Information Reports	79

LIST OF FIGURES

Figure 1. Earthquake Fault Zone Map for the Corona South Quadrangle Revised Official Map Effective May 1, 2003.....	6
Figure 2. Seismic Hazard Zones Map for the San Juan Capistrano Quadrangle released on December 21, 2001	14
Figure 3. Location of the March 11, 2011, Tohoku Earthquake and Tsunami M_w 9.0 subduction event: Origin time ~ 14:43 JST; Rupture length ~400 km; Displacement ~ 28m – 6m (Map provided by the United States Geological Survey).....	15
Figure 4. Tsunami Arrival Times and Surge Heights	16
Figure 5. Tsunami Inundation Map for Emergency Purposes	18
Figure 6. A summary of approved mine fees from year 2000 to 2010	22

Figure 7. California non-fuel mineral production for 2009	24
Figure 8. Location of the Power House Aggregate Project Site	34
Figure 9. View of proposed Power House Aggregate Project Site.	34
Figure 10. View of proposed Power House Aggregate Project Site.	35
Figure 11. San Gabriel Valley Production-Consumption (P-C) Region	39
Figure 12. MRZ-2 Areas within the San Gabriel Valley Production-Consumption Region.....	40
Figure 13a and 13b. Proposed Designated Mineral Lands within the San Gabriel Production-Consumption Region.	42
Figure 14a and 14b. Proposed Designated Mineral Lands within the Bakersfield Production-Consumption Region	45
Figure 15. Aerial image of the McLaughlin Mine and vicinity, Napa, Lake and Yolo Counties. ..	55
Figure 16. Former aggregate extraction pond within Yuba Goldfields near the community of Hallwood in Yuba County showing reclaimed shorelines.....	67
Figure 17. The Diamond Quarry located in El Dorado County	68
Figure 18. Atkinson Pit No. 1 located in the City of Compton. This former 50-feet in depth open pit clay mine is being reclaimed via backfilling to the adjacent street level for future open and industrial land use.....	69
Figure 19. View of the reclaimed open pit of the Big Gun Quarry within the City of Rocklin.....	70
Figure 20. Satellite image of San Francisco Bay and surrounding areas showing locations of San Francisco BCDC marine dredging operations (in red) under the jurisdiction of the SMGB	71
Figure 21. Location of abandoned mines potential, abandoned or remediated mine features in California.....	75
Figure 22. The interior of Hawver Cave, an old limestone mine in Placer County. Note the lake – and the graffiti.	77
Figure 23. Workers from DOC and other agencies collect trash in the cave	77

APPENDICES

A	Public Resources Code Sections 660-678	86
B	Memorandum of Understanding between the County of Alpine and SMGB	92
C	Aggregate Availability Group Charter	96

INTRODUCTION

ORGANIZATION AND RESPONSIBILITIES OF THE SMGB

The *State Mining and Geology Board* (SMGB) was established in 1885 as the *Board of Trustees*. Its purpose was to oversee the activities of the State Mineralogist and the Bureau of Mines (formerly the Division of Mines and Geology, and now the California Geological Survey (CGS)), and the State's geological survey, which were created by the Legislature five years earlier. The general policy for CGS is established by the SMGB. These responsibilities recognize the impacts that California's complex geology, large amounts of federally managed lands, high mineralization, and potential for geologic hazards have on the State's economy, land use, and public safety.

Today's SMGB is composed of nine members appointed by the Governor, and confirmed by the Senate, for four-year staggered terms. By statute, SMGB members must have specific professional backgrounds in geology, mining engineering, environmental protection, groundwater hydrology and rock chemistry, urban planning, landscape architecture, mineral resource conservation, and seismology, with one non-specialized member representing the general public. During this annual reporting period, the non-specialized public seat remained vacant, and the mineral resource conservation and landscape architecture seats became vacant as of January 2011.

To enable the SMGB to meet its responsibilities most effectively, it has established standing committees to gather information and formulate recommendations on a variety of topics. These committees include the Geohazards Committee, the Mineral and Geologic Resources Committee, the Policy and Legislation Committee, and the Surface Mining Standards Committee. The full SMGB, and these committees, meet in regularly scheduled sessions on a monthly basis.

The SMGB has one currently active advisory group which is the Alquist-Priolo Technical Advisory Committee (A-P TAC). This subcommittee reports to the SMGB through the Geohazards Committee, and is involved with considering current knowledge in engineering and the geological sciences, and their impact on the A-P EFZ Act. The subcommittee is composed of 16 professional members with various scientific, engineering, governmental, and business specialties. The subcommittee members are part time, and are not paid for their services. Since 2007 the A-P TAC has met on nine occasions, and currently is in the process of preparing their report and recommendations for the Geohazards Committee.

The SMGB is housed within the Department of Conservation (DOC), and is granted certain autonomous responsibilities and obligations under several statutes. The SMGB's general authority is granted under Public Resources Code (PRC) Sections 660-678 (Appendix A). Specifically, PRC Section 662(b) requires all SMGB members to "represent the general public interest". The SMGB serves as a regulatory, policy and appeals body representing the State's interests in geology, geologic and seismologic hazards, conservation of mineral resources and reclamation of lands following surface mining activities.

Pursuant to PRC Section 672, general policies for the CGS are determined by the SMGB. Pursuant to PRC Section 677, the SMGB also nominates, and the director appoints, the State Geologist, who shall either be registered in compliance with the Geologist and Geophysicist Act at least one year from the date of appointment, or the Board for Professional Engineers, Land

Surveyors, and Geologists may, upon the review of academic and professional experience, grant registration. The State Geologist possess general knowledge of mineral resources, structural geology, seismology, engineering geology, and related disciplines in science and engineering, and the reclamation of mined lands and waters. The State Geologist also advises the director regarding technical, scientific, and engineering issues, including the scientific quality of the CGS's products and activities.

SURFACE MINING AND RECLAMATION ACT OF 1975

Extraction of minerals in a responsible manner is essential to the continued economic well-being of the State and to the needs of society, and the thoughtful reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety.

Under SMARA, the SMGB is authorized and directed to represent the State's interests in the development, utilization, and conservation of the State's mineral resources, the reclamation of mined lands, and federal matters pertaining to surface mining within the State.

Principal populations served:

- 109 "Lead Agencies" (counties and cities), with authority over surface mining operations within their jurisdictions;
- Over 1,200 reporting surface mining operations within the State;
- Department of Conservation's Office of Mine Reclamation;
- Department of Conservation's California Geological Survey.

Pursuant to PRC Section 672, the SMGB also represents the state's interest in federal matters pertaining to mining, and shall determine, establish, and maintain an adequate surface mining and reclamation policy.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

Pursuant to PRC Section 672, the SMGB represents the state's interest in the development of geological information necessary to the understanding and utilization of the state's terrain, and seismological and geological information pertaining to earthquake and other geological hazards. Under the A-P EFZ Act, the SMGB is authorized and directed to represent the State's interests in establishing professional guidelines and standards for geological and geophysical investigations and reports produced by CGS, public sector agencies, and private practitioners. The SMGB is also authorized to develop specific criteria through regulations that shall be used by affected lead agencies in complying with the provisions of the A-P EFZ Act so as to protect the health, safety and welfare of the public.

The A-P EFZ Act (PRC, Chapter 7.5, Section 2621 through Section 2630) is intended to provide policies and criteria to assist cities, counties and State agencies in the exercise of their responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults as defined by the SMGB. Further, it is the intent of the A-P EFZ

Act to provide the citizens of the State with increased safety and to minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings, including historical buildings, against ground shaking.

Principal populations served:

- City, county and State agencies having jurisdictions over zoning ordinances, building codes, and general plan developments;
- Land developers and contractors;
- California Geological Survey;
- Professional geological, geophysical, and engineering consulting community.

SEISMIC HAZARDS MAPPING ACT

Under the SHMA, the SMGB is authorized to provide policy and guidance through regulations for a statewide seismic hazard mapping and technical advisory program to assist cities, counties, and State agencies in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction or other ground failure, landslides and other seismic hazards caused by earthquakes, including tsunami and seiche threats.

The SHMA (PRC Chapter 7.8, Section 2690 through Section 2699.6) establishes the authority to provide programs to identify and map seismic hazard zones in the State so that cities and counties can adequately prepare the safety element of their general plans, and to encourage land use management policies and regulations that reduce and mitigate those hazards so as to protect public health and safety.

Principal populations served:

- City, county and State agencies having jurisdictions over zoning ordinances, building codes, and general plan developments;
- Land developers and contractors;
- California Geological Survey;
- Professional geological, geophysical, and consulting community.

MISSION STATEMENT

“The mission of the State Mining and Geology Board is to represent the State’s interest in the development, utilization and conservation of mineral resources; reclamation of mined lands; development and dissemination of geologic and seismic hazard information; and to provide a forum for public redress.”

SMGB ACTIONS PURSUANT TO THE ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

The Alquist-Priolo Earthquake Fault Zoning Act (A-P EFZ Act - PRC Sections 2621 et seq.) provides for the mapping by CGS (formerly referred to as the Division of Mines and Geology, or DMG) of "Earthquake Fault Zones" along the surface traces of active faults in California. Mapping is done according to policies established by the SMGB. These Earthquake Fault Zones Maps are provided to local governments for their land-use planning and decision making.

The A-P EFZ Act was signed into law following the destructive 1971 M_w 6.6 San Fernando earthquake. This law initially was designated as the Alquist-Priolo Geologic Hazards Zones Act. In May 1975 it was re-named the Alquist-Priolo Special Studies Zones Act. In January 1994, the Act was given its current name. Information regarding the A-P EFZ Act and an index of the mapped Earthquake Fault Zones is available in CGS Special Publication No. 42 (Revised 1997, with supplements added in 1999; 2007 digital version; <ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sp/Sp42.pdf>).

The intent of the A-P EFZ Act is to insure public safety by safeguarding certain new construction from the hazard of surface fault rupture. To this effect, the A-P EFZ Act prohibits the construction of most structures for human occupancy, as defined, across the trace of an active fault. Lead agencies (cities and counties) affected by these Zones must regulate certain construction developments within the Zones. Lead agencies must not issue development permits for sites located within Earthquake Fault Zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

In California, there are about 150 named faults with Holocene displacement. This is a minimum number because it is based on the naming of fault zones, not individual faults. The amount of actual land surface covered by clearly mapped active fault zones is on the order of 0.0089 percent (or 1,381 square miles) of the total land surface of California; the actual area that is unbuildable is much less. These zones are typically 1,000 feet in width (0.189 mile), but in practice are usually greater, with an average width of 0.306 miles. The total linear miles of zoned active faults in California is about 4,500.

As of July 2006, 559 Official maps of Earthquake Fault Zones had been issued by CGS. Of these, 160 have been revised since their initial issue, and four maps have been withdrawn. Thirty-six counties and 103 cities are affected by the existing Earthquake Fault Zones (Table 1). Since July 1, 2000, 14 additional maps have been generated, with one map being revised (Table 2). No new maps were released during the 2009-2010 reporting period. A typical Earthquake Fault Zone Map, for the Corona South Quadrangle Revised Official Map Effective May 1, 2003, is shown in Figure 1.

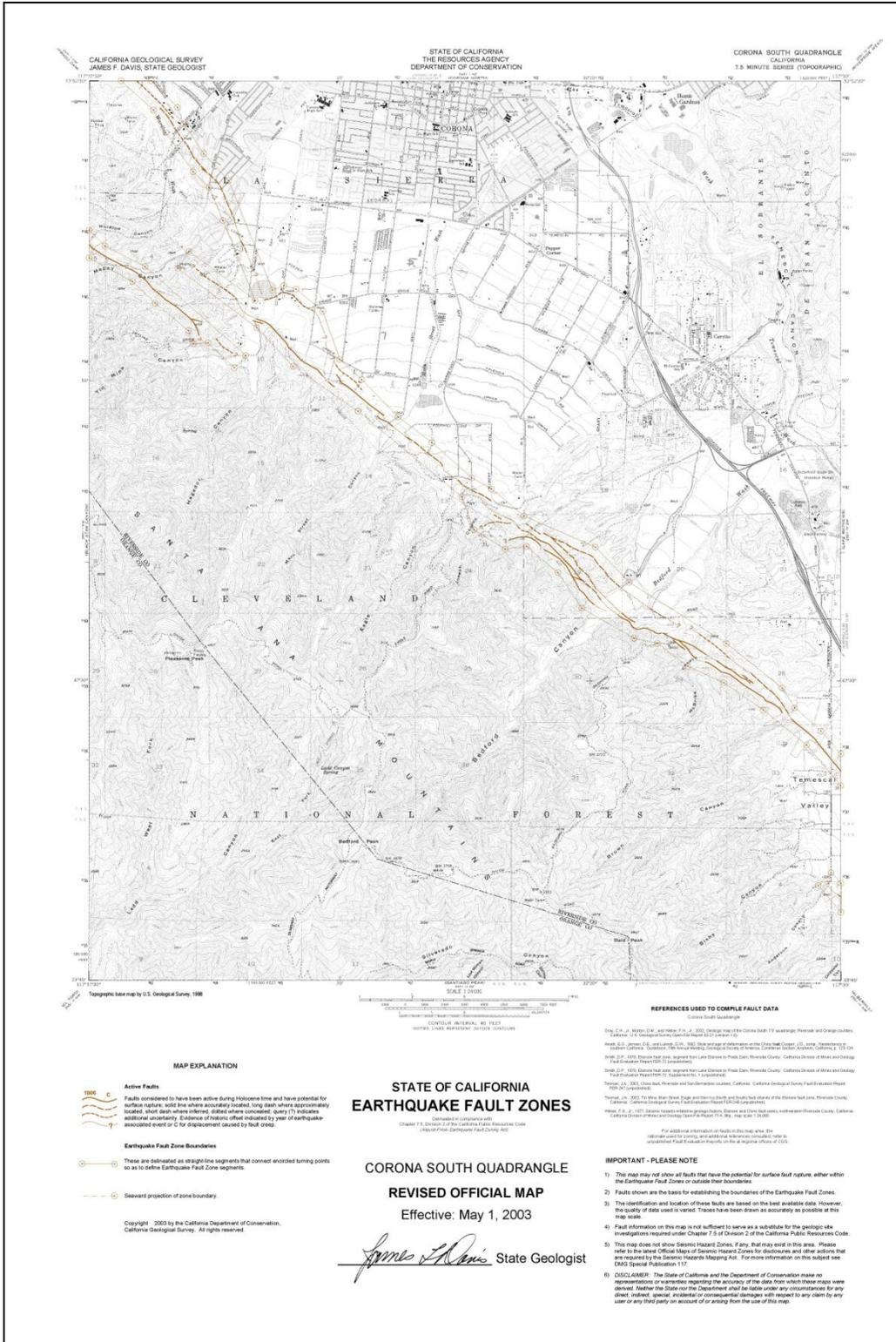


Figure 1. Earthquake Fault Zone Map for the Corona South Quadrangle Revised Official Map Effective May 1, 2003.

The A-P EFZ Act affects 104 Cities and 36 Counties as illustrated in Table 1.

Table 1 Cities and Counties Affected by Earthquake Fault Zones as of August 16, 2007			
Cities (103)			Counties (36)
American Canyon	Hemet	San Bruno	Alameda
Arcadia	Highland	San Diego	Alpine
Arcata	Hollister	San Fernando	Butte
Arvin	Huntington Beach	San Jacinto	Contra Costa
Bakersfield	Indio	San Jose	Fresno
Banning	Inglewood	San Juan Bautista	Humboldt
Barstow	La Habra	San Leandro	Imperial
Beaumont	La Habra Heights	San Luis Obispo	Inyo
Benicia	Lake Elsinore	San Marino	Kern
Berkeley	Livermore	San Pablo	Lake
Bishop	Loma Linda	San Ramon	Lassen
Brea	Long Beach	Santa Clarita	Los Angeles
Calimesa	Los Angeles	Santa Rosa	Marin
Camarillo	Malibu	Seal Beach	Mendocino
Carson	Mammoth Lakes	Signal Hill	Merced
Cathedral City	Milpitas	Simi Valley	Modoc
Chino Hills	Monrovia	South Pasadena	Mono
Coachella	Moorpark	South San Francisco	Monterey
Colton	Moreno Valley	Temecula	Napa
Compton	Morgan Hill	Trinidad	Orange
Concord	Murrieta	Twentynine Palms	Riverside
Corona	Oakland	Union City	San Benito
Coronado	Pacifica	Upland	San Bernardino
Culver City	Palmdale	Ventura (San Buenaventura)	San Diego
Daly City	Palm Springs	Walnut Creek	San Luis Obispo
Danville	Palo Alto	Whittier	San Mateo
Desert Hot Springs	Pasadena	Willits	Santa Barbara
Dublin	Pleasanton	Windsor	Santa Clara
El Cerrito	Portola Valley	Woodside	Santa Cruz
Fairfield	Rancho Cucamonga	Yorba Linda	Shasta
Fontana	Redlands	Yucaipa	Siskiyou
Fortuna	Rialto	Yucca Valley	Solano
Fremont	Richmond		Sonoma
Gardena	Ridgecrest		Stanislaus
Glendale	Rosemead		Ventura
Hayward	San Bernardino		Yolo

Under the A-P EFZ Act, there is a 90-day review period upon the issuance of Preliminary Earthquake Fault Zone Maps by the State Geologist, and the SMGB conducts public hearings within the affected lead agencies to receive technical comments about the maps (Table 2). These comments are reviewed by the SMGB's Geohazards Committee, and then forwarded to the State Geologist for consideration for inclusion in the Official Earthquake Fault Zone Maps. The approval of a project by a city or county must be in accordance with the policies and criteria submitted to and approved by the SMGB.

Table 2 Summary of Public Hearings on Preliminary Earthquake Fault Zone Maps Held by SMGB since 2000			
Quadrangle	Affected Cities and Counties	Number of Preliminary Maps	SMGB Pubic Hearing Date
Corona North and Corona South Quadrangles (City of Corona), Deadman Lake NW, Deadman Lake SE, Deadman Lake SW, Hector, Hidalgo Mountain, Lavic Lake, Lavic Lake SE, Morgan's Well, Sleeping Beauty, Sunshine Peak, and Prado Dam Quadrangle (San Bernardino County), and Point Loma Quadrangle (San Diego County).	City of Corona, and San Bernardino and San Diego Counties.	14	January 16, 2003
Malibu Beach Quadrangle (Los Angeles County)	Los Angeles County	1	February 16, 2007

Overall, the A-P EFZ Program has been severely impacted by budgetary constraints for the past several years.

SMGB ACTIONS PURSUANT TO THE SEISMIC HAZARDS MAPPING ACT

The Seismic Hazards Mapping Act (SHMA) became effective on April 1, 1991, and created a statewide seismic hazards mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public's health and safety from the effects of strong ground shaking, liquefaction or other ground failure, landslides, and other seismic hazards caused by earthquakes. Specifically, the SHMA requires the delineation of seismic hazard zones by CGS, site-specific geotechnical investigations for development projects within zones, and the disclosure by sellers to prospective buyers of lands located in seismic hazard zones.

Under the SHMA the SMGB developed, in cooperation with the State Geologist, guidelines and priorities for mapping seismic hazard zones, policies and criteria for local and State agencies to implement the SHMA, and guidelines for evaluating seismic hazards and recommending mitigation measures. On March 13, 1997 the SMGB adopted the *Guidelines for Evaluating and Mitigating Seismic Hazards in California*. These *Guidelines* have been published by CGS as Special Publication No. 117 (SP 117). The *Guidelines* reflect the collective intellectual talents from many individuals engaged in a broad spectrum of professions including the geological sciences, engineering, business, insurance, local government planning, academia, State and federal government agencies. A Technical Advisory Committee for the establishment of Grading Standards was established by the Geohazards Committee in 2004. The purpose of this subcommittee was to prepare a special section on grading techniques and standards for incorporation into an updated and revised version of SP 117. The subcommittee work was completed in early 2006. An updated version of SP 117, titled "Special Publication No. 117A", that includes the work of the subcommittee, was completed and published in early 2009.

The SHMA requires site-specific assessment of seismic hazards for most buildings constructed for human occupancy within designated seismic hazard zones in California. The burden of proof is on the developer to demonstrate that the site can be developed safely. Special Publication 117, "*Guidelines for Evaluating and Mitigating Seismic Hazards in California*", was prepared to help establish standards for site investigations within Official Seismic Hazard Zones, and has proven instrumental in raising the standards of geotechnical practice for evaluating seismic hazards since its first publication in 1997. Post-earthquake investigations worldwide and attendant advancements in earthquake science and engineering resulted in the 2008 revision of the *Guidelines*.

The *Guidelines* represent a target for the scope and content of geotechnical site investigations; however, the need for more specific advice on "how to" was requested by the City and County of Los Angeles, which resulted in publication of two important supplementary documents. One addresses procedures for field and laboratory analyses: "*Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction in California*", and a second report of similar title addresses landslide hazards. These documents, published in 1999 and 2002, respectively, were the result of two ad hoc working groups organized through the southern California Chapter of the American Society of Civil Engineers, and published through the Southern California Earthquake Center. While adopted in southern California practice, they have also been used by a few communities in

northern California. No equivalent document has been prepared and vetted by the geotechnical profession in northern California, where practice differs somewhat.

At its July 10, 2010, regular business meeting, the SMGB agreed with CGS that these two documents are now out-of-date and need to be brought into sync with the updated SP 117A guidelines, which provides an important opportunity to solicit input from northern California practitioners and to publish under State seal a single set of documents having statewide applicability. CGS has taken the lead in facilitating the development of a technical committee to achieve this goal.

Ten counties and 96 cities are affected by Seismic Hazard Zone Maps (Table 3). Between July 2000 and July 2006, 74 Official Seismic Hazard Zone Maps were released. Additional Preliminary Maps covering new areas were released in 2008. These official and preliminary maps cover parts of Alameda, Los Angeles, Orange, San Bernardino, San Mateo, Santa Clara and Ventura counties. No new maps were released during the 2010-2011 reporting period.

Each map covers an area of approximately 60 square miles. Prior to the release of the Official maps, a Preliminary set of maps is released for public review. The SMGB's Geohazards Committee, or in some cases the whole SMGB, conducts public hearings within the affected local jurisdictions to receive technical comments on the maps. These comments are reviewed by the Committee and/or SMGB, and then forwarded to the State Geologist for consideration in preparing the final set of Official Maps. A typical Seismic Hazard Zones Map, for the San Juan Capistrano Quadrangle released on December 21, 2001, is shown in Figure 2.

Lead Agencies affected by the Seismic Hazards Zone Maps is presented in Table 3.

Table 3 Lead Agencies Affected By the Seismic Hazards Zone Maps			
Cities			Counties
Agoura Hills	Industry	Orange	Alameda
Anaheim	Inglewood	Palos Verdes Estates	Los Angeles
Arcadia	Irvine	Paramount	Orange
Artesia	Irwindale La	Pasadena	Riverside
Azusa	Canada-Flintridge	Pico Rivera	San Francisco
Baldwin Park	La Habra	Placentia	San Bernardino
Bell	La Habra Heights	Pomona	San Mateo
Bell Gardens	La Mirada	Rancho Palos Verdes	Santa Clara
Bellflower	La Palma	Redondo Beach	San Diego
Beverly Hills	La Puente	Rolling Hills	Ventura
Brea	La Verne	Rolling Hills Estates	
Buena Park	Laguna Beach	Rosemead	
Burbank	Laguna Hills	San Dimas	
Calabasas	Lakewood	San Fernando	
Carson	Lomita	San Francisco	
Cerritos	Long Beach	San Gabriel	
Claremont	Los Alamitos	San Marino	
Commerce	La Habra	Santa Ana	
Compton	La Habra Heights	Santa Clarita	
Corona	La Mirada	Santa Monica	
Costa Mesa	La Palma	Seal Beach	
Covina	La Puente	Sierra Madra	
Cudahy	La Verne	Signal Hill	
Culver City	Laguna Beach	Simi Valley	
Cypress	Laguna Hills	South El Monte	
Diamond Bar	Lakewood	South Gate	
Downey	Lomita	South Pasadena	
Duarte	Long Beach	Stanton	
El Monte	Los Alamitos	Temple City	
El Segundo	Los Angeles	Thousand Oaks	
Fountain Valley	Lynwood	Torrance	
Fullerton	Malibu	Tustin	
Garden Grove	Manhattan Beach	Vernon	
Gardena	Maywood	Villa Park	
Glendale	Mission Viejo	Walnut	
Glendora	Monrovia	West Covina	
Hawaiian Gardens	Montebello	West Hollywood	
Hermosa Beach	Monterey Park	Westlake Village	
Hidden Hills	Moorpark	Westminster	
Huntington Beach	Murrieta	Whittier	
Huntington Park	Newport Beach	Yorba Linda	
	Norwalk		

A summary of Public Hearings on Preliminary Seismic Hazards Maps held by SMGB since 2000 is presented in Table 4.

Table 4 Summary of Public Hearings on Preliminary Seismic Hazards Maps Held by SMGB since 2000			
Quadrangle	Affected Cities and Counties	Number of Preliminary Maps	SMGB Public Hearing Date
Oxnard (Ventura County), Malibu Beach (Los Angeles County), and San Juan Capistrano, and Dana Point Quadrangles (Orange County).	Los Angeles, Orange and Ventura Counties.	3	October 11, 2001
San Clemente Quadrangle (Orange County), Santa Paula Quadrangle (Ventura County), and Mountain View Quadrangle (Santa Clara County).	Orange, Santa Clara and Ventura Counties.	3	March 14, 2002
Fillmore, Ojai, Piru, Pitas Point, Saticoy, Oxnard Quadrangles (Ventura County), Val Verde Quadrangle (Los Angeles, and Ventura Counties), and Santiago Peak Quadrangle (Orange County).	Los Angeles, Orange and Ventura Counties.	8	November 14, 2002
Richmond, Oakland East, Oakland West, Briones Valley, Hunters Point, and San Leandro Quadrangles (Alameda County).	Alameda County.	6	November 14, 2002
Corona North and Corona South Quadrangles (City of Corona), Deadman Lake NW, Deadman Lake SE, Deadman Lake SW, Hector, Hidalgo Mountain, Lavic Lake, Lavic Lake SE, Morgan's Well, Sleeping Beauty, Sunshine Peak, and Prado Dam Quadrangle (San Bernardino County), and Point Loma Quadrangle (San Diego County).	City of Corona, San Bernardino and San Diego Counties.	14	January 16, 2003
High Vista, Condor Peak, Agua Dulce, and Lovejoy Buttes Quadrangles (Los Angeles County), Matilija Quadrangle (Ventura County).	Los Angeles and Ventura Counties.	5	January 16, 2003
Hayward, Mountain View, Newark, and Redwood Point Quadrangles (Alameda County), and the Ventura Quadrangle (Ventura County).	Alameda and Ventura Counties.	4	March 13, 2003
Alpine Buttes, Lancaster East, Lancaster West, Littlerock, and Ritter Ridge Quadrangles (Los Angeles County), and Santa Teresa Hills Quadrangle (Santa Clara County).	Los Angeles and Santa Clara Counties.	6	April 4, 2003
Acton and Pacifico Mountain Quadrangles (Los Angeles County).	Los Angeles County.	2	May 23, 2003
Lake Hughes, Little Buttes, Del Sur, Rosamond, Sleepy Valley, Palmdale, Juniper Hills, Valyermo Quadrangles (Los Angeles County), and Santa Paula Peak Quadrangle (Ventura County).	Los Angeles and Ventura Counties.	9	July 10, 2003
Milpitas and Niles Quadrangles (Alameda County), and Morgan Hill Quadrangle, (Santa Clara County).	Alameda and Santa Clara Counties.	3	June 10, 2004
Alpine Butte, Del Sur, Lancaster East, Lancaster West, Rosamond Quadrangles (Los Angeles County).	Los Angeles County.	5	September 9, 2004
Yorba Linda Quadrangle (Los Angeles, Orange, San Bernardino), Castle Rock Ridge Quadrangle (Santa Clara County), and Mindego Hill Quadrangle (Santa Clara and San Mateo Counties).	Los Angeles, San Mateo and Santa Clara Counties.	3	March 10, 2005

**Table 4 (Continued)
Summary of Public Hearings on Preliminary Seismic Hazards Maps
Held by SMGB since 2000**

Quadrangle	Affected Cities and Counties	Number of Preliminary Maps	SMGB Public Hearing Date
Mountain View and Palo Alto Quadrangles (Santa Clara, San Mateo, and Alameda Counties), and Mount Sizer Quadrangle (Santa Clara County).	Alameda, San Mateo and Santa Clara Counties.	3	July 13, 2006
Murrieta Quadrangle (Riverside County)	Riverside County	1	June 12, 2007
Dublin Quadrangle (Alameda County)	Alameda County	1	May 10, 2008
Livermore Quadrangle (Alameda County)	Alameda County	1	May 10, 2008

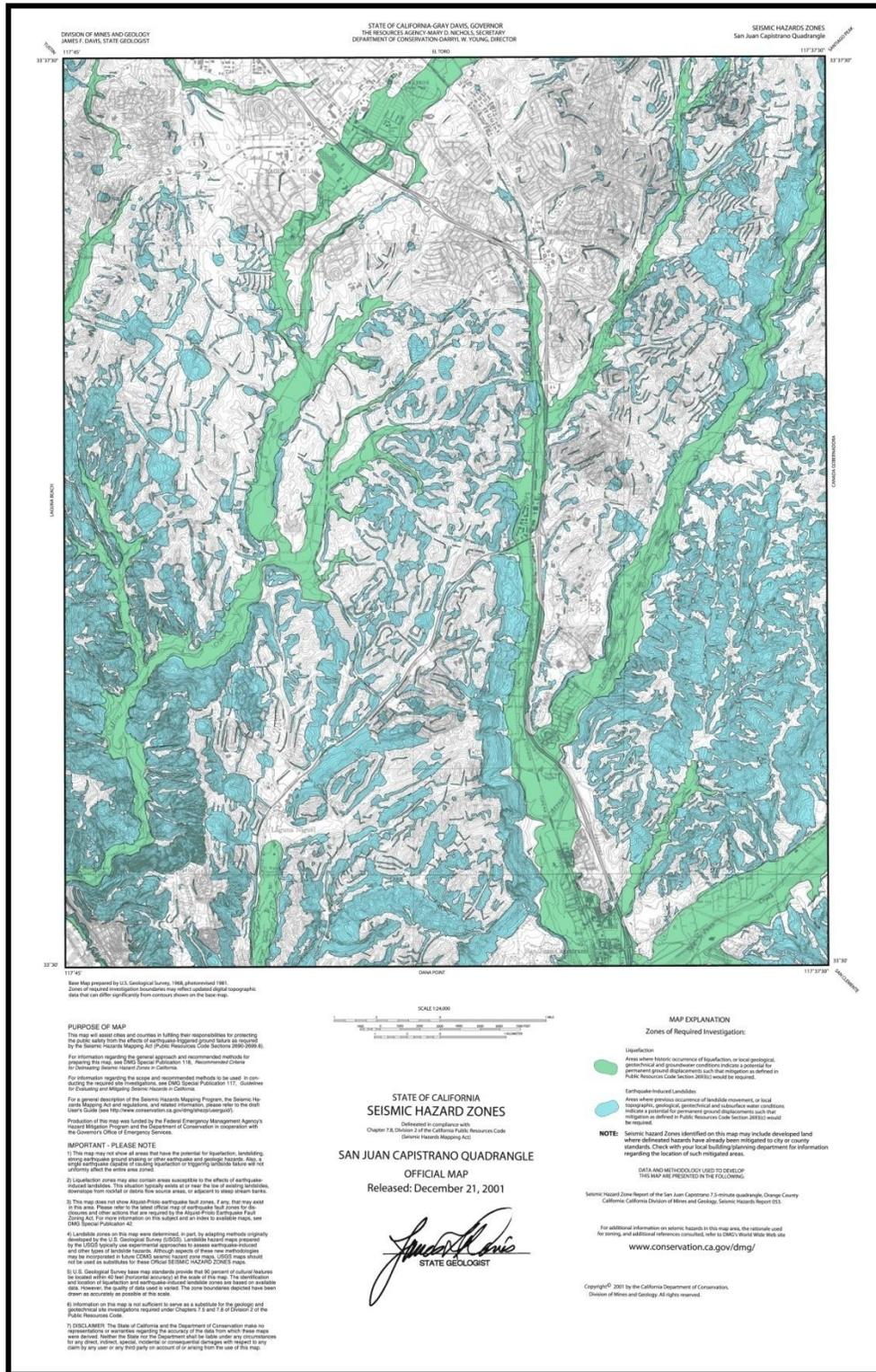


Figure 2. Seismic Hazard Zones Map for the San Juan Capistrano Quadrangle released on December 21, 2001.

The Tōhoku Earthquake: The magnitude (M) 9.0 Tōhoku Earthquake of March 11, 2011, and associated tsunami was the fourth most powerful earthquake measured by modern instruments (since about the year 1900), and it occurred at the interface of the Pacific and North America plates. Two days prior to the earthquake, a M 7.2 earthquake occurred near what would be the epicenter of the Tohoku Earthquake (Figure 3). It was followed by three aftershocks in the M 6 range later that day. These earthquakes were reported to the SMGB at its regular business meeting on March 10th, with the indication that these could be precursors of further action along the Japan Trench. In retrospect, these earthquakes were foreshocks to the M 9.0 event that followed. An overview of this historic event and its impact on California was presented by the CGS to the SMGB at its June 9, 2011, regular business meeting,

The hypocenter of the Tohoku Earthquake was located 81 miles off the east coast of the Oshika Peninsula, part of the Tohoku region of the island of Honshu, near the city of Sendai, at a depth of 20 miles below the seafloor. Over the next several days, hundreds of aftershocks, the largest of M 6.8, outlined the area of the plate boundary that ruptured. Aftershocks extend to depths of about 340 miles, although most are above a depth of 125 miles. Two weeks after the earthquake, some 726 aftershocks had been recorded, 26 of them magnitude 6.0 or greater. These aftershocks are expected to continue, at a decreasing frequency, for the next several years.

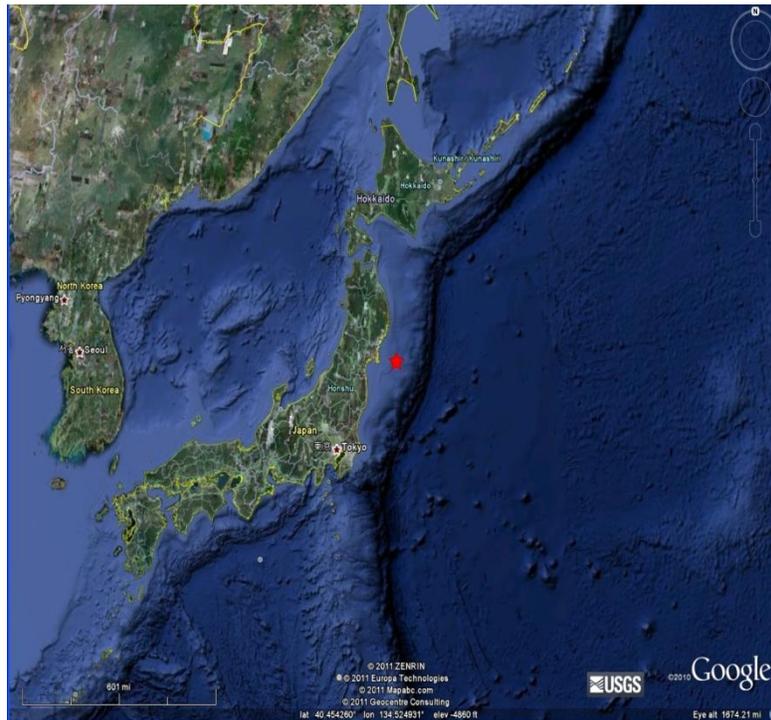


Figure 3. Location of the March 11, 2011, Tohoku Earthquake and Tsunami M_w 9.0 subduction event: Origin time ~ 14:43 JST; Rupture length ~400 km; Displacement ~ 28m – 6m (Map provided by the United States Geological Survey)

The Tohoku Earthquake is what is termed a “*megathrust earthquake*,” a major subduction zone earthquake whereby built-up pressure bending the leading edge of the North American Crustal Plate suddenly is released allowing that plate edge to spring upward and the Pacific Crustal Plate to lurch beneath the North America Plate. The affected portion of the North America Plate

is a westward and southward extension of the plate from the Alaska region that underlies eastern Siberia and the northern Sea of Japan. Some geologists divide this geologically complex region into a number of microplates.

The area of the plate boundary that ruptured during this earthquake was about 210 miles long and 120 miles wide, which is larger than the areas of San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties combined. At the location of the earthquake, oceanic crust of the Pacific Plate is being thrust under oceanic crust of the North America Plate at an angle of about 15 degrees, creating the Japan Trench, a bathymetric trough expressed along the seafloor. The average rate of this movement is approximately 83 mm/yr, one of the higher rates of plate convergence in the world. Much of this movement occurs episodically in earthquakes such as the Tohoku Earthquake.

The earthquake brought enormous crustal deformation on eastern Japan. Taking a fixed point at Misumi, Hamada City in Shimane Prefecture, the Pacific side of eastern Japan moved several meters in an ESE direction. Surface displacement of 4.4m was observed at Shizugawa, Minami-Sanriku Town in Miyagi Prefecture, and the largest displacement of 5.3m was detected at Oshika, Ishinomaki City, while displacement on the Japan Sea side was around 1m causing a large extensional field in western Japan.

Tsunami Hazards: The tsunami generated by the devastating earthquake caused millions of dollars in damages to harbors along the California coastline. Arrival times and surge heights for Crescent City (7:30 a.m.; 2.5m), San Francisco (8:16 a.m.; 0.73m), Santa Barbara (8:35 a.m.; 0.48 m), San Pedro (8:35 a.m.; 0.61m) and La Jolla (8:48 a.m.; 0.84m) are shown in Figure 4. CGS sent field teams to investigate the impact and collect valuable information on the tsunami's effects that can be used to improve model forecasts and identify ways to reduce risks to harbor facilities. For purposes of coordination and sharing of observations, a virtual clearinghouse has been established on the California Earthquake Clearinghouse website: <http://www.eqclearinghouse.org/CA/>



Figure 4. Tsunami Arrival Times and Surge Heights.

An estimate of loss as a result of the tsunami has not been developed. The lack of tools in developing this estimate has generated discussion of a module being developed for HAZUS, FEMA's software for loss estimation, but is in its infancy. In summary, there have been 17 deaths in California attributable to tsunamis since 1946. Damages to California ports from the recent Tohoku-Oki Earthquake tsunami are estimated at about \$50 million. There are about 370,000 people that reside in the current California tsunami evacuation zone maps, and on hot summer days California beaches can draw millions of people into the zones.

SMGB ACTIONS PURSUANT TO THE SURFACE MINING & RECLAMATION ACT OF 1975

The Surface Mining and Reclamation Act of 1975 (SMARA, PRC Sections 2710 et seq.) provides a comprehensive surface mining and reclamation policy for the regulation of surface mining operations. SMARA encourages the production, conservation, and protection of the State's mineral resources, and assures that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. In addition, PRC Section 2207 also provides annual reporting requirements for all mines in the State, under which the SMGB also is granted authority and obligations.

SCOPE OF SMARA AUTHORITY

SMARA provides for a three-tiered approach to accomplish its administration and enforcement. The primary entity responsible for the SMARA's enforcement is the local "lead agency" - that is, the city or county in which a surface mine operates. The lead agency is responsible for assuring that all surface mine operations within its jurisdiction are in full compliance with SMARA. SMARA prescribes specific responsibilities and powers to the lead agency.

Should a lead agency fail to bring, or become incapable of bringing one or more surface mining operations into compliance, statute allows for the Director of the DOC to enforce SMARA and initiate enforcement at individual surface mining sites. SMARA prescribes specific responsibilities and powers to the Director. The DOC is also responsible for providing technical reviews of reclamation plans and financial assurances to lead agencies to ensure that the requirements of SMARA have been addressed in the reclamation plans prior to their formal approval by the lead agency. California is the only State that regulates mine reclamation by means of local lead agencies. All other States regulate mine reclamation through a single State office (SMGB Information Report 2007-04).

The third tier of enforcement lies with the SMGB. Under SMARA, the SMGB is provided authority to hear appeals of enforcement actions taken by the Director against surface mine operators, as well as appeals of certain decisions regarding reclamation plans and financial assurances taken by a lead agency. In addition, the SMGB is provided authority to assume a lead agency's SMARA authority when a lead agency's actions are in violation of the statute, or if the lead agency defaults on its SMARA responsibilities and obligations. The SMGB may also exempt from the requirements of SMARA specific surface mining operations that are of limited scope and duration, and cause little land disturbance.

Promulgation of regulations that clarify and make more specific SMARA statutes also lies within the SMGB's authority. Examples of these regulations include the Reclamation Standards for lands disturbed by surface mining activities (California Code of Regulations (CCR) Section 3700 et seq.), and the designation of mineral lands of regional significance.

SMARA affects 113 jurisdictions comprised of 61 Cities and 52 Counties, excluding the SMGB (Table 5).

Table 5			
Lead Agencies Affected by the Surface Mining and Reclamation Act			
County	County	City	City
Alameda	Orange	Amador City	Needles
Amador	Placer	Anaheim	Oakland
Butte	Plumas Riverside	Apple Valley	Oceanside
Calaveras	County	Atascadero	Oroville
Colusa	Sacramento County	Azusa	Oxnard
Contra Costa	San Benito County	Bakersfield	Pacifica
Del Norte	San Bernardino	Banning	Palmdale
Fresno	County	Barstow	Paso Robles
Glenn	San Diego	Chula Vista	Perris
Humboldt	San Joaquin San	Claremont	Poway
Imperial	Luis Obispo San	Colton	Rancho Cordova
Inyo	Mateo Santa	Corona	Redding
Kern	Barbara	Fontana	Redlands
Kings	Santa Clara Santa	Fremont	Rialto
Lake	Cruz Shasta Sierra	Fresno	Riverside
Lassen	Siskiyou Solano	Grass Valley	Sacramento
Los Angeles	Sonoma	Hayward	Saint Helena
Madera	Stanislaus	Healdsburg	San Bernardino
Marin	Sutter	Highland	San Diego
Mariposa	Tehama	Ione	San Jacinto
Mendocino	Trinity	Irwindale	San Marcos
Merced	Tulare	Jackson	Santa Maria
Modoc	Tuolumne	Lake Elsinore	Santa Rosa
Mono	Ventura	Lake Forest	Santee
Monterey	Yolo	Lathrop	Taft
Napa		Lompoc	Tracy
		Los Angeles	Truckee
		Mammoth Lakes	Twenty Nine Palms
		Monrovia	Upland
		Montague	Yreka
		Mount Shasta	

The core services and activities of the SMGB are:

- Establish mining and reclamation standards and policies and provide guidance and direction to lead agencies, mine operators, the California Geological Survey, the Office of Mine Reclamation, and other agencies and organizations (Federal, State, local);
- Represent the interests of the State in SMARA matters that are appealed to the SMGB for action;

- Develop regulations to implement the statutes statewide so as to ensure an evenhanded application of the law throughout an environmentally and economically diverse State;
- Minimize residual hazards from surface mining operations to the public health and safety;
- Encourage the production and conservation of the State's mineral resources, while providing standards for the protection and preservation of the State's recreation, watershed, wildlife, range and forage, and aesthetic features; and
- Certify lead agency surface mining ordinances as being in accordance with the requirements of SMARA.

CHANGES TO SMARA SINCE 2000

SMARA became effective on January 1, 1976. The statute is unique in two respects: (1) mining is regulated locally by cities and counties which are referred to as lead agencies, and (2) processes for the conservation of mineral resources is provided. SMARA has been amended twenty-eight times since its enactment in 1975. Significant changes to SMARA occurred in 1987 with AB 747 (Sher), in 1990 with AB 3551 (Sher), in 1990 with AB 3903 (Sher), and in 1991 with AB 1506 (Sher). These amendments provided for additional performance standards for mine reclamation, mandatory financial assurances guaranteeing reclamation, time constraints for surface mines without approved reclamation plans to comply or else be closed until compliance was achieved, mandatory annual inspections of mines by the lead agency, establishment of annual mining reports and fees from mine operators to support the SMARA program within the DOC, and implementation of new procedures for lead agency conditional approval of reclamation plans and financial assurances.

Statutory Changes

No statutory changes to SMARA were enacted during the 2010-2011 reporting period.

Regulatory Changes

No regulatory changes were enacted during the 2010-2011 reporting period; however, several policy matters were discussed by the SMGB during this reporting period which would require regulations. Notably, such discussions focused on the AB 3098 List, annual mine fees, permitting of mining facilities located on State Designated mineral resource lands, and potential process streamlining and cost reduction in the implementation of SMARA.

AB 3098 List: OMR periodically publishes a list of mines regulated under SMARA that meet provisions set forth under PRC Section 2717(b). This list is generally referred to as the AB 3098 List, in reference to the 1992 legislation that established it. Sections 10295.5 and 20676 of the Public Contract Code preclude mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates, or other mined materials, to state or local agencies. The need for a process for the removal and reinstatement of a surface mining operation from/to the AB 3098 List has been recognized by the SMGB. Should a regulatory remedy not be available, a legislative remedy would be recommended.

Annual Mine Fees Calculation: PRC Section 2207(d) requires the SMGB to impose by regulation an annual reporting fee on each active and idle surface mining operation. Active and

idle surface mining operations are defined in PRC Sections 2207(f), 2714, 2727.1, 2735, and Title 14 of CCR Section 3501, and include operations conducted by public agencies. PRC Section 2207(d) also states the annual fee imposed shall not be less than \$100 or more than \$4,000 for each operation. These amounts shall be adjusted for cost of living as measured by the California Consumer Price Index. Furthermore and most importantly, PRC Section 2207(d)(2)(A) requires fees to be calculated on an equitable basis reflecting the size and type of the operation, the total assessed value of the mining operation, the acreage disturbed by mining activities, and the acreage subject to the reclamation plan. A summary of approved mine fees from 2000 to 2010 is shown in Figure 6.

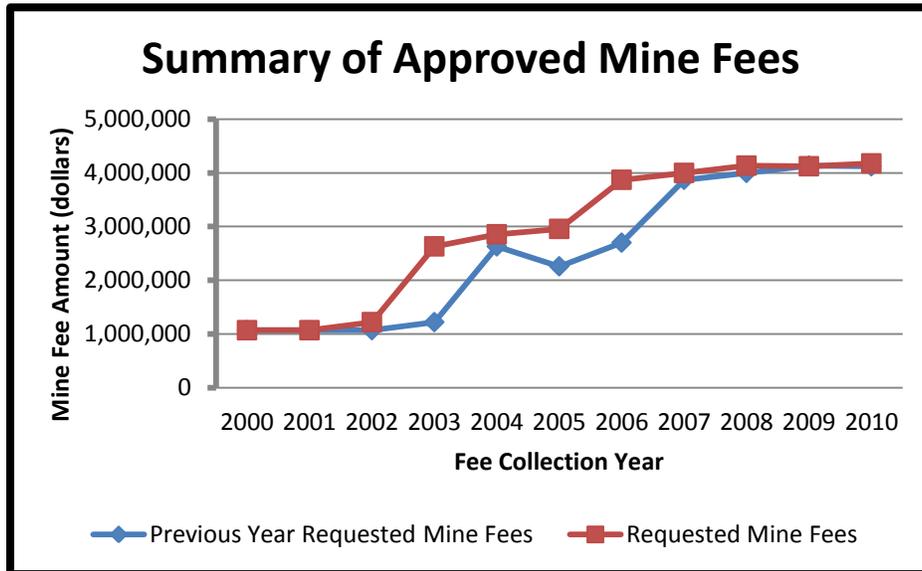


Figure 6. Summary of approved mine fees from year 2000-2010.

The SMGB at its March 10, 2011, regular business meeting accepted the 2010 Annual Mine Fees. With all industrial mineral sites now at the maximum fee amount with exception to those operations producing 100 tons or less, all gold and silver producers at the maximum fee amount with exception to those producing 10 ounces or less, and all base and other metals producers at the maximum fee amount with exception to those producing 10 pounds or less, the SMGB's Policy and Legislation Committee initiated discussion and consideration of other means in calculating the annual mine fees. Such means may entail a regulatory amendment, legislative amendment, or both.

SMARA Streamlining: SMARA has evolved during the past 35 years such that certain elements require revisiting and discussion. At its September 9, 2010, regular business meeting, the SMGB directed the Policy and Legislation Committee to commence discussion as to how the overall SMARA process could be streamlined, duplicity minimized or eliminated, and inequities addressed, while still maintaining the overall intent of SMARA. At its October 14, 2010, meeting, the Committee requested that a survey questionnaire be developed for further discussion. The purpose of the questionnaire is to identify 1) areas where SMARA could be streamlined, and 2) areas where the SMGB or DOC could assist SMARA lead agencies in their implementation of the mineral conservation and reclamation components of SMARA.

Guidelines and Policies

No new policies or guidelines were established during this reporting period.

MINERAL RESOURCES CONSERVATION

California is one of the nation's leading mining States in terms of both value and diversity of minerals produced. Based on the U.S. Geological Survey's (USGS) preliminary data for 2009, California ranks fourth after Utah, Arizona and Nevada, in the value of non-fuel production, accounting for approximately 6.3 percent of the nation's total. There were 1,230 reporting mines and quarries in the State for calendar year 2009. Combined production from these mines totaled approximately \$3.4 billion worth of non-fuel minerals in that same year (Figure 7), down from \$4.0 billion during the preceding year. Approximately 5,300 people are employed at these mines and their processing plants, down from 10,000 during the preceding year.

The only metals produced were gold and silver. California ranked 6th in gold production out of eleven States that reported for the year. Other minerals produced commercially include common clay, bentonite clay (including hectorite), crushed stone, dimension stone, feldspar, fuller's earth, gemstones, gypsum, iron ore (used in cement manufacture), kaolin clay, lime, magnesium compounds, perlite, pumice, pumicite, salt, soda ash, and zeolites.

Construction grade sand and gravel continued to be California's leading industrial mineral, with an estimated total value of \$905 million for 85 million tons produced. California's second largest mineral commodity was Portland Cement valued at \$855 million for 9.3 million tons produced, down from \$1.10 billion for 108.5 million tons produced during the preceding year. The third largest dollar value mineral produced in 2009 was boron. U.S. Borax and Chemical Corporation, Inc. (a subsidiary of Rio Tinto, Inc.) led the State and nation in the production of borates at their Boron Mine and facility in Kern County. Because there are only two producers of boron in the state, specific production values are withheld and are included in the "other" category in the table and figure. Boron makes up more than 60 percent of the "other" category. Crushed stone ranked fourth in the state with a value of \$513 million for 48 million tons produced, down from \$480 million.

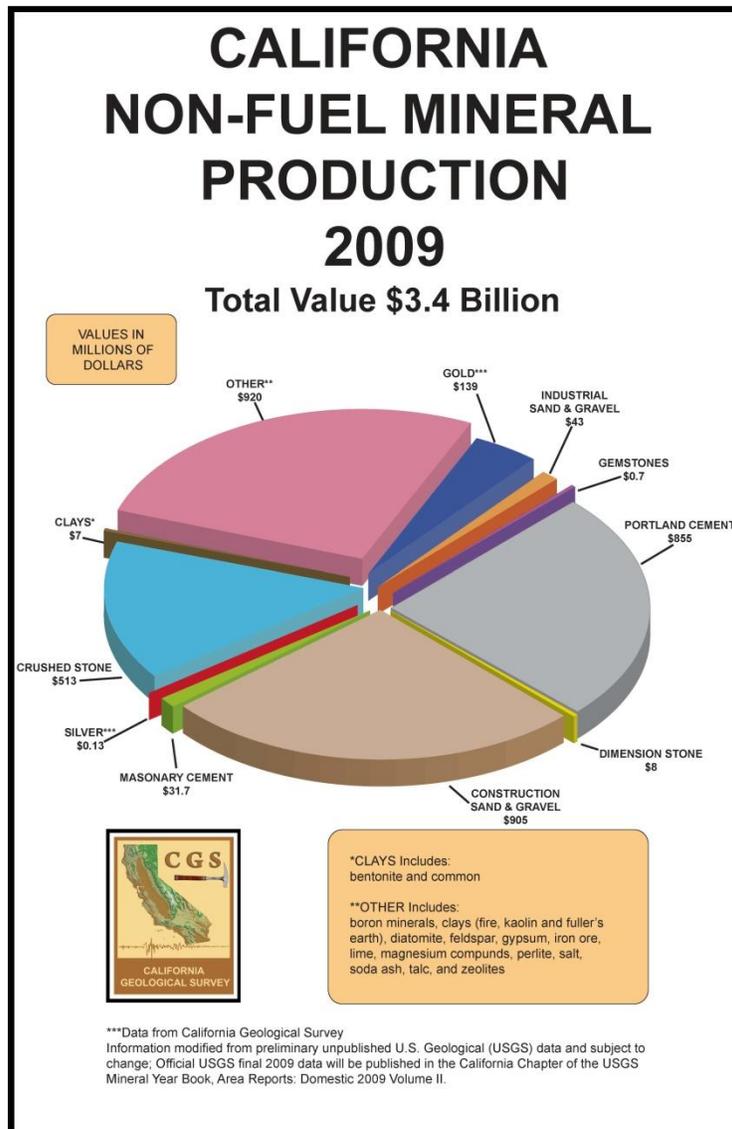


Figure 7. California non-fuel mineral production for 2009.

PROTECTION OF MINERAL LANDS

As California's population continues to grow rapidly, its communities face increasingly difficult and complex land use decisions. The production of mineral resources -- so necessary to support an expanding population -- must compete with other land uses such as agriculture, timber production, urban development, and recreational, sensitive ecological or scenic areas. The rapid growth of many communities and the incompatibility of mining with most other land uses sometimes results in heated conflicts within those communities. Often, the mineral resource is needed by the very use which threatens it. For example, construction grade aggregate deposits, which are the sources for the construction and repair of roads, houses, and commercial buildings, often are built over before the resource can be extracted.

The objectives of these processes are to provide local agency decision makers with information on the location, need, and importance of mineral resources within their jurisdiction, and to require that this information be considered in local land use planning decisions. These

objectives are met through the adoption of local Mineral Resource Management Policies (MRMP) that provide for the conservation and prudent development of these mineral deposits.

In 2006, CGS updated its report titled Aggregate Availability in California – Map Sheet 52. This map and accompanying text provides general information about the current availability of California's permitted aggregate resources. Map Sheet 52 (2006) is an update of the original version published in 2002 (Kohler, 2002), and summarizes data from reports compiled by CGS for 31 aggregate study areas throughout the State. These study areas cover about 25 percent of the State and provide aggregate for about 90 percent of California's population. This report is divided into three parts: Part I provides data sources and methods used to derive the information presented, Part II compares the updated 2006 Map Sheet 52 to the original map, and Part III is an overview of construction aggregate.

The map compares projected aggregate demand for the next 50 years with currently permitted aggregate resources in 31 regions of the State. The map also highlights regions where there are less than 10 years of permitted aggregate supply remaining.

Construction aggregate is essential to the needs of modern society, providing material for the construction and maintenance of roadways, dams, canals, buildings and other parts of California's infrastructure. Aggregate is also found in homes, schools, hospitals and shopping centers. In 2005, California consumed about 235 million tons of construction aggregate or about 6.6 tons per person. Because transporting aggregate is a significant part of the total cost to the consumer, aggregate mines generally are located close to communities that consume the aggregate.

The following conclusions were offered:

- About 32 percent of the total projected 50-year aggregate demand identified for the 31 study areas is currently permitted.
- Only six percent of the total aggregate resources identified within the 31 study areas are currently permitted.
- California currently has about 4.3 billion tons of permitted resources identified in the 31 study areas shown on Map Sheet 52.
- In the next 50 years, California will need approximately 13.5 billion tons of aggregate. This figure does not account for accelerated construction programs as a result of major bond initiatives, or from reconstruction following a major, damaging earthquake.
- Four of the updated aggregate study areas are projected to have less than ten years of permitted aggregate resources remaining as of January 2006.
- Ten of the updated aggregate study areas show less than 25 percent of the aggregate resources to meet the projected 50-year aggregate demand.
- About one-half (16) of the updated aggregate study areas show that 25 to 50 percent of the aggregate resources are available to meet the 50-year aggregate demand.

- Three (one tenth) of the updated aggregate study areas show between 50 and 75 percent of the aggregate resources are available to meet the 50-year aggregate demand.
- One study area shows between 75 and 100 percent of the aggregate resources to be available to meet its 50-year aggregate demand.
- Only one of the study areas has adequately permitted aggregate resources to meet or exceed its projected 50-year demand. The 2002 map showed six areas.

The information presented on Map Sheet 52 and in the referenced reports was provided to assist land use planners and decision makers in identifying those areas containing construction aggregate resources, and to identify potential future demand for these resources in different regions of the State. This information is intended to help planners and decision makers balance the need for construction aggregate with the many other competing land use issues in their jurisdictions, and to provide for adequate supplies of construction aggregate to meet future needs. This map is in the process of being updated.

One of the first mineral commodities selected by the SMGB for classification by the State Geologist was construction grade aggregates, such as sand, gravel, and crushed rock. The importance of construction aggregate is often overlooked, even though it is an essential commodity in today's society. Aggregate is a key component in products such as Portland Cement concrete, asphaltic concrete (macadam), railroad ballast, stucco, road base, and fill materials.

California's construction industry is greatly dependent on readily available aggregate deposits that are within a reasonable distance to market regions. Aggregate is a low unit-value, high bulk-weight commodity; therefore, aggregate for construction must be obtained from nearby sources in order to minimize costs to the consumer. If nearby aggregate sources do not exist, then transportation costs quickly can exceed the value of the aggregate. Transportation cost is one of the most important factors considered when defining the market area for an aggregate mine operation.

In an effort to address this issue, SMARA provides for a method by which mineral lands may be "Classified" by the State Geologist, and "Designated" by the SMGB. These Classification and Designation processes are methods by which an inventory of the State's most valuable mineral deposits can be compiled and made available to local communities for inclusion in their land use decision making. The SMGB's statutory authority to incorporate mineral lands classification information into State policy is provided pursuant to Division 2, Chapter 9, Article 4, State Policy for the Reclamation of Mined Lands, PRC Section 2761(a), which states:

"On or before January 1, 1977, and, as a minimum, after the completion of each decennial census, the Office of Planning and Research shall identify portions of the following areas within the state which are urbanized or are subject to urban expansion or other irreversible land uses which would preclude mineral extraction:

(1) Standard metropolitan statistical areas and such other areas for which information is readily available.

(2) Other areas as may be requested by the board.

(b) In accordance with a time schedule, and based upon guidelines adopted by the board, the State Geologist shall classify, on the basis solely of geologic factors, and without regard to existing land use and land ownership, the areas identified by the Office of Planning and Research, any area for which classification has been requested

by a petition which has been accepted by the board, or any other areas as may be specified by the board, as one of the following:

(1) Areas containing little or no mineral deposits.

(2) Areas containing significant mineral deposits.

(3) Areas containing mineral deposits, the significance of which requires further evaluation.

The State Geologist shall require the petitioner to pay the reasonable costs of classifying an area for which classification has been requested by the petitioner.

(c) The State Geologist shall transmit the information to the board for incorporation into the state policy and for transmittal to lead agencies.”

The SMGB’s statutory authority to consider areas for designation is provided pursuant to Division 2, Chapter 9, Article 6, Areas of Statewide or Regional Significance, PRC 2790, which states:

“After receipt of mineral information from the State Geologist pursuant to subdivision (c) of Section 2761, the board may by regulation adopted after a public hearing designate specific geographical areas of the state as areas of statewide or regional significance and specify the boundaries thereof. Such designation shall be included as a part of the State policy and shall indicate the reason for which the particular area designated is of significance to the State or region, the adverse effects that might result from premature development of incompatible land uses, the advantages that might be achieved from extraction of the minerals of the area, and the specific goals and policies to protect against the premature incompatible development of the area.”

The statutory authority which allows the SMGB to terminate, in whole or in part, an area previously designated is provided pursuant to PRC Section 2793 which states:

“The board may, by regulation adopted after a public hearing, terminate, partially or wholly, the designation of any area of statewide or regional significance on a finding that the direct involvement of the board is no longer required.”

Aggregate Availability Group

To further understand and address the needs of the State in regards to aggregate availability, an Aggregate Availability Group (AAG) was established in 2009. The group included representatives of the California Department of Conservation, Bureau of Land Management, California Office of Planning and Research, California Department of Transportation, California Construction and Industrial Materials Association, California Geological Survey, Office of Mine Reclamation and SMGB. A Charter was adopted by the AAG in 2011 and is provided in Appendix C.

Since adoption of the Charter in 2011, efforts have commenced to update and develop new aggregate availability map concepts that reflect current economic, social and environmental factors, and which provide a valuable tool and resource for all stakeholders concerned about aggregate availability.

California Mineral Resources Management Program

Based on a review of the State’s mineral resource management program (SMGB Information Report 2007-03), it was concluded that the Mining Ordinance review and certification program was working well, with an effective compliance rate of 100 percent. The Mineral Resource

Management Policies review and recognition program is not working as well and the compliance rate, while not well documented, may be as low as 4 percent to 19 percent. Since completion of SMGB Information Report 2007-03 titled "*A Review of the State's Mineral Resources Management Program and its Components – Status and Effectiveness of Review Efforts*", *several elements of this program have been accomplished*. Notably, a copy of the most current MRMP has been requested from each lead agency, and a review of them is in process. It is anticipated that many MRMP are adequate and should have been recognized by the SMGB, but were not. Geographical Information System technology applied to this program is being pursued. Also, having the SMGB serve as an official Review Agency for select documents and having them received directly from the State Clearinghouse may have merit.

Mining Ordinances

SMARA requires each lead agency (City, County, or City and County) to have a surface mining and reclamation mining ordinance that is in accordance with statute. To ensure ordinances are in compliance with SMARA and the SMGB's regulations, the SMGB has authority to review and certify these local ordinances that meet SMARA requirements. As of July 1, 2007, there are 109 SMARA lead agencies in the State.

SMARA requires that lead agencies periodically revise these ordinances to keep them in accordance with legislative changes. The SMGB is required to re-certify these ordinances before they become effective. From January 2000 through December 2006, the SMGB reviewed and re-certified updated SMARA ordinances for 13 cities and eight counties as summarized in Table 6. No new mining ordinances were considered for certification by the SMGB during the 2010-2011 reporting period.

**Table 6
SMGB Certified Surface Mining and Reclamation Ordinances
July 2000 - June 2011**

SMARA LEAD AGENCY	CITY OR COUNTY	LATEST CERT. DATE	SMGB CERTIFICATION DATE	SMGB RESOLUTION NUMBER	ORDINANCE NUMBER
Hayward	City	2004	11/15/04	Resolution 2004-09	Ordinance No. 04-12
Los Angeles	City	2000	7/13/00	Resolution 2000-06	Ordinance No. 173106
Mammoth Lakes	City	2001	5/10/01	Resolution 2001-05	Ordinance No. 01-02
Oakland	City	2003	6/19/03	Resolution 2003-02	Ordinance No. 12496
Oxnard	City	2001	10/11/01	Resolution 2001-06	Ordinance No. 2579
Pacifica	City	2006	5/12/06	Resolution 2006-03	Ordinance Nos. 670-C.S. and 711-C.S.
Poway	City	2004	11/15/04	Resolution 2004-11	Ordinance No. 609
Rancho Cordova	City	2004	7/23/04	Resolution 2004-06	Ordinance No. 22-2004
San Bernardino	City	2000	12/14/00	Resolution 2000-14	Ordinance No. MC-1084
San Diego	City	2000	7/13/00	Resolution 2000-05	Ordinance No. 18802
San Jacinto	City	2004	12/9/04	Resolution 2004-12	Ordinance No. 04-08
Tracy	City	2000	11/9/00	Resolution 2000-12	Articles 37 and 38 of the City Code
Truckee	City	2001	1/11/01	Resolution 2001-01	Ordinance No. 2000-04
Colusa	County	2003	9/11/03	Resolution 2003-04	Ordinance No. 659
Contra Costa	County	2000	7/13/00	Resolution 2000-08	Ordinance No. 2000-18
Glenn	County	2005	5/12/05	Resolution 2005-05	Ordinance Nos. 1083 and 1171
Lake	County	2000	7/13/00	Resolution 2000-07	Ordinance No. 2533
Madera	County	2006	12/14/06	Resolution 2006-10	Ordinance No. 525G
Modoc	County	2000	1/14/00	Resolution 99-48	Ordinance No. 236-85
Santa Clara	County	2000	12/14/00	Resolution 2000-13	Ordinance No. 1200.299
Yolo	County	2001	12/13/01	Resolution 2001-08	Ordinance No. 1276

Mineral Resource Management Policies (MRMP)

SMARA lead agencies are required to incorporate Mineral Resource Management Policies (MRMP) into their General Plans upon revision of their plans. Thirty-six lead agencies have mineral classified or mineral designated lands within their jurisdictions. Although MRMP's are required to be sent to the SMGB for review prior to their incorporation into local General Plans, most lead agencies seem not to have done so. Also, because MRMP information may be placed in more than one section or element in a General Plan, it can be difficult to find the MRMP if it is not clearly identified. A summary of MRMPs recognized by the SMGB from July 2000 to June 2011 is presented in Table 7.

The purpose and intent of the MRMP are to ensure the continued availability of important mineral resources, while regulating surface mining operations as required by SMARA, and the SMGB's regulations. As noted above, based on a review of the State's mineral resource management program (SMGB Information Report 2007-03), it was concluded that the MRMP review and recognition program is not working well and the compliance rate may be as low as 4 percent to 19 percent. Although several MRMP were reviewed and commented on during the 2010-2011 reporting period, none were finalized and subsequently considered for certification by the SMGB during this reporting period.

Table 7 Summary of SMGB Recognized MRMP July 2000 - June 2011				
Lead Agency	MRMP Submittal Date	Recognition Date	SMGB Resolution Number	MRMP Document
City				
Claremont	August 2, 2006	December 14, 2006	2006-10	General Plan, Mineral Resources
Goleta	May 31, 2006	September 14, 2006	2006-07	
Irwindale	May 2008	December 11, 2008	2008-08	2020 General Plan, Section 5, Resource Management Element
Santa Clarita	July 19, 2006	Not recognized		
Truckee	May 16, 2006	September 14, 2006	2006-08	
County				
El Dorado	January 24, 1995; April 9, 2003	Not recognized		County General Plan, Volume I – Goals, Objectives and Policies, December 1993; 1996 general Plan Alternatives – Conservation and Open Space Element, 1996.
Marin	August 11, 2004	October 14, 2004		2.6 Natural Systems Element
Mendocino	August 17, 2009	November 12, 2009		Chapter 4: Resources Management Element, Mineral Resources Policies (pages 4-44 and 4-45 of the Updated General Plan).
Merced	November 8, 2001	February 14, 2002		
Nevada	February 26, 2003	May 23, 2003		Nevada County General Plan Final Draft, September 1995, Chapter 17: Mineral Management
Sacramento	May 2008	September 11, 2008	2008-05	General Plan Conservation Element, Section II, Mineral Resources, and Section IV, Soil Resources
Tuolumne	July 2010			County of Tuolumne General Plan Amendment GPA09-004 Mineral Resources Section; commented in SMGB correspondence dated July 1, 2010.

Classification Petitions

During the 2010-2011 reporting period, the SMGB considered two mineral classification petitions that were subsequently accepted and classification reports prepared by CGS: the Granite Construction Company Power House Aggregate Project located in Butte County, and the Proposed Riddle Surface Mine Project located in Stanislaus County. These petitions, along with those accepted since July 2000, are summarized in Table 8, and discussed below.

Granite Construction Company Power House Aggregate Project, Butte County: At its December 9, 2010, regular business meeting, the SMGB considered acceptance of CGS's Special Report 218 on Mineral Lands Classification of the Power House Aggregate Project Site, Butte County, California, for Construction Aggregate. The SMGB received a petition for mineral lands classification from Mr. Yasha Saber, Resource Development Project Manager for Granite Construction Incorporated, dated July 26, 2010, for mineral land classification of the proposed Power House Aggregate Project, located in the County of Butte. The site consists of about 500 acres located approximately 7 miles southwest of the City of Oroville (Figures 8, 9 and 10). The petitioner has requested that the State Geologist reclassify the property as MRZ-2 for PCC-grade aggregate.

- 1) Based on test information provided by the petitioner, it is likely that much of the material on the property meets quality specifications for PCC aggregate.
- 2) Preliminary calculations based on information provided by the petitioner indicate that the property contains PCC-grade aggregate resources in excess of the threshold value of \$17,157,910 (2010 dollars) required for classification as MRZ-2.

At its December 9, 2010, regular business meeting, the SMGB accepted CGS Special Report 218 which explains the classification of the property and presents the conclusions reached in the classification evaluation. It is intended for the use of the SMGB, the petitioner - Granite Construction Company, and the County of Butte that has permitting authority over this property under SMARA.

For a mineral deposit to be considered significant, and therefore eligible for MRZ-2 classification, it must meet criteria established by the SMGB for material quality, marketability, and economic value. The significance of the resources was determined by evaluating the quality of the deposit and its suitability as a marketable commodity and by calculating the volume, tonnage, and value of available aggregate resources contained within the property. Data necessary to evaluate the property were compiled from geologic literature, proprietary company files, and limited field study by CGS staff.

CGS concluded that:

- Aggregate test results provided by the petitioner and analyzed by CGS staff indicate that the material present on the Power House Aggregate Project site meet the specifications for a variety of construction aggregate uses up to and including PCC-grade aggregate.

- Aggregate resources present at the Power House Aggregate Project site exceed the minimum threshold value of \$17.1 million 2009-dollars established by the SMGB.
- The 460-acre Power House Aggregate Project site has been classified MRZ-2 for construction aggregate as shown on Figure 9.

<p style="text-align: center;">Table 8 Mineral Lands Classification Petitions Received from July 2000 through June 2011</p>		
Geographical Area	Date	Petition Request
Alameda County	9/22/05	Acceptance of a Petition for designation of three parcels of land totaling 212 acres being classified as MRZ-2 (areas containing significant measured or inferred aggregate resources) in the city of Pleasanton, Alameda County, for Rhodes and Jamieson LLC.
San Diego County	9/22/05	Acceptance of a Petition for re-classification of six irregularly shaped parcels totaling 210.9 acres as MRZ-2a for construction aggregates in the County of San Diego for National Quarries
San Diego County	11/10/05	Acceptance of a Petition for Mineral Land Classification for the Proposed Otay Hills Quarry site, Superior Ready Mix Concrete, L.P.'s Otay Hills Property, San Diego, California.
Riverside County	12/11/08	Acceptance of a Petition for Re-Classification of Mineral Resource Zone (MRZ) Lands from MRZ-3a to MRZ-2a, Day Street Project, Riverside County.
Sacramento County	4/9/09	Acceptance of a Petition for Re-Classification of Mineral Resource Zone (MRZ) Lands from MRZ-3 to MRZ-2, White Rock Road Properties, Mangini Property, Sacramento County.
Riverside County	9/11/09	Acceptance of California Geological Survey's Report 212/Revised Mineral Land Classification, First Industrial Realty Trust Day Street Project, Riverside County, for Portland Cement Concrete-Grade Aggregate
Sacramento County	3/11/10	Acceptance of a Petition for Classification of Mineral Lands, Wilson Ranch-Walltown Quarry Project, Sacramento County, California.
Butte County	12/9/10	Acceptance of California Geological Survey's Special Report 218 on Mineral Lands Classification of the Power House Aggregate Project Site, Butte County, California, for Construction Aggregate
Stanislaus County	2/10/11	Acceptance of a Petition for Mineral Land Classification for the Proposed Riddle Surface Mine Property, Stanislaus County, California.

The SMGB accepted CGS's Special Report 212, titled "*Mineral Land Classification of the First Industrial Realty Trust Day Street Site, Riverside County, California for Portland Cement Concrete-Grade Aggregate*," at its regular business meeting held on April 9, 2009.

Following acceptance of CGS's Special Report 212, the petitioner recognized that two parcels, totaling 80 acres, were inadvertently excluded. The petition and accompanying map indicated the 80 acres relevant to this petition consideration, as well as the lands that were previously classified per CGS Special Report 212. The petition for a revision to the mineral land classification was dated June 5, 2009, and at its July 9, 2009, regular business meeting, was accepted by the SMGB.

The State Geologist subsequently investigated and revised the classified mineral lands for the First Industrial Realty Trust Day Street Site, Riverside County, from MRZ-3 to MRZ-2 for PCC-grade aggregate, as documented in CGS Special Report 212. The following conclusions were reported:

- Aggregate test results provided by the petitioner and analyzed by CGS staff indicated that the material present on the site meets the specification for use in PCC-grade aggregate.
- Aggregate resources present at the site exceed the minimum threshold value of \$17,380,000 million (2008-dollars) established by the SMGB.
- The approximately 577 acres comprising the First Industrial Realty Trust Day Street Site has been reclassified from MRZ-3 to MRZ-2 for PCC-grade aggregate.

At its September 11, 2009, regular business meeting, the SMGB accepted the CGS Classification Special Report 212/Revised.

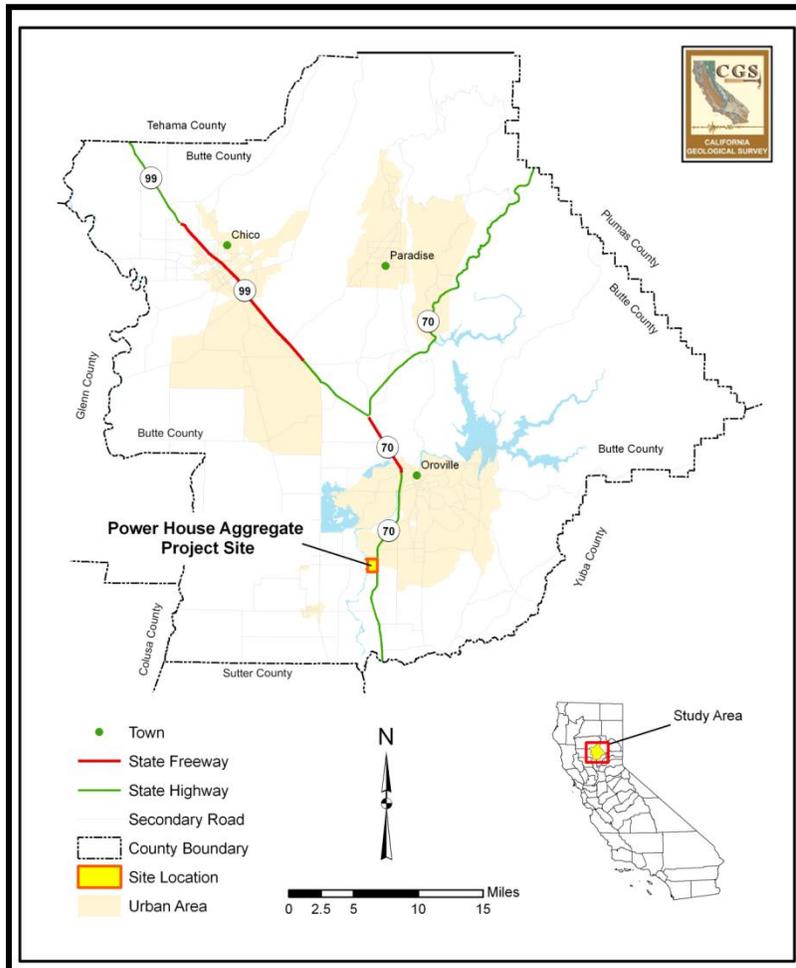


Figure 8. Location of the Power House Aggregate Project Site.



Figure 9. View of proposed Power House Aggregate Project Site.

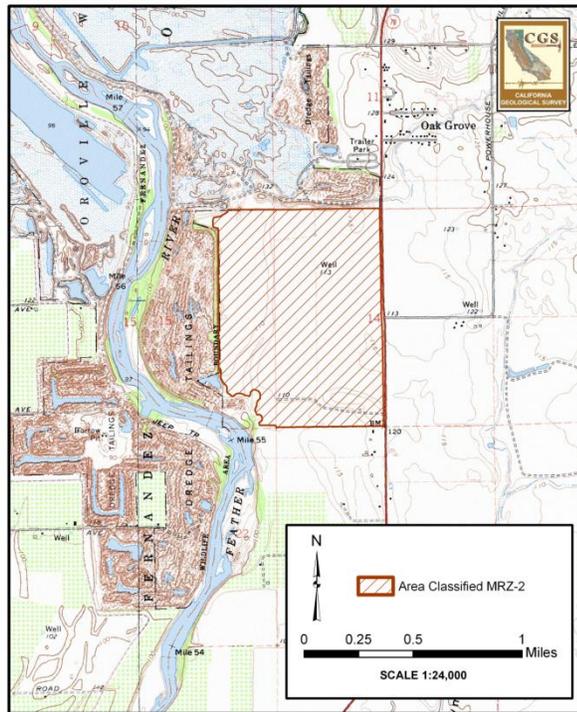


Figure 10. Mineral Land Classification of the Power House Aggregate Project Site for construction aggregate.

Proposed Riddle Surface Mine Project, Stanislaus County: The SMGB received a petition for mineral lands classification from Calaveras Materials, Inc., dated November 12, 2010, for mineral land classification of the proposed Riddle Surface Mine Project, located in the County of Stanislaus. The site consists of about 436 acres located approximately 3 miles west of the City of Newman in Stanislaus County. The petitioner requested that the State Geologist reclassify the property as MRZ-2a for Portland Cement Concrete (PCC) - grade aggregate.

The property consists of two parcels separated by approximately one-half mile; the northern parcel is 314.92 acres, the southern 121.06 acres. Approximately six acres of the northern property was classified as MRZ-2b for concrete-grade aggregate in California Division of Mines and Geology, “*Special Report 173, Mineral Land Classification of Stanislaus County,*” in 1993.

The petition application was reviewed by the CGS Minerals Resources Unit using the revised criteria for consideration of petitions, which were adopted by the SMGB in May 1994, and accepted by the SMGB at their February 10, 2011, regular business meeting.

Classification

Classification is the method by which the State Geologist, in accordance with a time schedule and based upon guidelines adopted by the SMGB, geologically evaluates the State’s lands and categorizes those lands as: (1) having little or no mineral deposits; (2) areas containing significant mineral deposits; and, (3) areas containing mineral deposits, the significance of

which requires further evaluation. These determinations by the State Geologist are made based solely on geologic factors, and without regard to existing land use or land ownership. Mineral Classification information is transmitted to the SMGB by the State Geologist, and then is provided to locally affected jurisdictions (cities and counties) by the SMGB.

In some regions, large portions of the areas classified as having significant mineral deposits are already committed to other various urban uses, which prohibit access to the underlying resources. As an additional aid to local planning agencies, classification reports prepared for metropolitan areas also highlight non-urbanized portions of the classified mineral lands as Aggregate Resource Areas (ARA). These non-urbanized ARA's contain mineral deposits that remain potentially available for future use, and facilitate estimating the volume of aggregate material that is practically available in the region. ARA's may be considered for Designation by the SMGB. Sixteen classification reports were completed between July 2000 and June 2010 (Table 9). Two new classification reports were completed and subsequently accepted by the SMGB during the 2009-2010 reporting period.

Table 9 Summary of Classification Reports Accepted by the SMGB since 2000				
Geographical Area	CGS Report No.	Title	Classified Acres	Date Accepted by SMGB
El Dorado County	OFR 2000-03	Mineral Land Classification of El Dorado County, 2000.	1,144,320	Uncertain
Butte County	OFR 2000-04	Mineral Land Classification of the KRC Holdings, Inc. M&T Chico Ranch Site, Butte County, California, for Construction Aggregate Resources, 2000.	627	06/15/2000
Tehama County	OFR 2000-18	Mineral Land Classification of Concrete-Grade Aggregate Resources in Tehama County, California, 2000.	1,891,000	Uncertain
Sonoma County	SR 175	Mineral Land Classification of Aggregate Materials in Sonoma County, California, 2005.	1,025,000	03/10/2005
Lassen County	SR 177	Mineral Land Classification of the Long Valley Pozzolan Deposits, Lassen County, California, 2003.	5,514.9	Uncertain
Monterey County	SR 180	Mineral Land Classification of Granite Construction Inc.'s Handley Ranch Site, Monterey County, California, 2005.	224	06/19/2003
San Diego County	SR 191	Mineral Land Classification of National Quarries' Twin Oaks Valley Road Site, San Marcos, San Diego County, California – for Construction Aggregate Resources, 2006.	160	09/14/2006

**Table 9 (Continued)
Summary of Classification Reports
Accepted by the SMGB since 2000**

Geographical Area	CGS Report No.	Title	Classified Acres	Date Accepted by SMGB
Riverside County	SR 198	Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the Palm Springs Production-Consumption Region, Riverside County, California, 2007.	404,000	12/13/2007
Riverside County	SR 200	Mineral Land Classification of the Granite Construction Company Liberty Quarry Site, Temecula, Riverside County, California – for Portland Cement Concrete-Grade Aggregate, 2007.	290	06/14/2007
Los Angeles and San Bernardino Counties	SR 202	Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production-Consumption Region, Los Angeles and San Bernardino Counties, California, 2007.	149,200	12/13/2007
San Bernardino and Riverside Counties	SR 206	Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California, 2008.	693,900	12/11/2008
Los Angeles County	SR 209	Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption Region	281	09/09/2010
Kern County	SR 210	Update of Mineral Land Classification: Aggregate Materials in the Bakersfield Production-Consumption Region, Kern County, California, 2009.	1,150,456	10/08/2009
Riverside County	SR 212	Mineral Land Classification of the First Industrial Realty Trust Day Street Site, Riverside County, California – for Portland Concrete-Grade Aggregate, 2009.	500*	04/09/2009
Riverside County	SR 212 (Revised)	Revised Mineral Land Classification of the First Industrial Realty Trust Day Street Site, Riverside County, California – for Portland Concrete-Grade Aggregate, 2009.	80*	09/11/2009
Sacramento County	SR 213	Mineral Land Classification of the White Rock Road Properties, Mangini Property, Sacramento County – for Construction Aggregate, 2009.	586	04/09/2009

Table 9 (Continued) Summary of Classification Reports Accepted by the SMGB since 2000				
Geographical Area	CGS Report No.	Title	Classified Acres	Date Accepted by SMGB
Sacramento County	SR 214	Mineral Land Classification of the Wilson Ranch – Walltown Quarry Project, Sacramento County, California – for Construction Aggregate, 2010	414	03/11/2010
Butte County	SR 218	Mineral Lands Classification of the Power House Aggregate Project Site, Butte County, California, for Construction Aggregate.	460	12/09/2010

*According to CGS SR 212 (Revised), the total for these two areas is 597 acres.

California Geological Survey Special Report 209 for Update of Mineral Land Classification, for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption Region, Los Angeles County, California: The SMGB, in the fall of 2006, and more recently at its June 14, 2007, regular business meeting, heard a report from SMGB staff on the Mineral Land Classification and Designation Program under the Surface Mining and Reclamation Act of 1975 (SMARA). At its September 13, 2007, regular business meeting, CGS provided a schedule and prioritized program of current and planned activities for mineral land classification and associated projects. The update of the report for the San Gabriel Valley P-C Region was considered moderate priority. The San Gabriel Valley P-C Region and associated MRZ-2 areas are shown in Figures 11 and 12, respectively.



Figure 11. San Gabriel Valley Production-Consumption Region

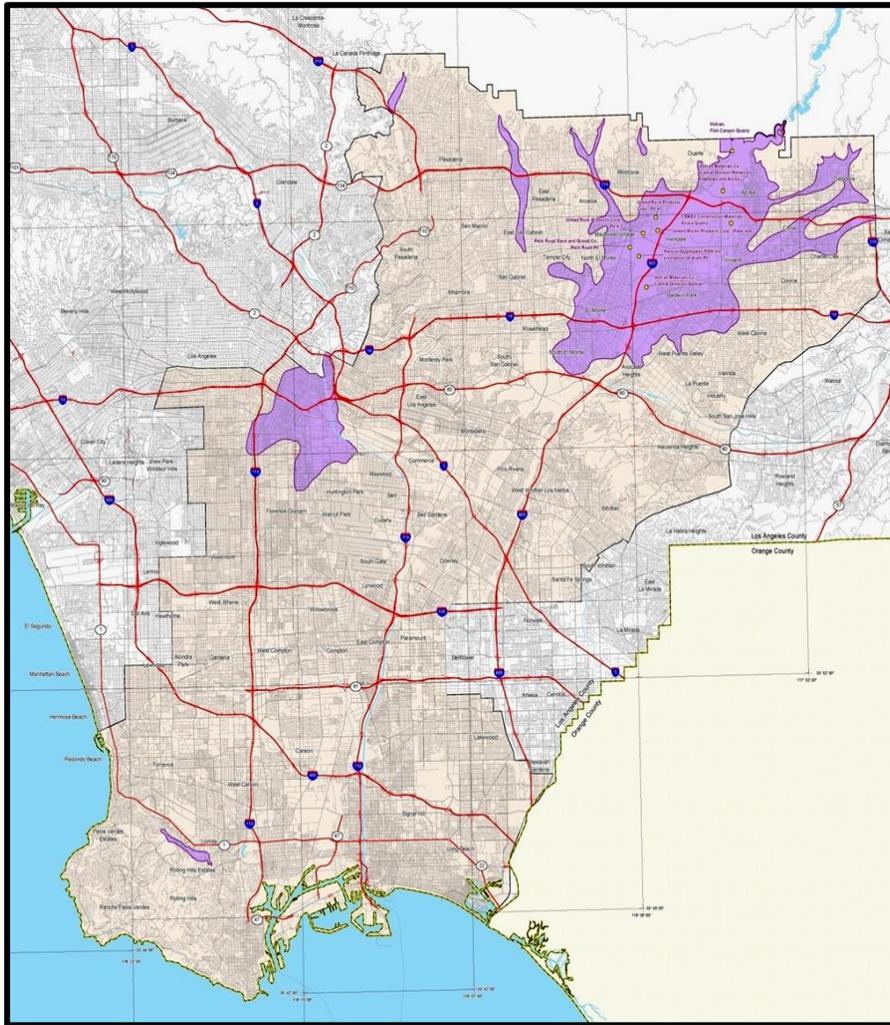


Figure 12. MRZ-2 Areas within the San Gabriel Valley Production-Consumption Region

The updated report presented updated mineral resources sectors (Figures 13a and 13b) and the following conclusions:

- As of January 2009, seven mines, operated by five different mining companies, were producing PCC-grade aggregate in the San Gabriel P-C Region, along with a full range of lower aggregate grades for such products as asphaltic concrete and base.
- The anticipated consumption of aggregate in the San Gabriel Valley P-C Region for the next 50 years (through the year 2058) is estimated to be 911 million tons, of which 638 million tons must be PCC quality.
- Since 1980, permitted PPC-grade aggregate reserves have increased from 280 million tons (a 19-year supply using the 1980 to 2030 projection) to 328 million tons (a 20-year supply using the updated 2009 through 2058 projection).

- About 27 percent, or 1,234 acres, of the 4,642 acres of lands designated by the SMGB in 1984 has been lost to land uses incompatible with mining. This equates to 435 million tons of PCC-grade aggregate resources lost.
- Since the 1984 designation of PCC-grade aggregate resources in the San Gabriel Valley P-C Region, 435 million tons of aggregate resources underlying 1,234 designated acres have been lost to urban development and land filling, and another 406 million tons of aggregate resources have been depleted due to aggregate mining. This has reduced the designated PCC-grade aggregate resources by about 35 percent, from 2,402 million tons to 1,561 million tons.
- Four additional aggregate resource areas totaling 281 acres and containing 311 million tons of aggregate resources have been identified during the updating of this P-C Region.

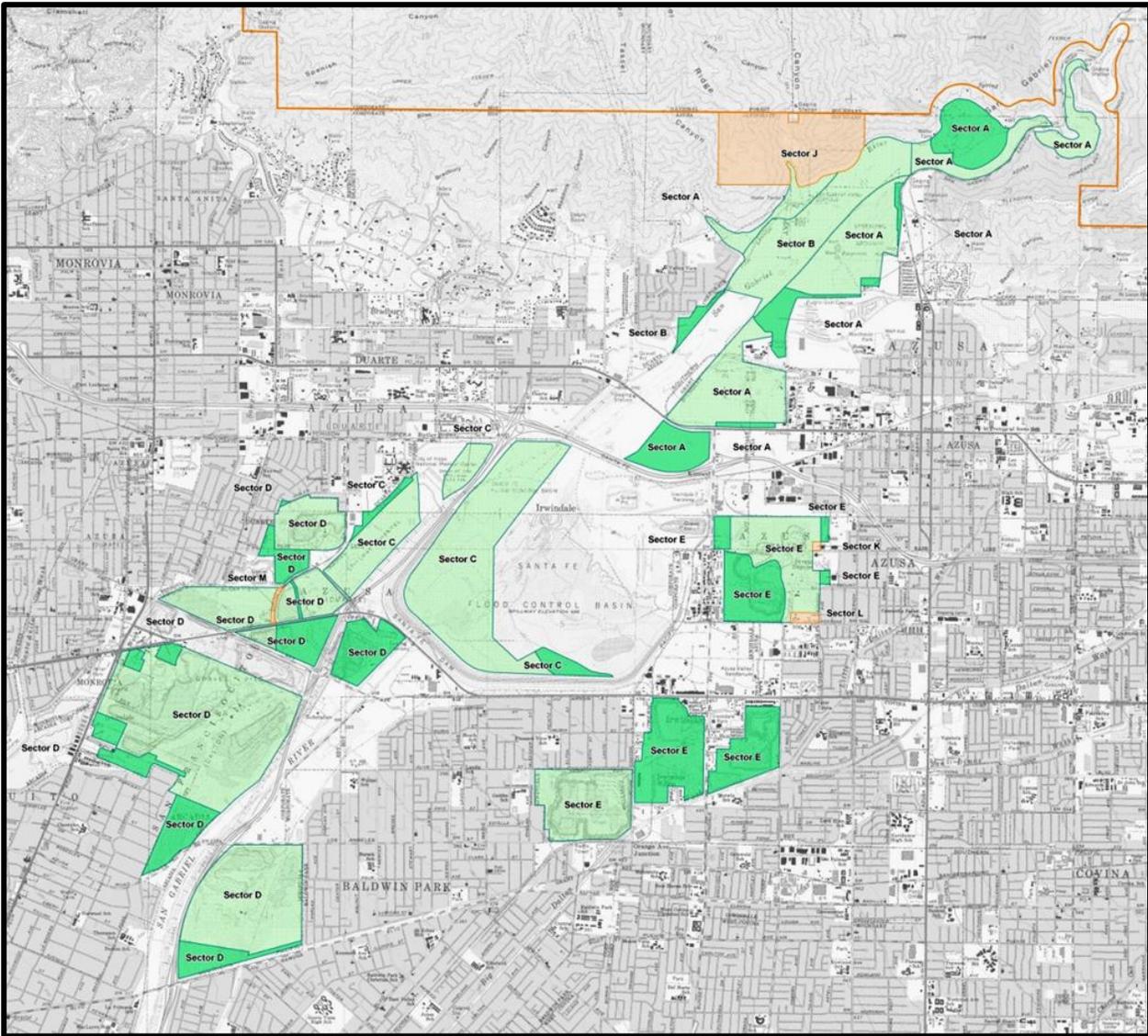


Figure 13a. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption (P-C) Region.

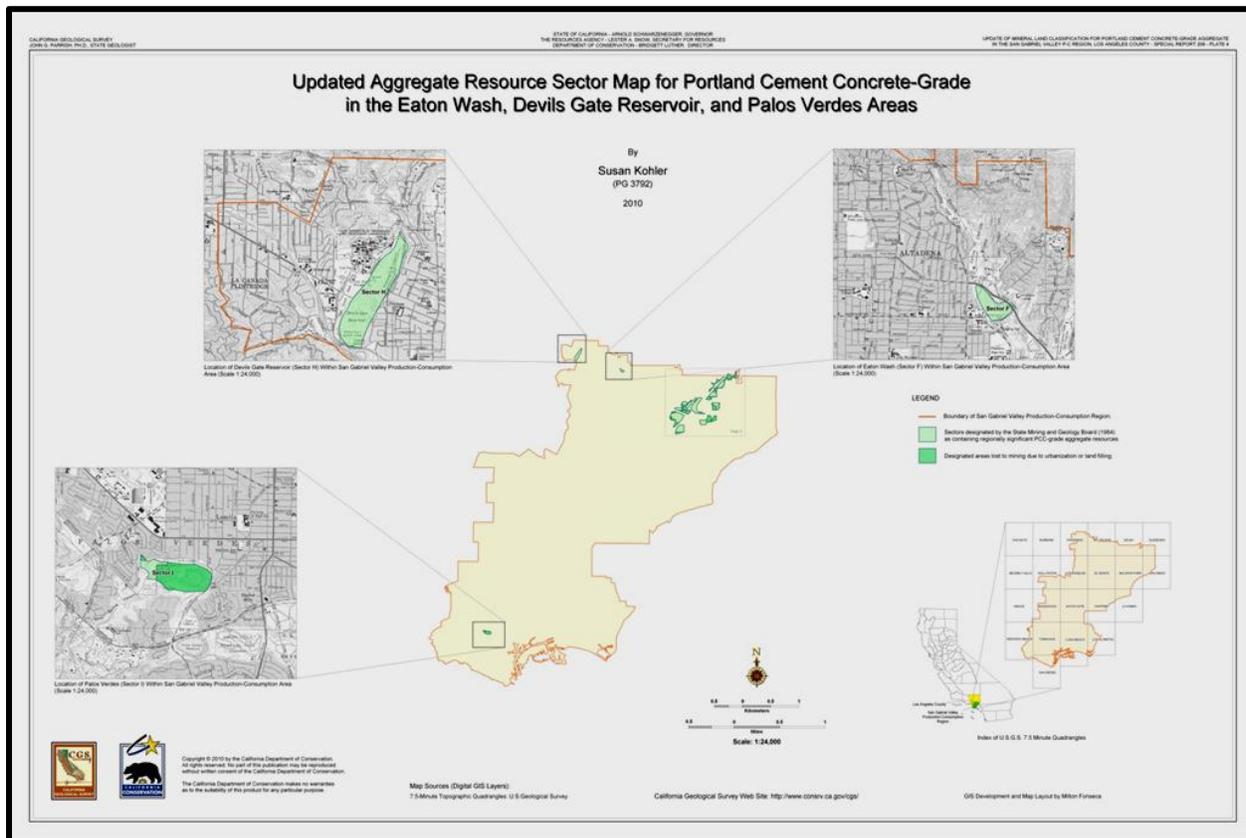


Figure 13b. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption (P-C) Region.

Designation

Designation is the process by which the SMGB, based on analyses by the State Geologist and the CGS, information gathered from local communities, the mining industry, and other government agencies such as the Governor's Office of Planning and Research, determines that a particular mineral classified deposit is of regional (multi-community) or statewide economic significance. In contrast to Classification, which inventories mineral deposits without regard to existing land use, the purpose of Designation is to identify those areas that are of prime importance in meeting the future needs of the study region and that remain available from a land use perspective.

Designation is the State's effort to conserve mineral resources in regions of expected rapid urbanization or other land uses that might prevent surface mining activities, and therefore result in a loss of the mineral resource to the community. To avoid dictating to local communities where future aggregate mines should be located, mineral designated areas generally contain resources (un-permitted deposits) that are far in excess of the region's 50-year demand. This attempts to provide maximum flexibility to local governments in making land use decisions, while still conserving an adequate amount of construction aggregate for the future.

Prior to 1991, the SMGB designated 15 areas within the State, encompassing 259,585 acres, as having regionally significant economic mineral resources. Designation ceased when the costs of complying with the requirements of the California Environmental Quality Act (CEQA) became prohibitive, and agency budgets were being reduced because of the "California

economic recession” of the early 1990’s. Since that time, no additional areas have received mineral Designation status from the SMGB.

Proposed Designation of Mineral Lands, Bakersfield Production-Consumption Region: At its October 8, 2009, regular business meeting, the State Mining and Geology Board (SMGB) accepted California Geological Survey (CGS) Special Report 210 for Update of Mineral Land Classification, Aggregate Materials in the Bakersfield Production-Consumption Region, Kern County, California. Consideration of designation of mineral lands typically follows classification. The SMGB, based on recommendations from the State Geologist, considers areas to be designated. The State Geologist recommended designation of select mineral resource lands in the Bakersfield’s Production-Consumption (P-C) Region, Kern County. The proposed regulatory language would allow consideration of new information obtained since the publication of the 1988 Mineral Land Classification study. Special Report 147 identified 19,491 acres of land containing approximately 5.3 billion tons of PCC-grade aggregate resources. The reevaluation and update in Special Report 210 identified 20,193 acres of land containing an estimated 4.4 billion tons of PCC-grade aggregate resources; this includes an additional 2,456 acres of newly identified land containing an estimated 442 million tons of PCC-grade resources in areas adjacent to the Bakersfield P-C Region (Sectors I, J and K). The areas are identified as Candidate Sectors A through K (in 62 individual sectors and sub-sectors).

The State Geologist’s recommendations were accepted by the SMGB at its regular business meeting held on November 12, 2009. A hearing to receive public comment was held on July 29, 2010. No comments were received. At its June 9, 2011, regular business meeting, the SMGB adopted its proposed new regulatory language for designation of mineral resources areas of statewide or regional significance for the Bakersfield Production-Consumption Region, County of Kern, California.

The candidate areas for designation are shown on Figures 14a and 14b (referred to Plates 1 and 2 in the classification report): Plate 1, *Candidate Areas for Designation in the Bakersfield Production-Consumption (P-C) Region, Kern County California, Northern Area*; and Plate 2, *Candidate Areas for Designation in the Bakersfield Production-Consumption (P-C) Region, Kern County California, Southern Area*. A description of each candidate Sector is given below and summarized on Table 10.

California Geological Survey Candidate Areas for Designation in Bakersfield Production-Consumption (P-C) Region, Kern County, California, Northern Area

By
Lawrence L. Branch (PG 6440)
2009

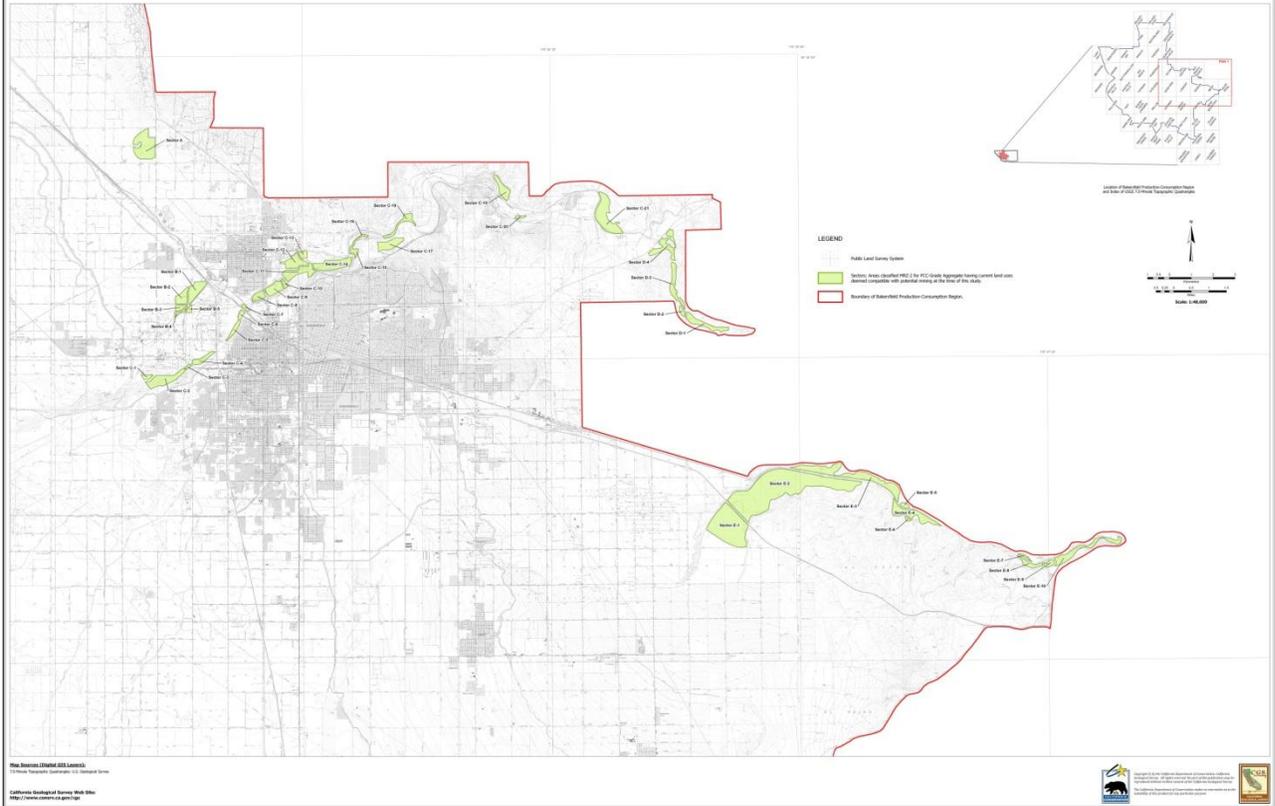


Figure 14a. Plate 1 showing regionally significant construction aggregate resource areas for the Bakersfield (P-C) Region.

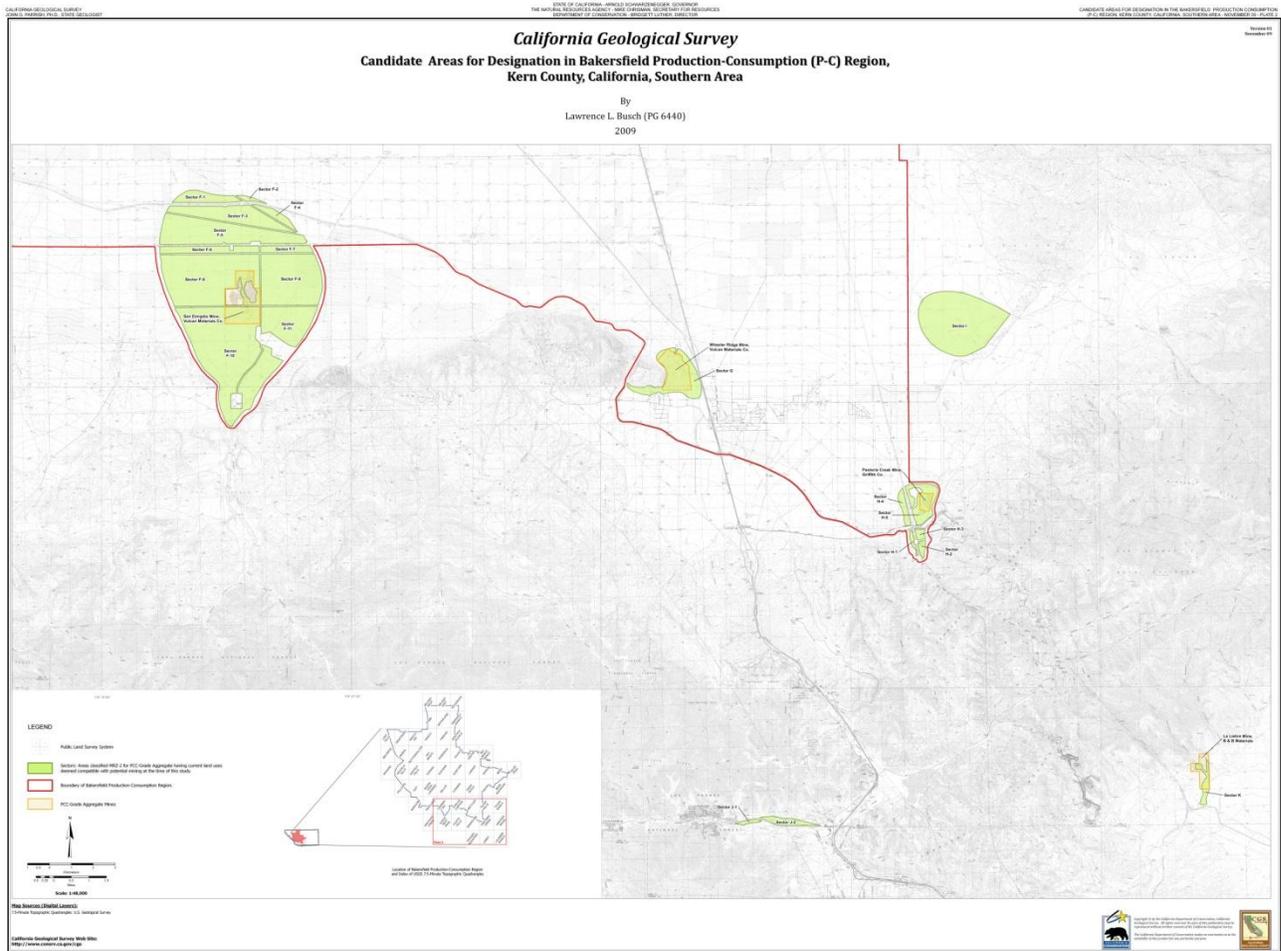


Figure 14b. Plate 2 showing regionally significant construction aggregate resource areas for the Bakersfield (P-C) Region.

Table 10
Tabulated List of Candidate Sectors

Sector	Acres	Location	Lead Agency
A	247	Sections 28 and 29, T28S, R27E, MDBM. North of Bakersfield, west of State Route 65, south of James Rd.	Kern County
B-1	108	Sections 14 and 15, T29S, R27E, MDBM. Northwest of Bakersfield, north of State Route 58 and west of Highway 99.	City of Bakersfield, Kern County
B-2	70	Section 15, T29S, R27E, MDBM. West of Highway 99 and north of State Route 58.	City of Bakersfield
B-3	24	Section 22, T29S, R27E, MDBM. West of Highway 99 and north of State Route 58.	City of Bakersfield
B-4	14	Section 22, T29S, R27E, MDBM. West of Highway 99 and north of State Route 58.	City of Bakersfield
B-5	15	Section 22, T29S, R27E, MDBM. West of Highway 99 and north of State Route 58.	Kern County
C-1	20	Sections 33, T29S, R27E, MDBM. North of Kern River. West of Highway 99 and south of State Route 58.	City of Bakersfield

Sector	Acres	Location	Lead Agency
C-2	149	Sections 27, 33 and 34, T29S, R27E, MDBM. Kern River. West of Highway 99 and south of State Route 58.	City of Bakersfield
C-3	8	Sections 27, T29S, R27E, MDBM. Kern River. West of Highway 99 and south of State Route 58.	City of Bakersfield
C-4	51	Sections 26 and 27, T29S, R27E, MDBM. Kern River. West of Highway 99 and south of State Route 58.	City of Bakersfield
C-5	36	Sections 23, 24 and 26, T29S, R27E, MDBM. Kern River. East of Highway 99 and west of State Route 204.	City of Bakersfield
C-6	18	Section 24, T29S, R27E, MDBM. Kern River. East of Highway 99 and west of State Route 204.	City of Bakersfield
C-7	14	Sections 13 and 24, T29S, R27E, MDBM. Kern River. East of State Route 204 and west of Chester Ave.	City of Bakersfield
C-8	46	Sections 13, T29S, R27E, MDBM, and Section 18, T29S, R28E, MDBM Kern River. East of State Route 204 and west of Chester Ave.	City of Bakersfield
C-9	85	Section 18, T29S, R28E, MDBM. Kern River. East of Chester Avenue and west of Manor St.	City of Bakersfield
C-10	15	Section 18 T29S, R28E MDBM. Kern River. East of Chester Avenue and west of Manor St.	City of Bakersfield
C-11	124	Sections 8, 17 and 18, T29S, R28E, MDBM. Kern River. East of Manor St.	City of Bakersfield, Kern County
C-12	104	Section 7 and 8, T29S, R28E, MDBM. North of Kern River. East of Manor St.	Kern County
C-13	26	Section 8, T29S, R28E, MDBM. North of Kern River. East of Manor St.	Kern County
C-14	163	Sections 8, 9, 16 and 17, T29S, R28E, MDBM. Kern River. East of Manor St.	City of Bakersfield, Kern County
C-15	32	Section 9, T29S, R28E, MDBM. Kern River. East of Manor St.	City of Bakersfield, Kern County
C-16	12	Section 9, T29S, R28E, MDBM. Kern River. West of China Grade Bridge.	City of Bakersfield
C-17	101	Section 10, T29S, R28E, MDBM. South of Kern River. North of Alfred Harrell Highway.	Kern County
C-18	70	Sections 2, 3 and 10, T29S, R28E, MDBM. Kern River. South of Round Mountain Rd.	City of Bakersfield, Kern County
C-19	80	Sections 36, T28S, R28E, MDBM, Section 31, T28S, R29E, MDBM, and Section 6, T29S, R29E, MDBM. Northeast of Kern River. East of Hart Memorial Park.	Kern County
C-20	11	Section 5, T29S, R29E, MDBM. South of Kern River. North of Alfred Harrell Highway.	Kern County
C-21	253	Sections 33 and 34, T28S, R29E, MDBM, and Sections 2, 3, 10 and 11, T29S, R29E, MDBM. North of Kern River. East of Kern River Golf Course.	City of Bakersfield, Kern County
D-1	105	Sections 19 and 20, T29S, R30E, MDBM. Cottonwood Creek. South of Breckenridge Road.	Kern County
D-2	19	Section 24, T29S, R29E, MDBM. Cottonwood Creek. South of Breckenridge Road.	Kern County
D-3	101	Sections 12, 13 and 24, T29S, R29E, MDBM. Cottonwood Creek. South of State Route 178.	City of Bakersfield, Kern County
D-4	131	Sections 1, 11 and 12, T29S, R29E, MDBM.	City of Bakersfield

Sector	Acres	Location	Lead Agency
		Cottonwood Creek. South of State Route 178, north of Breckenridge Road.	
E-1	572	Sections 17, 18, 19 and 20, T30S, R30E, MDBM. Caliente Creek. South of State Route 58.	Kern County
E-2	1330	Sections 9, 10, 14, 15, 16, 17, 20 and 21, T30S, R30E, MDBM. Projected – Rancho El Tejon. Caliente Creek, north of State Route 58.	Kern County
E-3	357	Sections 9, 10, 11, 12, 13 and 14, T30S, R30E, MDBM. Projected – in Rancho El Tejon. Caliente Creek, north of Bena Road.	Kern County
E-4	171	Sections 13 and 24, T30S, R30E, MDBM, and Sections 18, 19 and 20, T30S, R31E, MDBM. Projected – in Rancho El Tejon. Caliente Creek, north of Bena Road.	Kern County
E-5	18	Sections 13, T30S, R30E, MDBM, and Section 18, T30S, R31E, MDBM. Projected – in Rancho El Tejon. Caliente Creek, north of Bena Road.	Kern County
E-6	8	Section 19, T30S, R31E, MDBM. Projected – in Rancho El Tejon. Caliente Creek south of Bena Road.	Kern County
E-7	11	Section 27, T30S, R31E, MDBM. Caliente Creek west of Caliente.	Kern County
E-8	45	Section 27, T30S, R31E, MDBM. Caliente Creek west of Caliente.	Kern County
E-9	24	Section 26, T30S, R31E, MDBM. Caliente Creek south of Caliente.	Kern County
E-10	149	Sections 24, 25 and 26, T30S, R31E, MDBM, and Section 19, T30S, R32E, MDBM. Caliente Creek east of Caliente.	Kern County
F-1	289	Sections 34, 35, and 36, T12N, R22W, SBBM, and Sections 1, 2 and 3, T11N, R22W, SBBM. San Emigdio Creek. North of California Aqueduct.	Kern County
F-2	44	Section 36, T12N, R22W, SBBM, Section 6, T11N, R21W, SBBM, and Section 1, T11N, R22W, SBBM. San Emigdio Creek. North of California Aqueduct.	Kern County
F-3	782	Sections 1, 2 and 3, T11N, R22W, SBBM, and Section 5 and 6, T11N, R21W, SBBM. San Emigdio Creek. South of California Aqueduct, north of State Route 166.	Kern County
F-4	142	Sections 1, T11N, R22W, SBBM, and Sections 5 and 6, T11N, R21W, SBBM. San Emigdio Creek. South of California Aqueduct, north of State Route 166.	Kern County
F-5	1,468	Sections 1, 2, 3, 10, 11 and 12, T11N, R22W, SBBM and Sections 5, 6, 7 and 8, T11N, R21W, SBBM. San Emigdio Creek. South of California Aqueduct, north of State Route 166.	Kern County
F-6	347	Sections 10, 11 and 12, T11N, R22W, SBBM. San Emigdio Creek. South of State Route 166.	Kern County
F-7	183	Sections 7 and 8, T11N, R21W, SBBM. San Emigdio Creek. South of State Route 166.	Kern County
F-8	2,254	Sections 10, 11, 12, 13, 14 and 15, T11N, R22W, SBBM. San Emigdio Creek. South of State Route 166.	Kern County
F-9	1,566	Sections 7, 8, 17 and 18, T11N, R21W, SBBM. San Emigdio Creek. South of State Route 166.	Kern County
F-10	3,356	Sections 22, 23, 24, 25, 26, 35 and 36, T11N, R22W SBBM, Sections 30 and 31, T11N, R21W, SBBM and Sections 1 and 2 T10N, R22W SBBM. San Emigdio Creek. South of State Route 166.	Kern County
F-11	840	Sections 19, 20, 29 and 30, T11N, R21W, SBBM. San Emigdio Creek. South of State Route 166.	Kern County
G	882	Sections 25, 35, 36, T11N, R20W, SBBM, and	Kern County

Sector	Acres	Location	Lead Agency
		Sections 30 and 31 T11N, R19W SBBM. Wheeler Ridge. West of Highways I-5 and 99.	
H-1	35	Sections 18 and 19, T10N, R18W, SBBM. Projected – in Rancho El Tejon. Pastoria Creek, south of California Aqueduct and Edmonston Pumping Plant Road.	Kern County
H-2	48	Section 19, T10N, R18W, SBBM Projected – in Rancho El Tejon. Pastoria Creek, south of California Aqueduct and Edmonston Pumping Plant Road.	Kern County
H-3	47	Sections 18 and 19, T10N, R18W, SBBM, Projected – in Rancho El Tejon. Pastoria Creek, south of California Aqueduct and Edmonston Pumping Plant Road.	Kern County
H-4	108	Sections 12 and 13 T10N, R19W, SBBM, and Section 18, T10N, R18W, SBBM. Projected – in Rancho El Tejon. Pastoria Creek, north of California Aqueduct and Edmonston Pumping Plant Road.	Kern County
H-5	409	Sections 12 and 13, T10N, R19W, SBBM, and Sections 7 and 18, T10N, R18W, SBBM. Projected – in Rancho El Tejon. Pastoria Creek, north of California Aqueduct and Edmonston Pumping Plant Road.	Kern County
I	2,151	Sections 16, 17, 18, 19, 20, 21, 28, 29 and 30, T11N R18W, SBBM. El Paso Creek. East of Rancho Drive, south of Sebastian Road.	Kern County
J-1	35	Sections 31 and 32, T9N, R19W, SBBM. Cuddy Creek. East of Frazier Park, south of Frazier Mountain Park Road, west of Highway I-5.	Kern County
J-2	145	Sections 32 and 33, T9N, R19W, SBBM. Cuddy Creek. East of Frazier Park, north of Frazier Mountain Park Road, west of Highway I-5.	Kern County
K	125	Sections 29 and 32, T9N, R17W, SBBM. La Liebre Ranch, Little Sycamore Canyon.	Kern County

ROLES OF THE OFFICE OF MINE RECLAMATION (OMR)

In 1991 the Department of Conservation (Department) created the Office of Mine Reclamation (OMR) to administer the provisions of SMARA for the Department. OMR is divided into three units: the Reclamation Unit, the Reporting, Compliance, and Review Unit and the Abandoned Mine Lands Unit. The core operations of OMR are to:

- Provide expert technical review and comment on reclamation plans and plan amendments submitted by a lead agency prior to the lead agency's approval of the plan;
- Review and comment on financial assurance estimates for reclamation plans and plan amendments;
- Assist and advise surface mine operators regarding SMARA compliance issues;
- Assist lead agencies by providing training and advice on administering and enforcing SMARA;
- Review and process annual reports and fees supporting the SMARA program; and
- Recommend to the Director enforcement actions against surface mine operators who do not comply with SMARA.

OMR's Reclamation Unit reviews reclamation plans and plan amendments submitted by lead agencies. This unit also assists individual mine operators and lead agencies with reclamation questions, and conducts on-site inspections of new surface mine sites and of existing sites when reclamation plan amendments are proposed. OMR's Reclamation Unit conducts training workshops throughout the State for lead agency personnel and industry regarding the content of SMARA and the SMGB's reclamation regulations. Each year, OMR conducts several of these workshops.

OMR's Reporting, Compliance, and Review Unit (RCRU) is responsible for the review and processing of annual reports and collection of mining fees; the enforcement of SMARA statutes and regulations for both lead agencies and mine operations; and audits of each lead agency for performance of their individual SMARA programs.

Annual Mine Reporting

PRC Section 2207 [AB 3551 (Sher, Chapter 1097, Statutes of 1990), AB 3903 (Sher, Chapter 1101, Statutes of 1990); AB 1506 (Sher, Chapter 845, Statutes of 1991); SB 649 (Kuehl, Chapter 794, Statutes of 2003); SB 1110 (Kuehl, Chapter 383, Statutes of 2005)] provides requirements for filing annual reports and reporting fees by each mine. These annual reports are filed on forms approved by the SMGB, and furnished as a courtesy by OMR. Annual reporting fees and a method for collecting those annual fees from each active surface mining operation are also imposed by the SMGB. By July 1, 1991, surface mine operators were required to file an annual report and pay fees to the Department for operations conducted during calendar year 1990.

Annual reports are required from all mines subject to SMARA from the time they are permitted until they are certified reclaimed, even if they have not begun operation or have ceased operation with no intent to resume and performing reclamation activities. As a courtesy, OMR mails annual report forms to each reporting mining operation during May of each year. Reports must be postmarked on or before July 1 of that year. Annual reporting forms were last revised and implemented in 2007.

When surface mine operators do not provide reports, fees, reclamation plans and financial assurances as required by SMARA (and PRC Section 2207), this unit notifies the operator and the responsible lead agency of the operator's lack of compliance. A request is made of the local jurisdiction to take corrective action. If the operator fails to comply, and the lead agency takes no further action, the RCRU recommends enforcement action to the Director.

The number of reporting mines per year since 1990 is shown in Table 11. Because annual reports are filed with OMR by July 1 for the previous calendar year, the number of reporting mines is not available for calendar year 2011 at the time this report was prepared. The figures for the 2010 reports are as of the date of publication, and do not reflect all mines that will eventually report and pay fees for the year.

OMR's Reporting section of RCRU is responsible for the review and processing of annual reports and mining fees. In 2011 this unit processed 1,230 annual reports filed for calendar year 2010. In addition, mine fees in the amount of \$4,173,834.00 were authorized for collection to run the Department and SMGB's SMARA programs; whereas, \$3,320,550.84 has been collected to date for the 2011/12 fiscal year.

Table 11 Summary of Number of Reporting Mines from 1990 through 2011	
Reporting Year	Number of Mines
1990	856
1991	1,079
1992	1,154
1993	1,185
1994	1,274
1995	1,290
1996	1,332
1997	1,326
1998	1,470
1999	1,348
2000	1,444
2001	1,424
2002	1,412
2003	1,385
2004	1,359
2005	1,365
2006	1,346
2007	1,333
2008	1,224
2009	1,070
2010	1,230

STATE MINING AND GEOLOGY BOARD'S AUTHORITY UNDER SMARA

Under SMARA, the SMGB has authority to act on the following items:

- Review and certify lead agency surface mining ordinances;
- Review certain orders of the DOC Director before they become effective;
- Assume local lead agency authority for administering and enforcing SMARA under specified circumstances;
- Adjudicate appeals from individuals and mine operators for specific lead agency actions;
- Adjudicate appeals of Administrative Penalties issued by the Director;
- Exempt from the requirements of SMARA specific surface mining operations; and
- Make regulations implementing the statutes.

SMARA Lead Agencies

California is the only State in the conterminous United States where surface mine reclamation is not regulated primarily at the State level. Most states also maintain permitting authority when it comes to mining regulation; whereas, in California permitting authority is decided at the local level. SMARA, pursuant to PRC Section 2728, defines a lead agency as a city, county, San Francisco Bay Conservation and Development Commission (BCDC), or the SMGB which has the principal responsibility for approving a surface mining operation or reclamation plan. Under SMARA, there are currently 109 lead agencies: 57 counties, 50 cities, and the SMGB.

The 57 counties that serve as lead agencies contain from 4 to 117 mine sites within their jurisdiction, and average about 27 mine sites per county. The 50 cities that serve as lead agencies contain from 1 to 35 mine sites within their jurisdiction, and average about 3 mine sites per city. As a lead agency, the SMGB has assumed SMARA authority from three counties (El Dorado County, Yuba County and Alpine County), 10 cities that have not adopted mining ordinances, and 12 BCDC sites.

Specific duties of lead agencies which are charged with the primary administration and enforcement of SMARA are to:

- Review and approve reclamation plans that meet the minimum requirements established by SMARA and the SMGB's reclamation performance standards (regulations) for surface mines;
- Approve financial assurances, subject to review annually, that are sufficient to pay for the costs of full reclamation of the lands disturbed by surface mining operations according to the requirements of the approved reclamation plan;
- Approve local permits for mining operations;
- Conduct an annual inspection of each surface mine to confirm that the operation is in compliance with the requirements of SMARA, and to remedy the situation if the operation is not in compliance;
- Issue Administrative Penalties to operators who do not come into compliance;
- Close operations that do not attain compliance;
- Maintain a surface mining ordinance that is in accordance with SMARA;
- Incorporate Mineral Resource Management Policies (MRMP) into their General Plans if there are mineral "classified" or mineral "designated" lands within the lead agency's jurisdiction.

Some SMARA lead agencies are diligent in their reviews and approvals of reclamation plans and financial assurances in accordance with SMARA and the SMGB's regulations; whereas others, for a variety of reasons, are less able to perform adequate reviews of reclamation plans and rely extensively on OMR's technical review comments. Lead agencies must review

financial assurances annually and require adjustments to the financial assurance amounts to cover any changes to the costs of reclamation. This financial assurance review should be accomplished during the mandatory annual inspection process. Following the field inspection, the lead agency shall require a recalculation of the required financial assurance amount to adjust for changes in the amount of newly disturbed land and anticipated disturbed lands over the next year, reclaimed land, and economic inflation.

As noted above, since 2002, the SMGB has exercised its assumption of lead agency authority for three counties, and by default 10 cities, and 12 marine dredging operations. In September 2006 the SMGB performed a review of overall SMARA lead agency performance using the DOC SMARA database (SMGB Information Report 2007-01). This evaluation assessed the lead agency's performance of periodic mine inspections, adjustment of annual financial assurances and enforcement of the preparation of Interim Management Plans (IMP) should a surface mine site be characterized as idle for a period exceeding one year. Based on this review, the overall performance of SMARA lead agencies throughout California varies significantly. For the most part, overall performance was deemed poor, reflecting a number of factors, including primarily financial constraints, and limited or absent technical expertise.

During the 2010-2011 reporting period, the SMGB reviewed the SMARA programs for the County of Santa Clara, and considered assumption of County of Sierra and the City of Lake Elsinore. In addition, in 2007, the Department of Conservation, Office of Mine Reclamation (OMR) established the Lead Agency Review Team (LART). The LART completed its Lead Agency Review Report for the County of Alpine (County), and provided a summary to the SMGB of its audit of the County's Surface Mining and Reclamation Act (SMARA) program to the SMGB at its December 9, 2010, regular business meeting. The SMGB upon receiving the LART report directed the Executive Officer to prepare a 45-Day Notice to Correct Deficiencies for the SMGB's consideration at its next scheduled meeting. The County indicated that it would forfeit its SMARA lead agency responsibilities and obligations to the SMGB, with exception to permitting, assuming that an agreement could be reached to allow a mechanism for the transfer of their SMARA lead agency role.

At its June 9, 2011, regular business meeting, the a Memorandum of Understanding was entered into by and between the SMGB and the County of Alpine, through its County Board of Supervisors, for the purposes of:

- (1) Assuring that the adverse environmental effects of mining are minimized or eliminated and that surface mining operations throughout the County are reclaimed to a beneficial end use;
- (2) Ensuring that effective administration of surface mining and reclamation requirements for surface mining operations within the jurisdiction of the County to which both federal rules and California's Surface Mining and Reclamation Act (Public Resources Code section 2710 et seq., hereinafter referred to as SMARA) will continue within the County;
- (3) Achieving coordination between the County and the SMGB in administering rules governing surface mining, surface mine inspections, financial assurances, and reclamation; and
- (4) Eliminating unnecessary duplication, wherever possible, between the County and the SMGB in implementing state and federal requirements.

- (5) Avoiding the necessity of administrative proceedings that otherwise might be required pursuant to Public Resources Code section 2774.4(a) to provide for SMGB's assumption of lead agency authority in the County.

A signed copy of the MOU, dated June 7, 2011, is provided in Appendix B.

SMARA Lead Agency Designation

Pursuant to SMARA, whenever a proposed or existing surface mining operation is within the jurisdiction of two or more public agencies, is a permitted use within the agencies, and is not separated by a natural or manmade barrier coinciding with the boundary of the agencies, the evaluation of the proposed or existing operation shall be made by the lead agency. Should a question arise regarding which public agency serves as the SMARA lead agency, the SMGB shall designate which public agency will serve as the SMARA lead agency. During the reporting period the SMGB considered making such a determination at the request of the OMR.

The McLaughlin Mine is located within Lake, Napa and Yolo Counties (Figure 15), and is comprised of the following facilities:

- Lake County: Mill and tailings impoundment facility (TIF);
- Napa County: Eighty percent of the pit lakes and waste rock disposal units;
and
- Yolo County: Davis Creek Reservoir and twenty percent of the mine pit lakes.

Essentially, the reclamation footprint encompasses approximately 1,566 acres: Napa County (761 acres), Lake County (540 acres), and Yolo County (255 acres). All three lead agencies implemented permits for select surface mining activities within their respective jurisdiction.



Figure15. Aerial image of the McLaughlin Mine and vicinity, Napa, Lake and Yolo Counties.

Based on discussions held with representatives of Napa, Lake and Yolo Counties, the SMGB, on May 10, 2010, received a request from the OMR to make a determination of lead agency jurisdiction pursuant to SMARA. On May 28, 2010, OMR and the SMGB received a letter from Napa County clarifying that “OMR’s records are correct, Napa County is the Lead Agency of the McLaughlin Mine...” Similarly, on June 3, 2010, OMR and the SMGB received a letter from Lake County (copy attached) explaining that “OMR’s records are correct, in that Napa is the Lead Agency of the McLaughlin Mine facility and will continue to carry out their role and responsibilities under the Surface Mining and Reclamation Act, including those associated with the facilities proposed reclamation plan amendment.” Also, on June 3, 2010, OMR and the SMGB received a letter from Yolo County (copy attached) explaining that “...will continue to carry out our appropriate roles and responsibilities under the Surface Mining and Reclamation Act.”

PRC Section 2728 defines lead agency as the county which has the principal responsibility for approving a reclamation plan pursuant to SMARA. The need for determination of one lead agency for the McLaughlin Mine is further exemplified in the sporadic inspection reporting activities conducted by each of the three Counties involved. A lead agency under SMARA is responsible for the issuance of a permit to mine or Conditional Use Permit for the entire surface

mining operation. The SMGB is being requested by OMR to designate the public agency which shall serve as the lead agency. In considering this matter, the SMGB must give due consideration to 1) the capability of the agency to fulfill adequately the requirements of this chapter, and 2) to an examination of which of the public agencies has principal permit responsibility.

In regards to which of the public agencies has principal permit responsibility is uncertain. Based on information presented in the Environmental Impact Report/Environmental Impact Statement, dated June 1983, Volume 1, there was not one agency that issued a permit to mine. Conditional use permits were issued by all three counties for select surface mining activities within their respective jurisdictions, along with permits being issued by other state and public agencies. It is clear from Figure 15 that most of the actual mining occurred in County of Napa, with a small amount of overlap into Yolo County. In summary, no one agency, or county, accepted responsibility for issuance of a permit to mine for the entire surface mining operation, or conducted mine inspections at least one each calendar year.

It is clear from historical records that Napa County was the lead agency for CEQA when the mine was permitted and in several subsequent amendments to the reclamation plan. However, Lake County adopted a Mitigated Negative Declaration in approving the recent amendment allowing the TIF to be reclaimed to a "containment zone." Lake County inspection reports cover only facilities in Lake County, including the TIF.

The County of Napa has, in its correspondence dated May 28, 2010, requested that it "*continue to carry out our role and responsibilities under the Surface Mining and Reclamation Act, including those associated with the facilities proposed Reclamation Plan amendment.*" Lake County in their correspondence dated June 3, 2010, concurs that "...Napa County *is the lead agency for the McLaughlin Mine...*" There remains no readily apparent reason why the County of Napa cannot fulfill this role. As a lead agency, it is clear from the historical record that all three counties independently performed mine inspections at different times. However, only Napa County inspections were comprehensive of the entire mine site.

Absence of Clarity: An absence of clarity exist as to which county is the SMARA lead agency for the McLaughlin Mine, as noted by 1) inconsistent inspection reporting by each of the counties, 2) conflicting correspondence from the three counties, and 3) attempts by Lake County to amend the reclamation plan that was originally approved and amended by Napa County. The lead agency has responsibility for implementation of SMARA, and the law states that there can be only one lead agency. Because the mine is in the post-mining reclamation phase and facing difficult reclamation challenges, it is imperative that the lead agency with responsibility for implementation of the reclamation plan be unmistakably clear. Thus, OMR has requested that the SMGB make a determination regarding lead agency jurisdiction for the site. The requested determination is critical to ensure that the intent of SMARA as this site undergoes reclamation, which relies on the fundamental idea that there is only one reclamation plan and one lead agency for each surface mining operation, is upheld.

One Surface Mining Operation – One Reclamation Plan: SMARA requires that a reclamation plan be developed that describes how all areas disturbed by surface mining operations will be reclaimed to a beneficial end use. A single comprehensive reclamation plan was approved for the McLaughlin Mine in 1983. Subsequently, the SMGB adopted regulations that state that each surface mining operation shall have no more than one approved reclamation plan applicable to that operation. An exception is allowed when a single surface mining operation has separate facilities located within different lead agency jurisdictions, and where these facilities are separated by a distinct and significant physical boundary such as a major highway, stream channel, or the like. No distinct and significant physical boundary exists between the TIF and the area where

excavation and waste disposal occurred. In fact, during the mining phase, both were connected by a slurry pipeline and a road to allow daily access to both.

The statute clearly states that there can be only one lead agency who is responsible for implementing SMARA. Napa, Lake, and Yolo Counties coordinated in approving a reclamation plan for McLaughlin Mine. Napa County has amended the reclamation plan, several times, which is consistent with its role as the lead agency. Lake County has approved an amendment for reclamation of the TIF; however, approving an amendment for reclaiming the TIF is different from amending the approved reclamation plan. Only the lead agency has the authority to approve an amended reclamation plan for the mine.

It is imperative that there be clarity regarding who is the SMARA lead agency for McLaughlin Mine. Substantial reclamation challenges remain. According to OMR's records, the current reclamation plan covers over 1400 acres and the financial assurance amount is \$15,061,491.

Designation of SMARA Lead Agency: Designation of a single lead agency, which takes place after there may have been uncertainty in that regard with respect to this operation, raised some question whether that decision will impact SMARA-governed actions taken by the operator in the past, and in reliance on approvals provided by entities other than that lead agency. It is important to note that no such conduct is presented to the SMGB at this point, so this analysis will provide only general principles which would guide consideration of same should that come up.

The starting point for reviewing past operator behavior relies on well-established concepts governing vested rights. The primary rule to understand is that government behavior must abide by constitutional limitations affecting property, while still being free to ensure the public health and welfare. More specifically, where a private entity has, in good faith relied on a governmental approval, and expended significant funds in proceeding along the terms of that approval, the government will face serious obstacles in the event it seeks to revoke, reverse or substantially modify that approval, should that proposed action cause material financial loss to the private entity.

The foregoing basic concept is fraught with modifying aspects that are largely fact-dependent. Thus, it is impossible, and is not attempted herein, to predict the outcome of any analysis of a situation before the circumstances are fully articulated. For example, the notion of "good faith reliance" is critically important to determining whether a private entity's conduct can even begin to qualify as rising to vested stature. Moreover, there are powerful reasons why government's ability to protect the public welfare should be circumscribed only in the most narrow situations; the private actor is charged with knowledge of the law, and thus cannot be allowed to "snap up" a mistake of law made by a government employee acting beyond his or her capacity to approve a particular conduct.

Amendments to the Reclamation Plan: Under SMARA there can only be one lead agency, and so it is a legal impossible for there to be three lead agencies. The SMGB must designate a single SMARA lead agency. For example, should the SMGB designate the County of Napa to serve as the SMARA lead agency (or confirm that the County of Napa shall continue in this capacity), any amendment to the approved reclamation plan set forth by either Lake or Yolo County will need to eventually be approved by the County of Napa, and should such amendments be deemed substantial or changes that would substantially affect the approved end use of the site as established in the approved reclamation plan (CCR Section 3502(d), then an amended reclamation plan would need to be developed by the operator, and eventually approved by the County of Napa (i.e., amendments to the TIF could be considered and

approved by Lake County, but there can be no reasonable reliance on the Lake County approval under the circumstances, and thus, such amendment would also require consideration and approval by Napa County). Once the lead agency has been designated, all changes to the reclamation plan must be approved by that lead agency. The SMGB would consider any changes to the TIF facilities to be unapproved by Lake County until subsequently approved by Napa County. There is no reasonable basis for the operator to have relied solely on approval by Lake County.

At its July 8, 2010, regular business meeting, the SMGB moved to not recognize a physical barrier between the Counties of Napa and Yolo, but recognized the existence of a physical barrier between Yolo and Lake Counties and between Lake and Napa Counties. The SMGB then moved to designate Napa County as the SMARA lead agency for that portion of the McLaughlin Mine that is situated within the jurisdiction of Yolo and Napa Counties, and to designate Lake County as the SMARA lead agency for that portion of the McLaughlin Mine that is situated within its jurisdiction. The decision to designate two SMARA lead agencies for the McLaughlin Mine was an administrative act, and in itself, would require that Napa County and Lake County provide an amended reclamation plan that simply reflects the SMGB's designation, a map showing the respective mine footprint for that portion of the mine site within each respective lead agency's jurisdiction, and adjustment of their respective financial assurances amount. The designations of two SMARA lead agencies for this mine would not be deemed a substantial deviation and/or require an amended reclamation plan. However, the designation of two SMARA lead agencies by the SMGB did not relieve the operator from fulfilling all other requirements of SMARA and the SMGB's regulations.

Enforcement Actions

Order to Comply Appeals

When the Director of the DOC issues an Order to Comply to a surface mine operator to bring its operations into compliance with the State mining law, SMARA provides that the Order does not become effective until it has been heard by the SMGB in public session. This constitutes an automatic appeal to the SMGB. No Order to Comply was issued by OMR during the 2010-2011 reporting period.

The SMGB when administering SMARA as a lead agency can also issue an Order to Comply, when appropriate for surface mining operations within its various jurisdictions. Two Orders to Comply were issued to the operators of the Big Cut Mine (CA Mine ID #91-09-00XX), Joseph and Yvette Hardesty and Rick Churches (Operators), County of El Dorado, for conduct of surface mining operations without a permit to mine issued by the County, and approved reclamation plan and financial assurance approved by the SMGB as lead agency. An Order to Comply was issued on November 10, 2010, and a public hearing was held by the SMGB on January 10, 2011. Another Order to Comply was issued by the SMGB to the same operator at its June 9, 2011, regular business meeting.

Administrative Penalties Appeals

No administrative penalties were issued to a surface mine operator by the DOC during the 2010-2011 reporting period, thus, no appeals were heard by the SMGB. However, the SMGB at its March 10, 2011, regular business meeting and in its capacity as a SMARA lead agency, issued an Administrative Penalty in the amount of \$100,000 to the operators of the Big Cut Mine (CA Mine ID #91-09-00XX), Joseph and Yvette Hardesty and Rick Churches (Operators), County of El Dorado, for conduct of surface mining operations without a permit to mine issued

by the County, and approved reclamation plan and financial assurance approved by the SMGB as lead agency.

SMARA Exemptions

It is recognized that not all surface mining operations are an efficient “fit” under SMARA, and that many projects of limited size, duration, economic and environmental impact would be prevented, delayed, or rendered uneconomic if the requirements of SMARA were fully applied. The SMGB may exempt from the requirements of SMARA surface mining operations that are of short duration and cause limited surface disturbance (PRC Section 2714(f)). During the 2010-2011 reporting period, two exemption requests were considered by the SMGB. Between July 1999 and June 2011, the SMGB heard twenty (22) such exemption requests. A summary of these exemption requests is provided in Table 12.

The Executive Officer can deny a one-time exemption request if, upon review, the request does not comply with the criteria set forth in PRC Section 2714(d). However, this matter can also be placed before the SMGB should 1) a request be made by one SMGB member; 2) the Executive Officer cannot come to a clear consensus; or 3) if controversy arises surrounding the request.

In cases when a request comes before the SMGB, the SMGB can grant a one-time exemption on a case-by-case basis. Before exemptions from the provisions of SMARA are granted, the SMGB, pursuant to SMGB Resolution No. 93-6, considers the following four criteria: compliance with the California Environmental Quality Act (CEQA), whether the proposed activity is permitted or otherwise authorized by a lead agency, whether the end use or proposed end use of property on which the activity is proposed to occur is defined, and whether there may be adverse impacts from the proposed operation on commercial activities.

Table 12 Summary of SMARA Exemption Requests From July 2000 to June 2011		
Date	City or County	Exemption Request
11/19/00	Fresno County	SMARA Exemption Request, Strahm Engineering, Gegunde Stock Pond, Fresno County
8/16/01	Yuba County	SMARA Exemption Request, Jon Messick, Yuba County
8/16/01	Lassen County	SMARA Exemption Request, Fitch Sand & Gravel, Lassen County
12/13/01	City of Red Bluff	SMARA Exemption Request, Ladd & Associates, Adobe Road-Interchange, City of Red Bluff
7/11/02	Yuba County	SMARA Exemption Request, Baldwin Contracting Company
11/14/02	Yuba County	SMARA Exemption Request Denial, Alice Sohrakoff, Yuba County
4/10/03	Kern County	SMARA Exemption Request, Cactus Mine, Kern County
5/23/03	Yuba County	SMARA Exemption Request, Baldwin Contracting, Yuba County
3/12/04	Kern County	SMARA Exemption Request, B&B Materials, Inc., Kern County

**Table 12 (Continued)
Summary of SMARA Exemption Requests
From July 2000 to June 2011**

Date	City or County	Exemption Request
6/10/04	Santa Barbara County	SMARA Exemption Request, Jeff & Shawn Montgomery, Montgomery Family Trust, Lambert Road, Carpinteria, County of Santa Barbara
7/23/04	Kern County	SMARA Exemption Request, Smeed Family Trust, Tehachapi, Kern County
03/13/08	Mendocino	SMARA Exemption Request, Willits Bypass, Mendocino County
04/09/09	Yuba County	SMARA Exemption Request, Three Rivers Levee Improvement Authority, Yuba County.
11/12/09	Sacramento County	Natomas Urban Development Borrow Site, Sacramento Area Flood Control Agency, Sacramento County.
03/11/10	Kern County	California Vision, Inc., Kern County.
04/15/10	Sacramento County	M & T Ranch, Sacramento County.
04/15/10	Tehama County	Ford Construction, Tehama County.
05/13/10	Imperial County	The California Energy Commission, Imperial County.
06/10/10	Tulare County	Tea Pot Dome Water District, Tulare County.
12/09/10	Ventura County	California State University Channel Islands (CSUCI)
02/10/11	Ventura County	Ojai Oil Company Project

California State University Channel Islands (CSUCI), County of Ventura: In correspondence dated November 29, 2010, Sespe Consulting, Inc., on behalf of the California State University Channel Islands (CSUCI), submitted a request for a one-time exemption from SMARA for the donation of approximately 100,000 cubic yards of riverbed alluvial material that was previously derived from flooding of the Broome Ranch by the Calleguas Creek twenty-years ago, and subsequently stockpiled on the ranch property. The owner of the Broome Ranch wishes to donate the material, with no financial compensation, to the California State University Channel Islands (CSUCI) for road construction purposes. The stockpiled material is located approximately three miles south of the location for a new entrance road for CSUCI, in the County of Ventura.

The project is not exempt from SMARA pursuant to PRC Section 2714(b), since the construction exemption applies to excavated material that is incident to a construction project. The proposed excavation is not exempt under PRC Section 2714(b) because:

1. The earth moving activities are not an integral and necessary part of a construction project;

2. The earth moving activities are not being undertaken to prepare the site for construction of structures, landscaping, or other land improvements associated with structures; and
3. As presented, the earthmoving activities constitute an offsite borrow pit to provide construction material for an off-site entrance road. Borrow pits are defined in California Code of Regulations (CCR) Section 3501 as “*Excavations created by the surface mining of rock, unconsolidated geologic deposits or soil to provide material (borrow) for fill elsewhere.*”

General threshold criteria triggering SMARA is discussed in PRC Section 2714(d), which indicates that SMARA does not apply to operations where “*Prospecting for, or the extraction of, minerals for commercial purposes where the removal of overburden or mineral product total less than 1,000 cubic yards in any one location, and the total surface area disturbed is less than one acre.*” In this case, the stockpiled material is deemed a borrow pit, and the removal of 100,000 cubic yards of material as a result of flooding of ranch property situated adjacent the Calleguas Creek twenty years ago is subject to SMARA, unless exempted by the SMGB pursuant to SMARA Section 2714(f).

It is recognized that not all surface mining operations are an efficient “fit” under SMARA, and that many projects of limited size, duration, economic and environmental impact would be prevented, delayed, or rendered uneconomic if the requirements of SMARA were fully applied. To address these special situations, SMARA provides the SMGB with authority under PRC Section 2714(f) to grant exemptions under specific conditions when the proposed activity is of an infrequent nature and involves only minor surface disturbance.

The proposed project 1) exceeds SMARA's minimum thresholds by disturbing more than one acre of land and 1,000 cubic yards of material for commercial purposes. However, one-time exemptions have been granted by the SMGB in the past in instances where such thresholds have been significantly exceeded, but not typically when materials being extracted for export and commercial gain.

Finding No. 1: An approved Environmental Impact Statement (EIS) was prepared for the CSUCI master plan in 1998. A Supplemental EIR was completed in 2000 to add the University Glen Development to the Master Plan. An Amended EIR was completed in 2004 for Site Plan modifications and the addition of the new entry road project.

Finding No. 2: CSUCI will obtain a Grading Permit from the Ventura County Resource Management Agency, Public Works Department to move the 100,000 cubic yards of material. No existing permits have been obtained as yet, pending a decision from the SMGB as to whether an exemption would be granted.

Finding No. 3: The end use of the property on which the stockpiles are located is defined as Agricultural on a private land owner's property. This project would not change the end use of the property and will continue to be compatible with the Ventura County Coastal Zoning Ordinance for Agricultural Property.

Finding No. 4: The Broome Ranch property owner was donating the stockpiled material to CSUCI. Mr. Broome will receive no compensation for the material being used for the road construction project. No additional information is available to indicate that such material is available, or not available, from other nearby sources.

The SMGB granted the exemption at its regular business meeting held on December 9, 2010.

Ojai Oil Company Project, County of Ventura: On November 24, 2010, the Ojai Oil Company submitted a request for a one-time exemption from SMARA for the removal of approximately 5,000 tons of large boulders currently comprising 12 stockpiles from the 50.82 acre oil field site located in the County of Ventura (Exhibit A). The boulders were derived from past farming related activities within a former river bed. An Agricultural Mining Permit issued in 2004, would have allowed removal of the rocks, but the permit expired prior to the boulders being removed (Exhibit B). A one-year extension was granted in 2005, which expired in June of 2006. Ojai Oil Company is now in the process of acquiring another Agricultural Mining Permit to clear an additional seven acres approximately, to plant olive trees.

Ojai Oil Company maintains 13 operational oil wells on the site, and with the removal of the boulders, which is anticipated to take approximately one year, will allow for a 7.3 acre expansion of an existing olive grove. The material is anticipated to be used as part of a creek wall replacement project, situated about four miles from the site, and which is funded by a grant from the Resource Conservation Service. The following findings were noted.

Finding No. 1: The owner was in the process of acquiring an Agricultural Mining Permit from the County of Ventura, since its previous permit has expired. This permit is a ministerial permit, and exempt from the CEQA.

Finding No. 2: The County of Ventura is being requested to consider granting a new Agricultural Mining Permit, since the previous permit has expired. Material removal is anticipated to be subject to the requirements under this permit.

Finding No. 3: The current use of the materials stockpiled is agricultural (i.e., olive grove), and is consistent with the existing zoning and land use designation.

Finding No. 4: The material is anticipated to be used in a creek wall replacement project, situated about four miles from the site, and which is funded by a grant from the Resource Conservation Service. The second nearest location for suitable material is located approximately 35 miles from the site, at the base of the Conejo Grade in the City of Camarillo. Use of this material would result in the traversing of three highways, two cities, and secondary roads, with an increase environmental impact.

At its February 10, 2011, regular business meeting, the SMGB granted the request for a one-time exemption from the requirements of SMARA pursuant to PRC Section 2714(f), providing the Ojai Oil Company is in complete compliance with all permit conditions set forth by the County of Ventura, and other appropriate requirements.

RECLAMATION PLAN APPEAL

Petitioner Mosler, on July 21, 2010, filed with the SMGB an Intent to Appeal stating that the County of Ventura (hereinafter referred to as County) failed to approve and timely act upon an Amended Reclamation Plan for the Ojai Quarry located in Ventura County. Mosler petitioned the SMGB to take jurisdiction of the appeal under three statutes under SMARA: PRC Section 2770(e), subdivisions (e)(1), (e)(2) and (e)(3)). The Chairman on August 26, 2010, and pursuant to CCR Section 3651, made a determination that the appeal was within the jurisdiction of the SMGB.

Material extraction has occurred on the property since the 1930s. The surface mining operation is characterized as a hard rock quarry located northwest of the City of Ojai, Ventura County. The site is claimed to be the only source for rip-rap and other rock in the County that meets all federal and state standards and specifications for marine usage. Schmidt Construction, the original operator, received approval of a reclamation plan in 1981 and originally covered 4 acres. In 1995, the reclamation plan was amended to cover 13 acres, as part of an application to modify the site's conditional use permit (CUP 3489-2). The current owner/operator, Mosler Rock Products, acquired the operation from Schmidt Construction in February 2005.

Prior to February 2005, several issues were noted. The previous operator encroached on 1.3 acres of neighboring property, and perched rocks posed both a potential safety and environmental hazard. Following issuance by the County of a Notice of Violation on February 14, 2008, an Amended Reclamation Plan was submitted to the County on August 8, 2008, along with proof of a financial assurance in the amount of \$22,322.33, and financial assurance cost estimate and supportive documentation.

Summary of County's Review Process: On February 14, 2008, an Amended Reclamation Plan was submitted to the County on August 8, 2008, along with proof of a financial assurance in the amount of \$22,322.33, and financial assurance cost estimate and supportive documentation. The County subsequently commented in correspondence dated October 14, 2008, on the Amended Reclamation Plan (2.5 months after the initial submittal). In correspondence dated June 25, 2009 (11 months following submittal of the plan), County staff forwarded the plan to the Office of Mine Reclamation, and noted upon review of the amended Reclamation Plan, County has deemed it adequate pursuant to SMARA and the SMGB's regulations, and the Ventura County Non-Coastal Zoning Ordinance.

The Department of Conservation Office of Mine Reclamation (OMR) commented on the February 14, 2008, Amended Reclamation Plan in July 2009, but the County did not get back to the OMR until October 27, 2009 with clarification that the Amended Reclamation Plan was a minor amendment, which OMR subsequently concurred, based on additional findings made by the County, as noted in correspondence dated November 18, 2009. OMR also requested from the County an amended site map, but the County did not provide a request for such map from Mosler until January 19, 2010, and rather than forward the previously submitted reclamation map, County staff noted that the map was no longer adequate, and requested a new map reflecting additional issues – a new request a year and a half after the original submittal in February 2008.

Additional issues raised by the County pertained to a new interpretation by the County; whereas, the County concluded that the newly disturbed areas noted in the Amended Reclamation Plan did not correspond with mining phasing limits set forth in CUP 3289-2. Despite efforts to clarify what was considered a minor amendment to an existing approved reclamation plan and Financial Assurance Cost Estimate (FACE), as noted in Mosler's

correspondences dated August 9 and 12, 2010, no approval consideration of the amended reclamation plan or FACE was made.

In lieu of taking any action on the Amended Reclamation, addenda, and the accompanying FACE, the County issued a Notice of Violation and although an Amended Reclamation Plan has been pending for nearly two years, noted in correspondence dated July 9, 2010, that "*To date, you have not submitted the requested amended reclamation plan.*" The Notice of Violation also requested submittal of an updated FACE.

Analysis: An analysis was performed by the SMGB's Executive Officer to assess whether the County failed to act within a reasonable time of receipt of a completed application, or failed to review and approve reclamation plans or financial assurances as required by PRC Section 2770(c) and (d). More specifically, the SMGB must determine whether the amended reclamation plan and financial assurance cost estimate substantially meet the applicable requirements of Sections 2772, 2773, 2773.1, and the lead agency surface mining ordinance adopted pursuant to subdivision (a) of Section 2774.

Alleged failure of the County to process Mosler's Amended Reclamation Plan and Financial Assurance in a timely manner: Pursuant to CCR Section 3650 (B) notes that "reasonable time" means the time period specified in the lead agency's surface mining and reclamation ordinance, or that which is mutually agreed upon by the applicant and the lead agency. Where no times are specified in the lead agency's ordinance, then the interval between successive review steps shall not exceed 60 days.

The County is the SMARA lead agency for the site. After two years, the County failed to either accept or deny approval of Mosler's Amended Reclamation Plan. In addition, the County issued a Notice of Violation on July 9, 2010, requesting submittal of an amended reclamation plan and FACE, apparently ignoring the earlier submittal of an Amended Reclamation Plan and FACE.

Alleged adequacy of the amended reclamation plan and financial assurance cost estimate deemed as meeting the minimum requirements of SMARA and the SMGB's regulations: CCR Section 3653 provides guidance in the review for adequacy of amended reclamation plan. A review of the February 2008 amended reclamation plan was performed by OMR as documented in their correspondence dated July 28, 2009. Several inadequacies were raised by OMR pertaining to mining operation and closure, geotechnical requirements, hydrology and water quality, environmental setting and protection of wildlife habitat, and resoiling and revegetation. The absence of any slope stability analysis further questions the feasibility of the final configuration of the cut slope. Since these specific items still require to be addressed, the February 2008 amended reclamation plan is not adequate for approval consideration by the SMGB at this time.

Furthermore, the financial assurance cost estimate is not adequate and can not be determined as adequate until the amended reclamation plan is eventually approved. In the meantime, a financial assurance bond was issued (?) in the amount of \$22,322.33 (County approved in October 2008).

The County is the SMARA lead agency for the subject site. The County reviewed the contents of the reclamation plan amendment application dated February 14, 2008, and initially considered the application adequate. After 19 months following the initial submittal of an Amended Reclamation Plan and FACE, the County failed to deny or approve such submittals.

The issue under appeal is the consideration by the County, acting as a SMARA lead agency, of a reclamation plan amendment application submitted by Mosler. PRC Section 2770(d) states that *“Reclamation plans or financial assurances determined not to substantially meet these requirements shall be returned to the operator within 60 days. The operator has 60 days to revise the plan or financial assurances to address identified deficiencies, at which time the revised plan or financial assurances shall be returned to the lead agency for review and approval.”* Mosler argues that the County failed to act within a reasonable time of receipt of a completed application for the subject site. Mosler made necessary revisions to its application, but the County did not follow up as stipulated pursuant to PRC Section 2770(d). “Approval” means presentation of the matter to a discretionary body for consideration and decision. Excessively protracted and serial reviews, although each may be conducted within 60 days, is inconsistent with PRC Section 2770(d). Where the application is not presented for a discretionary decision the agency is acting in conflict with SMARA’s intent.

Thus, it could be concluded that County did fail to review and approve the reclamation plan and financial assurances as required under subdivision (c) and (d), because Mosler had been provided no reasonably foreseeable conclusion to the process of County review. And although the County did not deny approval of Mosler’s reclamation plan, it could be concluded that interminable processing by a public agency is functionally equivalent to a denial. Failure of the County to process Mosler’s application, ignore it, or take action upon it, within a reasonable period of time is tantamount to a denial.

In regards to financial assurances, a FACE was initially submitted with the Amended Reclamation Plan on February 14, 2008. A revised financial assurance and addenda to the Amended Reclamation Plan were submitted to the County on June 25, 2010. The County apparently has, to date, not acknowledged such submittals nor provided a list of deficiencies.

In regards to substantial compliance with the reclamation provisions of County’s mining ordinance as certified by the SMGB, the County’s mining ordinance, Section 8107-9.5.1, clearly states the requirements for approval of a reclamation plan noting *“All mining and reclamation shall be consistent with the County General Plan, the Ventura County Water Management Plan, and the State Surface Mining and Reclamation Act of 1975 (SMARA), as amended, and State policy adopted pursuant to SMARA.”* In addition, Section 8107-9.5.3 states: *“No provisions in this Chapter or in the County General Plan shall be construed to encourage any mining operation or facility which would endanger the public’s health, safety or welfare, which would endanger private or public facilities or....”* It is apparent that Mosler has not fully complied with such requirements to date, albeit, the operator has taken steps and continues to take steps to remedy public safety concerns.

At its February 10, 2010, regular business meeting, the SMGB denied approval of the amended reclamation plan dated August 2008 for the Mosler Rock Quarry (CA Mine ID #91-56-0025), and; 2) directed the appellant (operator) to provide the County 1) an Amended Reclamation Plan that addresses the deficiencies noted in OMR’s August 8, 2008, correspondence, 2) an adjusted financial assurance that addresses all disturbed areas, and areas anticipated to be disturbed over the next calendar year, within 30 days.

SMGB AS A SMARA LEAD AGENCY

There are four circumstances when the SMGB is empowered to assume local lead agency authority:

1. When the lead agency’s mining ordinance has been determined to be deficient by the SMGB, the SMGB assumes authority to review and approve new

reclamation plans and plan amendments until a revised ordinance is certified by the SMGB. There was one lead agency in this category as of June 30, 2011.

2. When a local jurisdiction has no mining ordinance, yet has a surface mining, or proposed surface mining, operation within its jurisdiction. There were eight lead agencies in this category as of June 30, 2011.
3. When the SMGB accepts an appeal petition from an aggrieved person alleging a lead agency's inaction or its denial of a reclamation plan or financial assurance, the SMGB may uphold or override that denial; The SMGB had one appeal, against the City of Chula Vista, regarding reclamation plan inaction before it as of June 30, 2011.
4. When the SMGB determines that a lead agency has failed in one or more of its responsibilities under SMARA. There were two lead agencies, El Dorado County and Yuba County, in this category as of June 30, 2011.

In March 2000 the SMGB assumed from El Dorado County its SMARA authority to annually inspect surface mines. The SMGB determined that annual mine inspections performed by the County were not adequate to determine the true operating and compliance status of the surface mines within the County's jurisdiction. Under SMARA Section 2774.4 the SMGB will have this inspection authority for a minimum of three years. On June 14, 2001 the SMGB assumed SMARA lead agency authority from the County of El Dorado, and on February 14, 2002 the SMGB assumed SMARA lead agency authority from the County of Yuba. During previous reporting periods the SMGB also reviewed the SMARA programs for the Counties of Butte, Sacramento, Santa Clara, San Bernardino, and Siskiyou, and the City of Irwindale. During the 2009-2010 reporting period, the SMGB reviewed the SMARA programs for the County of Sierra and the City of Lake Elsinore. In addition, the OMR Lead Agency Review Team (LART) was established in 2007 to further review the overall performance of SMARA lead agencies, and provides assistance, as deemed necessary. During this reporting period, LART reported to the SMGB on their review of Alameda, Mono, Napa and Santa Cruz County, and City of Truckee.

As of June 2011, the SMGB serves as lead agency under SMARA for 46 individual mining operations located in California. Of these 46 surface mining operations, 30 are located within three counties (County of Alpine, El Dorado and Yuba), 7 are located within cities that do not have surface mining ordinances, and 9 are dredging operations located within the San Francisco Bay and bay delta areas (Table 13).

The SMGB may assume a local jurisdiction's authority to administer SMARA under certain circumstances. Specifically, PRC Section 2774.4 states:

“(a) If the board finds that a lead agency either has (1) approved reclamation plans or financial assurances which are not consistent with this chapter, (2) failed to inspect or cause the inspection of surface mining operations as required by this chapter, (3) failed to seek forfeiture of financial assurances and to carry out reclamation of surface mining operations as required by this chapter, (4) failed to take appropriate enforcement actions as required by this chapter, (5) intentionally misrepresented the results of inspections required under this chapter, or (6) failed to submit information to the department as required by this chapter, the board shall exercise any of the powers of that lead agency under this chapter, except for permitting authority.”

Several figures showing surface mining sites located within the jurisdiction of the SMGB as a SMARA lead agency are presented in Figures 16 through 19.



Figure 16. Former aggregate extraction pond within the Yuba Goldfields near the community of Hallwood in Yuba County showing reclaimed shorelines. (Photo credit: Will Arcand)

PRC Section 2774.5 requires the SMGB to assume full authority for reviewing and approving reclamation plans in any jurisdiction in which the lead agency does not have a certified surface mining ordinance. As of July 2011, the SMGB serves as SMARA lead agency for seven cities that have surface mining operations within their jurisdiction, but do not have surface mining ordinances certified by the SMGB.

Lastly, the SMGB acts as the SMARA lead agency for all surface mining operations under the jurisdiction of the San Francisco Bay Conservation and Development Commission (BCDC). The San Francisco BCDC jurisdiction includes open water, marshes, mud flats and shorelines immediately surrounding San Francisco Bay and its surrounding Bays and tributary water bodies. As of July 2011 there were eight active marine dredging operations, and one inactive operation that have approved reclamation plans in place, for which the SMGB oversees SMARA compliance (Figure 20).



Figure 17. The Diamond Quarry located in El Dorado County (viewing north).
(Photo credit: Will Arcand)



Figure 18. Atkinson Pit No. 1 located in the City of Compton. This former 50 feet in depth open pit clay mine is being reclaimed via backfilling to the adjacent street level for future open and industrial land use. (Photo credit: Will Arcand)



Figure 19. View of the open pit of the Big Gun Quarry within the City of Rocklin.
(Photo credit: Will Arcand)



Figure 20. Satellite image of San Francisco Bay and surrounding areas showing locations of San Francisco BCDC marine dredging operations (in red) under the jurisdiction of the SMGB. (Modified after Google Maps, 2009)

The status of all surface mining operations currently under the jurisdiction of the SMGB as a SMARA lead agency, as of June 30, 2011, is summarized in Table 13.

**Table 13
SMGB SMARA LEAD AGENCY SURFACE MINES**

CA ID No.	Mine Name	Status	Primary Commodity	Local Lead Agency
91-02-0001	Merrill Borrow Pit	Active	Sand and Gravel	County of Alpine
91-02-0002	Gansberg Sand	Active	Sand and Gravel	County of Alpine
91-02-0004	Diamond Valley Borrow Site	Active	Sand and Gravel	County of Alpine
91-02-0005	Fredricksburg Gravel Pit	Idle	Sand and Gravel	County of Alpine
91-07-0006	Richmond (Chevron) Quarry	Mining Completed - Reclamation In Progress	Franciscan Rock, Recyclable Concrete and Asphaltic Material	City of Richmond
91-07-0007	Pt. Richmond (Canal) Quarry	Reclamation Completed – Post Reclamation Monitoring	Franciscan Rock	City of Richmond
91-09-0001	Bear Creek Quarry	Active	Serpentinite Rock	County of El Dorado
91-09-0002	Weber Creek Quarry	Idle	Serpentinite Rock	County of El Dorado
91-09-0003	Diamond Quarry	Active	Limestone	County of El Dorado
91-09-0004	Chili Bar Slate Mine	Active	Slate	County of El Dorado
91-09-0005	Cool Cave Quarry	Active	Limestone	County of El Dorado
91-09-0006	Timm Mine	Idle	Specimen Gold	County of El Dorado
91-09-0009	Somerset Sand Pit	Active	Granitic Sand	County of El Dorado
91-09-0010	Lawyer Pit	Active	Granitic Sand	County of El Dorado
91-09-0012	Snows Road Quarry	Idle	Alluvial Sand and Gravel	County of El Dorado
91-09-0015	Marin Quarry	Idle	Granodiorite	County of El Dorado
91-19-0004	Atkinson Pit I	Mining Completed - Reclamation In Progress	Clay	City of Compton
91-27-0006	CEMEX-Lapis	Active	Beach Sand	City of Marina
91-31-0013	Big Gun Quarry	Idle	Granite	City of Rocklin
91-33-0003	Super Creek Quarry (Painted Hills)	Active	Decorative Stone	City of Desert Hot Springs
91-33-0031	Garnet Pit	Active	Alluvial Sand	City of Palm Springs
91-38-0001	Alcatraz, Presidio, Point Knox	Active	Marine Sand	San Francisco BCDC
91-38-0002	Point Knox South	Active	Marine Sand	San Francisco BCDC
91-38-0003	Point Knox Shoal	Active	Marine Sand	San Francisco BCDC
91-38-0004	Alcatraz South Shoal	Active	Marine Sand	San Francisco BCDC
91-38-0005	Hanson Suisun Bay	Active	Marine Sand	San Francisco BCDC
91-38-0006	Hanson Suisun Bay Middleground Shoal	Active	Marine Sand	San Francisco BCDC
91-38-0007	Jerico Suisun Bay Middle Ground Shoal	Active	Marine Sand	San Francisco BCDC
91-38-0011	Morris Tug & Barge Marine Oyster Shell Mining	Active	Marine Oyster Shells	San Francisco BCDC
91-38-0012	San Francisco Marina Dredging Operation	Mining Not Commenced	Marine Sand	San Francisco BCDC
91-56-00XX	Santa Paula Rock	Active	Alluvial Sand and Gravel	City of Santa Paula
91-58-0001	Western Aggregates	Active	Alluvial Sand and Gravel	County of Yuba
91-58-0002	Knife River Hallwood	Active	Alluvial Sand and Gravel	County of Yuba
91-58-0003	Cal Sierra Development	Active	Gold	County of Yuba
91-58-0004	Sperbeck Quarry	Active	Metabasalt	County of Yuba

**Table 13 (Continued)
SMGB SMARA LEAD AGENCY SURFACE MINES**

CA ID No.	Mine Name	Status	Primary Commodity	Local Lead Agency
91-58-0006	Teichert Hallwood	Active - Reclamation In Progress	Alluvial Sand and Gravel	County of Yuba
91-58-0007	Wheatland Clay	Idle - Reclamation Complete	Clay	County of Yuba
91-58-0011	Dantoni Pit	Active	Alluvial Sand and Gravel	County of Yuba
91-58-0013	Parks Bar Quarry	Active	Metabasalt	County of Yuba
91-58-0015	Blue Point Clark Rock Quarry	Reclamation Complete - Post Reclamation Monitoring	Metabasalt	County of Yuba
91-58-0022	Silica Resources	Active	Alluvial Sand and Gravel	County of Yuba
91-58-0023	Silica Resources #2 (Formerly Garcia Sand & Gravel)	Active	Alluvial Sand and Gravel	County of Yuba
91-58-0025	Simpson Lane	Idle	Alluvial Sand	County of Yuba
91-58-0026	Three Rivers Levee Improvement Authority, Feather River Levee Repair Project Segment 2	Reclamation Complete - Post Reclamation Monitoring	Levee Fill Material	County of Yuba

SUMMARY OF SMARA REGULATIONS AND GUIDELINES ADOPTED BY THE SMGB

PRC Section 2755 provides authority to the SMGB to adopt regulations that establish State policy for the reclamation of mined lands. PRC Section 2759 states that State policy shall be continuously reviewed and may be revised, based on consultation and evaluation of recommendations of the Director of DOC, advisory committees, concerned federal, State and local agencies, educational institutions, civic and public interest organizations, and private organizations and individuals. No new or amended regulations were enacted during the 2010-2011 reporting period.

CALIFORNIA ABANDONED MINE LANDS PROGRAM

Commencing in fiscal year 1997-1998, the Abandoned Mine Lands Unit (AMLU) was created within the DOC's Office of Mine Reclamation. This unit implements a field program to locate, and inventory California's pre-SMARA (i.e., before January 1, 1976 when SMARA became effective) historic abandoned mines, provide a preliminary assessment of any hazards observed, and remediate/close physical hazards on publicly owned or managed abandoned mine lands (AML) to protect human life and safety and any associated wildlife and cultural values. It is estimated that there are approximately 47,000 abandoned mines located on public and private lands throughout California (Figure 21). Many of these old mine workings present dangerous physical risks and hazards to the public, as well as potential financial liability to public land management agencies. In 2000, the AMLU published *California's Abandoned Mines: A Report on the Magnitude and Scope of the Issue in the State*. The AMLU also maintains the State's abandoned mine inventory database and convenes the AML Forum, a quarterly venue for the public and agencies to discuss abandoned mine issues. (For more information, see the AMLU website at www.consrv.ca.gov/OMR/abandoned_mine_land.)

Many of the pre-SMARA mines that ceased operations before site reclamation was a State requirement and before various environmental regulations were enacted have been found to be hazardous to people and animals, and a threat to the natural environment. In rapidly urbanizing regions of the State as well as in heavily used recreational areas, these old mines may pose a very significant threat to the health and safety of the human population. The low level of knowledge about the location and effects of abandoned mines on the well-being of local communities is becoming more evident in the face of new disclosure requirements or land-use planning and development.

For years, both local jurisdictions and state agencies have had permitting or regulatory authority over abandoned mines if those mines adversely affected water quality (Regional Water Quality Control Board) or if they contained hazardous wastes that could escape into the surrounding environment (Department of Toxic Substances Control). As a non-regulatory State entity that doesn't own or manage lands, the AMLU has taken a lead role in coordinating information regarding the character and type of abandoned mines in California, providing funding, staff, and/or technical expertise to inventory and remediate/close unsafe AML features, and recently taking the lead among many State landowning agencies to prioritize and coordinate abandoned mine remediation efforts on State-owned lands.

The AMLU is also assisting federal land management agencies to inventory and close AML sites on their lands. In the spring of 2010, \$2.083 million in federal ARRA (Stimulus Act) funds was obtained to inventory all 5,307 AML sites located in California's 13 national parks by September 20, 2013. Most of the work is located in the desert region and needs to be done during the months of September and May due to excessive heat during the summer. In addition, \$1.516 million in ARRA (Stimulus Act) funds was obtained to remediate/close approximately 350 AML features by September 30, 2014 in the California Desert District (Barstow, El Centro, Ridgecrest, Palm Springs Field Offices) and the Mother Lode Field Office. Most of the work must be done in the fall and spring to avoid impacting biological resources on federal lands.

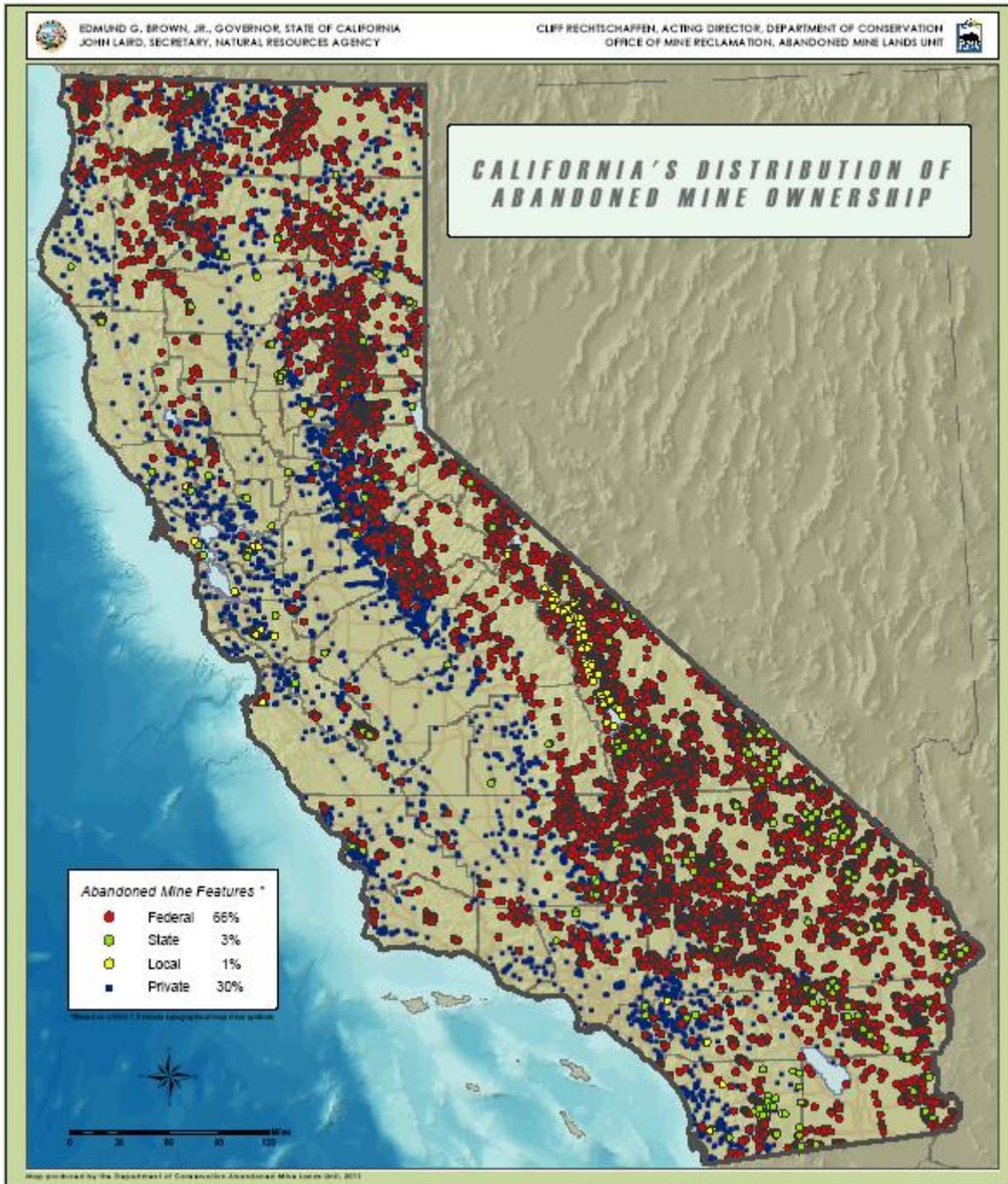


Figure 21. Location of abandoned mine features in California.

The AMLU estimates that the 47,000 abandoned mine sites in the State shown on Figure 21 contain between 175,000 – 250,000 individual mine features. A feature is a single human-made object or disturbance associated with mining, such as a shaft or adit (vertical or horizontal opening), tailings, machinery and facilities. A mine can be comprised of one or more features. Of these 47,000 abandoned mines, about 67 percent are located on federal land (primarily on Bureau of Land Management, National Park Service, and U.S. Forest Service property), 31 percent are on private lands, and about 2 percent are on State or local lands. The AMLU estimates that about 62,000 of the State's AML features include hazardous openings that could present a threat to human life.

In order to tackle this enormous task in a logical fashion, the AMLU works with other federal and State agencies and local organizations to compile and consolidate knowledge about abandoned mine sites. Where there is little information, the AMLU employs a watershed approach that begins in the areas with the highest potential threat to public health and safety and to the environment. The AMLU uses a combination of sophisticated survey technologies (geographical information systems, global positioning systems, etc.), literature research, and field work. The California Geological Survey Library provides a wealth of historical information. Local knowledge is often a valuable resource for historic abandoned mine information. AMLU has established a toll-free telephone number (1-877-OLD-MINE) to easily allow individuals throughout California contribute to the inventory.

The AMLU began closing and remediating physical hazards associated with abandoned mines in 2001, when it helped close a hazardous abandoned mine shaft as a public safety demonstration project. In 2002, the AMLU began funding abandoned mine remediation projects in addition to its inventory work. Since 2006, the AMLU's primary funding sources to remediate physical hazards at abandoned mines come from federal funding and a legislatively created fee collected on gold and silver mined in California (\$5 per ounce for gold and \$0.10 per ounce for silver (Kuehl, Chapter 794, Statutes of 2003); PRC Section 2207(d)(4)(B)). Techniques that the AMLU has used to remediate hundreds of hazardous abandoned mine openings and associated debris include: wire fencing; backfills; polyurethane foam (PUF) closures; bat-compatible gates, cupolas, and culvert gates; fitting with concrete plugs and steel caps; and demolition and/or removal of unstable structures and trash. All work is conducted in accordance with CEQA or National Environmental Policy Act (NEPA) reviews completed by the land-owning agencies.

The AMLU has also successfully used media events to promote its remediation activities and its "Stay Out - Stay Alive!" message, which is part of a national public awareness campaign to warn children and adults about the dangers of exploring and playing near abandoned mines. In July 2008, AMLU staff organized a PUF closure of an abandoned mine shaft in the Auburn State Recreation Area that was filmed for an episode of Discovery Channel's "Dirty Jobs" shown in January 2009. The AMLU has coordinated several other media events featuring the closure of abandoned mine shafts and adits in California that reached a broad audience of television news viewers and newspaper readers.

The AMLU also participated in an underground safety training and lent a hand cleaning up debris left by trespassers at the Hawver Cave in Placer County near Auburn, east of Sacramento (Figures 22 and 23).

Hawver Cave has a reputation as a good place for local youngsters to hang out. DOC's volunteers helped pull out 25 or so large bags of trash – this despite the fact that AMLU and partners installed bat-compatible gates on several of the known entrances to the mine in 2006. While Hawver Cave is not seen as particularly dangerous, participants were required to wear hard hats, safety vests and sturdy boots; have two light sources; and use the buddy system.



Figure 22. The interior of Hawver Cave, an old limestone mine located in Placer County. Note the lake and the graffiti.



Figure 23. Workers from DOC and other agencies collect trash in the cave.

Through December 31, 2010, the AMLU collected inventory data on 3,095 abandoned mine sites and 33,347 features. Through the end of fiscal year 2009-10, the AMLU also helped to close/remediate more than 694 hazardous abandoned mine features, in partnership with more than two dozen local, State and federal partners. The AMLU provided \$950,000 to its landowning agency partners who contributed approximately \$2 million to close/remediate physical hazards on their lands.

As California's representative to the National Association of Abandoned Mine Land Programs (NAAML), the AMLU co-hosted, with Nevada, the 2011 NAAML Annual Conference (the first hardrock, non-coal States to serve as host) providing further opportunities to highlight California's AML issues and successes and raise awareness of AML hazards.

OTHER SMGB CONSIDERATIONS AND ACTIONS

On occasion, the SMGB requests from staff comprehensive or focused analysis on topics of interest to the SMGB, prior to considering policy decisions and the need for regulations or legislative action. These reports commonly take the form of an Information Report. These reports do not set forth policy, but rather present information that the SMGB reviews in considering in considering policy. A summary of such reports is presented in Table 14.

Table 14 Summary of Published Information Reports			
Information Report No.	Description	Date	Authors
SMGB IR 2007-01	Report on SMARA Lead Agency Performance Regarding Mine Reclamation	June 2007	Stephen M. Testa and David J. Beeby
SMGB IR 2007-02	Report on Backfilling of Open-Pit Metallic Mines in California	January 2007	Stephen M. Testa and James S. Pompy
SMGB IR 2007-03	A Review of the State's Mineral Resources Management Program and its Components – Status and Effectiveness of Review Efforts	November 2007	Stephen M. Testa and David J. Beeby
SMGB IR 2007-04	A Comparison of Regulatory Surface Mining Programs in the Western United States	September 2007	David J. Beeby
SMGB IR 2007-05	A Report on the Mineral Land Classification and Designation Program under the California Surface Mining and Reclamation Act of 1975	July 2008	Stephen M. Testa and David J. Beeby
SMGB IR 2009-06	A Survey of Lead Agencies Affected by the Alquist-Priolo Earthquake Fault Zoning Act	June 2009	Stephen M. Testa, William Bryant and Jerry Treiman
SMGB IR 2010-07	A Review of Issues Pertaining to Idle Mines under the Surface Mining and Reclamation Act of 1975	January 2011	Stephen M. Testa

Several additional reports were in preparation at the time this annual report was being prepared. These information reports will address results of a survey of lead agencies affected by SMARA, annual mine fees, and summary of quasi-judicial decisions made by the SMGB in regards to one-time exemption from SMARA considerations, among others.

OBSERVATIONS AND RECOMMENDATIONS

The following observations and recommendations are offered. A comment on their respective financial funding status is also provided.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

This Act became effective on March 7, 1973. Since that time it has been amended 11 times by the Legislature. The SMGB finds that implementing the requirements of this Act continues to protect the health and safety of the public from losses that would be incurred by the construction of structures for human habitation across the surface traces of known active faults. A technical Advisory Committee was established to address certain aspects of the Act. Its work has essentially been completed and a report is in preparation.

There is no statutory funding source to support this Act. The SMGB recommends that a steady funding source be developed to support this Act.

SEISMIC HAZARDS MAPPING ACT

This Act became effective on April 1, 1991. The SMGB finds that the implementation of this Act enhances public health and safety and serves to protect the public from losses incurred by the effects of strong ground shaking, liquefaction or other ground failure, landslides, and other seismic hazards caused by earthquakes.

Funding mechanisms for this program remain inadequate to fulfill the intent of the Legislature. The SMGB recommends that an adequate funding source be specified to support this program.

SURFACE MINING AND RECLAMATION ACT

The Surface Mining and Reclamation Act (SMARA) has been amended 28 times since its enactment in 1975. The statute is unique in two respects:

- (1) Mining is regulated locally by cities and counties which are referred to as lead agencies, and
- (2) A process is provided for the conservation of mineral resources.

SMARA has evolved over time and numerous amendments to improve its effectiveness have been enacted. Based on observations of the current statewide implementation of this law, it is apparent that the opportunity for further improvement remains. The SMGB has found that the overall SMARA program can be streamlined while meeting the intent of the law. Current duplicative efforts by the State and local lead agencies can be minimized or eliminated, and various unintended and adverse consequences of the current statutory and regulatory language can be alleviated.

The SMGB has continued its comprehensive review of SMARA and its effectiveness, and offers the following recommendations for improvement.

SMARA Lead Agency Determination of Reclamation Plan Adequacy: Under SMARA, PRC Section 2774(c) requires that a lead agency submit to the Director of the Department of Conservation (DOC) for use in reviewing the reclamation plan or plan amendments 1) information from any related document prepared, adopted, or certified pursuant to Division 13

(commencing with Section 21000), and any other pertinent information, and 2) a certification that the reclamation plan is in compliance with the applicable requirements of Article 1 of the SMGB's regulations, commencing with California Code of Regulations (CCR) Section 3500. Specifically, the issue is that staff of the local agency cannot make a conclusionary determination that a reclamation plan is complete and in compliance with SMARA. Only the decision-makers can make such a conclusionary determination.

The SMGB recommends that Legislative language be considered that interpret this requirement to mean that the Planning Director of an agency makes a preliminary determination subject to later consideration by the decision-makers in a public hearing. This issue is deemed non-controversial.

Mineral Resource Management Policies: Under current SMARA statutes, a city or county, upon receipt of a mineral land Classification report prepared by the State Geologist or mineral land designation report prepared by the SMGB, must prepare Mineral Resource Management Policies (MRMP) and incorporate them into its General Plan. The MRMP must be submitted to the SMGB for review and comment prior to adoption by the city or county [ref. PRC Section 2762].

Although the SMGB has developed regulations describing the content and requirements of the MRMP in accordance with a statutory mandate, the SMGB has no authority to enforce inclusion of the Act's requirements into the MRMP adopted by a city or county. Cities and counties are not required to accept and incorporate the SMGB's review comments. Therefore, a MRMP may be locally adopted that does not meet the Act's minimum requirements.

The SMGB recommends that prior to a city's or county's adopted MRMP becoming effective, it must be certified by the SMGB as being in accordance with the Act and the SMGB's regulations. This is similar to the current requirement that the lead agency's SMARA (mining) ordinance must be certified by the SMGB as being in accordance with SMARA prior to the ordinance taking effect.

Role of SMGB in Local Land Use Decisions on Mineral Lands Designated by the SMGB: Under current SMARA statutes, it is required that, prior to permitting a use that would threaten the potential to extract minerals in an area designated by the SMGB as having mineral resources of regional or statewide significance, the city or county shall prepare a statement specifying its reasons for permitting the proposed use. The city or county must consider its MRMP, must balance the designated mineral values against alternative land uses, and consider the importance of these minerals to their market region as a whole and not just their importance to the city's or county's area of jurisdiction (PRC Section 2763).

The adoption of a "statement of reasons" requires that local land use agencies consider the mineral resource consequences of a land use decision but it does nothing to prevent or discourage the permitting of land uses that extinguish access to designated important mineral resources. This process, in fact, puts a city or county in the position of choosing whether to make a decision in its own interest or in the interest of other surrounding jurisdictions in the region. The elected officials who prepare the statement of reasons and who make the land use decision owe no allegiance to other jurisdictions. Thus, there is no effective mechanism in SMARA to encourage or facilitate the local permitting of mining facilities on State-designated mineral lands. This is one of the reasons why the supply of permitted mineral reserves (such as aggregate) is in critical short supply in California.

Designation by the SMGB of a mineral resource as having regional or statewide significance is based on extensive geological analysis and demand evaluations by the CGS and the SMGB. SMARA statutes should be amended to facilitate the permitting of mining facilities on designated lands. This could be accomplished, for example, through the adoption of State-mandated uniform “findings of approval” for a local agency to use when considering a requested use permit application for a mining facility on State-designated lands. These findings could be designed specifically for the issues associated with mining facilities and avoid “neighborhood compatibility” requirements that fuel litigation. As the State has done for affordable housing (GC 65589.5), the discretion of local agencies to deny a mining project on designated lands could be limited to instances where a direct impact on public health and safety is identified.

Along with changes in statute to facilitate the permitting of mining facilities on designated lands, the criteria for designation must be updated. Currently, a site can be designated if only \$17,000,000 worth of mineral reserves are present. This figure is far too low to represent a “significant” regional resource. The threshold of significance should be raised to an economically viable level such as \$200 million of reserves over a minimum of 100 acres.

Preclude Limiting Mine-Related Transport on a State Highway: An environmental impact associated with proposed mining facilities is the truck traffic required to transport the mined material to its market. Limitations on truck traffic (e.g. average daily or peak hour trips) are commonly imposed as a CEQA mitigation measure or as a condition of approval necessary to make use permit findings. Such a limitation can be the result of local citizen opposition and not related to any public health or safety concern. Local agencies imposing limitations on the use of State highways is particularly problematic for mining facilities. As the State highway system is intended to facilitate the transport of goods as part of the State economy, conditions of a local permit that limit the use of a State highway for an otherwise lawful commercial purpose appears inappropriate. SMARA statutes could be amended to preclude a local agency from limiting mine-related transport truck traffic on a State Highway unless a specific public health and safety hazard is identified by the California Highway Patrol.

California Mineral Resources Plan: In 2006, CGS updated Map Sheet 52, and its accompanying report providing general information about the current availability of California’s permitted aggregate resources. Although the statewide and regional information on the map and in this report may be useful to local decision-makers, more detailed information contained in each of the aggregate studies employed in the compilation of Map Sheet 52 was aimed to be used for land-use and decision making purposes. For the 31 aggregate study areas throughout the State, these study areas cover about 25 percent of the State and provide aggregate for about 90 percent of California’s population.

It was concluded that in a five-year period (2001-2005), permitted aggregate resources have decreased by about 2.5 billion tons. Also, during this same period, more aggregate study areas had decreases in permitted aggregate resources than increases. Decreases were caused by changes in permitted resource calculations, aggregate consumption, and social and economic conditions leading to mine closures. Furthermore, aggregate price at the plant site and transportation costs have increased significantly in the past five years. Areas throughout the State are experiencing shortages in local permitted aggregate resources and are being forced to transport aggregate longer distances, significantly increasing the FOB cost by the time it reaches its final destination. Areas in very short supply of permitted aggregate resources include Fresno, North San Francisco Bay, Southern Tulare County, and Sacramento County. The shortage of PCC-grade sand in the San Diego and the San Francisco Bay areas has driven up the price in both areas, making importation of sand from Canada and Mexico into these regions competitive.

In the next 50 years, California will need approximately 13.5 billion tons of aggregate. This figure does not account for accelerated construction programs as a result of major bond initiatives, or from reconstruction following a major, damaging earthquake. Only one of the study areas has adequately permitted aggregate resources to meet or exceed its projected 50-year demand.

Due to the inability of local governments to meet their projected 50-year aggregate needs, the SMGB recommends consideration of development of a California Mineral Resources Plan (Plan). The Plan could provide a framework for the mineral industry, legislators, and the public to consider options and make decisions regarding California's mineral needs. The Plan could be updated periodically, and serve to provide basic data and information on California's mineral resources including aggregate availability evaluations and assessments for urban growth, construction, and strategic minerals, while balancing environmental concerns and issues (i.e., water, greenhouse gases emissions, etc.). The Plan could also identify and evaluate existing and proposed statewide demand, management and aggregate availability programs and projects to address the State's aggregate and other mineral resources needs.

OTHER CGS PROGRAMS

The SMGB represents the State's interest in the development of geological information necessary to the understanding and utilization of the State's terrain, and seismological and geological information pertaining to earthquake and other geological hazards (PRC Section 672). The CGS conducts the scientific investigations of mineral resources, seismology, and geologic hazards. As part of this work, CGS reviews the geological aspects of Timber Harvest Plans for the Department of Forestry and Fire Protection under the Forest and Watershed Geology Program, operates the largest strong motion earthquake monitoring program network in the United States under the Earthquake Engineering Program, and performs school site and hospital site geological hazard reviews for the Division of the State Architect and the Office of Statewide Health Planning and Development, respectively, under the Seismic Hazards Assessment Program.

Forest and Watershed Geology Program: CGS's Forest and Watershed Geology Program provides expertise in geologic-related watershed processes with a focus on landslides and erosion. The majority of this work is conducted for other state departments and local agencies where CGS serves as a geologic resource. Staff review Timber Harvest Plans throughout the State and provide input to the lead agency, Department of Forestry and Fire Protection, regarding potential for slope instability and soil erosion as a result of proposed timber management operations. The review of Timber Harvest Plans is partially funded through an interagency agreement with the Department of Forestry.

CGS staff also provides geologic products and services to a number of State departments and local agencies. The CGS effort is funded by these agencies through interagency agreements. Some of the projects that staff is currently working on include:

- Assessment of geologic hazards on alluvial fans and input to a planning manual as part of the Department of Water Resources' initiative to reduce hazards from flooding on alluvial fans in southern California;
- Developing statewide standards and best practices to reduce potential soil erosion as a result of Off Highway Vehicle use for the Off Highway Motor Vehicle Division of the Department of Parks and Recreation; and

- Conducting pilot studies and developing statewide standards for reducing road and trail erosion on State park land for California State Parks.

The SMGB recommends that a steady funding source be devised to assure the continuation of the multiple projects under the Forest and Watershed Program.

Earthquake Engineering Program: The projects that are funded under the Strong Motion Instrumentation Program (SMIP) from building permit fees are significantly impacted by the reductions in permits issued for new construction throughout the State. This adversely impacts the baseline activities of the program, including the reduction in instrumentation of buildings and ground sites. Other projects in the Earthquake Engineering program are moving forward. The maintenance and data recovery from previously installed ground stations continues. Work supported by Caltrans continues, and the instrumentation of several structures is being completed or is underway, such as the Bay Bridge and Devils Slide tunnel. Additionally, the BART tube under San Francisco Bay is receiving instrumentation. Instrumentation work focused on hospitals continues with the support of Office of Statewide Health Planning and Development (OSHPD), and two hospitals have been instrumented in the last year.

The SMGB recommends that an increase in the new construction permit fees be enacted so as to provide adequate funding to meet the Legislature's intent. The Current fee structure was enacted 19 years ago, and no longer is adequate to maintain the instrumentation program at the levels of activity proposed by the Legislature.

Post-Fire Emergency Geologic Evaluation Services: CGS provides post-fire emergency geologic mapping services in wildland burned areas to assist in mitigation planning, and in the assessment of areas prone to hazardous debris flows and landslides. Budget cuts to CGS have caused this service to be terminated.

The SMGB recommends that a steady funding source be developed to assure the continuance of this vital service.

APPENDIX A

Public Resources Code Sections 660-678

**PUBLIC RESOURCES CODE
SECTIONS 660-678**

660. There is in the department a State Mining and Geology Board consisting of nine members appointed by the Governor, subject to confirmation by the Senate.

661. As used in this article, "board" means the State Mining and Geology Board and "division" means the California Geological Survey of the department.

662. (a) One member of the board shall be a professional geologist with background and experience in mining geology; one member shall be a mining engineer with background and experience in mining minerals in California; one member shall have background and experience in groundwater hydrology, water quality, and rock chemistry; one member shall be a representative of local government with background and experience in urban planning; one member shall have background and experience in the field of environmental protection or the study of ecosystems; one member shall be a professional geologist, registered geophysicist, registered civil engineer, or registered structural engineer with background and experience in seismology; one member shall be a landscape architect with background and experience in soil conservation or revegetation of disturbed soils; one member shall have background and experience in mineral resource conservation, development, and utilization; and one member shall not be required to have specialized experience.

(b) All members of the board shall represent the general public interest, but not more than one-third of the members at any one time may be currently employed by, or receive more than 25 percent of their annual income, not to exceed \$25,000 a year per member, from an entity that owns or operates a mine in California. The representative of local government shall not be considered an employee of an entity that owns or operates a mine if the lead agency employing the representative owns or operates a mine. For purposes of this section, retirement or other benefits paid by a mining entity to an individual who is no longer employed by that entity are not considered to be compensation, if those benefits were earned prior to the date the individual terminated his or her employment with the entity.

(c) If a member of the board determines that he or she has a conflict of interest on a particular matter before the board pursuant to subdivision (b) or Section 663, he or she shall provide the clerk of the board with a brief written explanation of the basis for the conflict of interest, which shall become a part of the public record of the board. The written explanation shall be delivered prior to the time the matter to which it pertains is voted on by the board. This disclosure requirement is in addition to any other conflict-of-interest disclosure requirement imposed by law.

663. (a) No member of the board shall participate in any action of the board or attempt to influence any decision of the board that involves himself or herself, or any person with whom he or she is connected, as a director, officer, paid consultant, or full-time or part-time employee, or in which he or she has a financial interest within the meaning of Section 87103 of the Government Code.

(b) No board member shall participate in any proceeding before any state or local agency as a consultant or in any other capacity on behalf of any person who engages in surface mining operations.

(c) Upon request of any person, or on his or her own initiative, the Attorney General may file a complaint in the superior court for the county in which the board has its principal office alleging that a board member has knowingly violated this section, alleging the facts upon which the allegation is based, and asking that the member be removed from office. Further proceedings shall be in accordance as nearly as practicable with rules governing civil actions. If after trial the court finds that the board member has knowingly violated this section it shall order the member removed from office.

663.1. (a) For the purposes of this section, "ex parte communication" means any oral or written communication between a member of the board and an interested person about a matter within the board's jurisdiction that does not occur in a public hearing, workshop, or other official proceeding, or on the official record of the proceeding on the matter.

(b) For purposes of this section, "a matter within the board's jurisdiction" means any action on a reclamation plan or financial assurance appealed pursuant to subdivision (e) of Section 2770, any review of an order setting administrative penalties pursuant to Section 2774.2, or any review of an appeal pursuant to Section 2775.

(c) A board member or any person, other than a staff member of the board, department, or any other state agency, who is acting in his or her official capacity and who intends to influence the decision of the board on a matter within the board's jurisdiction, shall not conduct an ex parte communication, unless the board member or the person who engages in the communication with the board member discloses that communication in one of the following ways:

(1) The board member or the person fully discloses the communication and makes public the ex parte communication by providing a full report of the communication to the executive officer or, if the communication occurs within seven days of the next board hearing, to the board on the record of the proceeding of that hearing.

(2) When two or more board members receive substantially the same written communication or receive the same oral communication from the same party on the same matter, one of the board members fully discloses the communication on behalf of the other board member or members who received the communication and requests in writing that it be placed in the board's official record of the proceeding.

(d) (1) The board shall adopt standard disclosure forms for reporting ex parte communications which shall include, but not be limited to, all of the following information:

(A) The date, time, and location of the communication.

(B) The identity of the person or persons initiating and the person or persons receiving the communication.

(C) A complete description of the content of the communication, including the complete text of any written material that was part of the communication.

(2) The executive officer shall place in the public record any report of an ex parte communication.

(e) Communications shall cease to be ex parte communications when fully disclosed and placed in the board's official record.

(f) In addition to any other applicable penalty, a board member who knowingly violates this section is subject to a civil fine, not to exceed seven thousand five hundred dollars (\$7,500). Notwithstanding any law to the contrary, the court may award attorneys' fees and costs to the prevailing party.

(g) Notwithstanding Section 11425.10 of the Government Code, the ex parte communications provisions of the Administrative Procedure Act (Article 7 (commencing with Section 11430.10) of Chapter 4.5 of Part 1 of Division 3 of Title 2 of the Government Code) do not apply to proceedings of the board under this code.

663.2. (a) No board member shall make, participate in making, or in any other way attempt to use his or her official position to influence a board decision about which the member has knowingly had an ex parte communication that has not been reported pursuant to Section

663.1.

(b) In addition to any other applicable penalty, including a civil fine imposed pursuant to subdivision (f) of Section 663.1, a board member who knowingly violates this section shall be subject to a civil fine, not to exceed seven thousand five hundred dollars (\$7,500).

Notwithstanding any law to the contrary, the court may award attorneys' fees and costs to the prevailing party.

664. Each member of the board shall hold office for four years. Vacancies shall be immediately filled by the Governor.

667. Each member of the board shall receive one hundred dollars (\$100) for each day during which the member is engaged in the performance of official duties. The compensation of each member, except the compensation of the chairman, shall not, however, exceed in any one fiscal year the sum of four thousand dollars (\$4,000). The chairman of the board may receive compensation of not to exceed five thousand dollars (\$5,000) in any one fiscal year for the performance of official duties. In addition to such compensation, each member shall be reimbursed for necessary traveling and other expenses incurred in the performance of official duties.

668. The board shall maintain its headquarters in Sacramento and shall hold meetings at such times and at such places as shall be determined by it. Five members of the board shall constitute a quorum for the purpose of transacting any business of the board. A majority affirmative vote of the total authorized membership of the board shall be necessary to adopt, amend, or repeal state policy for the reclamation of mined lands adopted pursuant to Article 4 (commencing with Section 2755) of Chapter 9 of Division 2. All meetings of the board shall be open to the public.

669. The Governor shall designate the chairman of the board from among the members of the board. The person designated as the chairman shall hold such office at the pleasure of the Governor. The board shall annually elect a vice chairman from among its members.

670. The board may appoint an executive officer who shall be exempt from civil service pursuant to subdivision (e) of Section 4 of Article XXIV of the California Constitution. The board may also employ such clerical assistance as may be necessary for the proper discharge of its duties. Neither the board nor its employees shall have or be given any powers in relation to the administration of the division.

671. The director shall have no power to amend or repeal any order, ruling, or directive of the board.

672. The board shall represent the state's interest in the development, utilization, and conservation of the mineral resources of the state and the reclamation of mined lands, as provided by law, and federal matters pertaining to mining, and shall determine, establish, and maintain an adequate surface mining and reclamation policy. The board shall also represent the state's interest in the development of geological information necessary to the understanding and utilization of the state's terrain, and seismological and geological information pertaining to earthquake and other geological hazards. General policies for the division shall be determined by the board.

673. The board shall also serve as a policy and appeals board for the purposes of Chapter 7.5 (commencing with Section 2621) of Division 2.

675. The board may provide for a statewide program of research regarding the technical phases of reclaiming mined lands which may be delegated to it by law and may accept funds from the United States or from any person to aid in carrying out the provisions of this section. The board may conduct such a program independently or by contract or in cooperation with any

person, public or private organization, federal agency, or state agency, including any political subdivision of the state.

676. The board shall provide for a public information program on matters involving the state's terrain, mineral resources, mining, the reclamation of mined lands, and the seismological and geological aspects of earthquakes and other geological hazards.

677. The board shall nominate, and the director shall appoint, the State Geologist, who shall either be registered in compliance with the Geologist and Geophysicist Act at least one year from the date of appointment, or the Board of Geologists and Geophysicists may, upon the review of academic and professional experience, grant registration. The State Geologist shall possess general knowledge of mineral resources, structural geology, seismology, engineering geology, and related disciplines in science and engineering, and the reclamation of mined lands and waters. The State Geologist shall advise the director regarding technical, scientific, and engineering issues, including the scientific quality of the division's products and activities.

678. The director may authorize the State Geologist to exercise his power to appoint employees of the division in accordance with the State Civil Service Act. The director may authorize the State Geologist, or any employee of the division, to exercise any power granted to, or perform any duty imposed upon, the director by the State Civil Service Act.

APPENDIX B

Memorandum of Understanding between the County of Alpine and SMGB

MEMORANDUM OF UNDERSTANDING

THIS Memorandum of Understanding is entered into by and between the California State Mining and Geology Board through its Chairman (referred to herein as "SMGB"); and the County of Alpine (referred to herein as "County"), through its County Board of Supervisors, for the purposes of:

- (6) Assuring that the adverse environmental effects of mining are minimized or eliminated and that surface mining operations throughout the County are reclaimed to a beneficial end use;
- (7) Ensuring that effective administration of surface mining and reclamation requirements for surface mining operations within the jurisdiction of the County to which both federal rules and California's Surface Mining and Reclamation Act (Public Resources Code section 2710 et seq., hereinafter referred to as SMARA) will continue within the County;
- (8) Achieving coordination between the County and the SMGB in administering rules governing surface mining, surface mine inspections, financial assurances, and reclamation; and
- (9) Eliminating unnecessary duplication, wherever possible, between the County and the SMGB in implementing state and federal requirements.
- (10) Avoiding the necessity of administrative proceedings that otherwise might be required pursuant to Public Resources Code section 2774.4(a) to provide for SMGB's assumption of lead agency authority in the County.

WHEREAS, pursuant to SMARA, local government agencies are tasked with primary legal responsibility for regulating surface mining and reclamation.

WHEREAS, pursuant to Public Resources Code section 2774.4 SMGB may assume lead agency powers when a local agency has failed to carry out certain duties under SMARA.

WHEREAS, given certain budgetary circumstances pertinent to the County, the parties recognize that the effective administration of SMARA in that jurisdiction would be best served by an assumption of SMARA lead agency authority, from the County by the SMGB for all surface mining operations within the jurisdiction of the County notwithstanding the lack of any finding that County has failed to carry out its duties under SMARA.

NOW, THEREFORE BE IT RESOLVED that the parties to this memorandum hereby agree that in regulation of surface mining operations on lands within the jurisdiction of the County:

- (1) The SMGB will assume and carry out the duties of the County as SMARA lead agency from and after the effective date of this agreement at no cost to County.
- (2) The SMGB will work cooperatively with the County to ensure that conditions required of surface mine operators (as defined by federal law, by SMARA, and any other relevant regulations and ordinances) are met, in order to minimize adverse environmental impacts and achieve mine reclamation in accordance with law.
- (3) The SMGB will ensure preparation of environmental documents that conform with the National Environmental Protection Act and California Environmental Quality Act, as appropriate, when such documents are needed for the approval of federally mandated Plans of Operation and state mandated SMARA reclamation plans.
- (4) The SMGB will ensure preparation of a single reclamation plan per surface mining operation, or amendment thereof, that conforms to federal, state and County requirements.
- (5) The SMGB will approve financial assurances, and any adjustments thereto, for reclamation in an amount that conforms to state and county requirements. Financial assurances will be payable to the SMGB and the Department of Conservation.
- (6) The SMGB will conduct and coordinate enforcement and monitoring responsibilities, to ensure the correction and abatement of any violation of applicable mining law within the County. An inspection of each of the County's mining operations will be carried out not less than once annually using the State-approved inspection report form pursuant to SMARA 2774(b). The SMGB will also coordinate with the County during such inspections.
- (7) The SMGB will administer the release of financial assurances to ensure that reclamation of the particular mining operation has been completed in accordance with the approved reclamation plan. A joint final inspection between the SMGB and the County will be conducted prior to any final release of financial assurances for any mining operation. Written authorization will be obtained from each payee prior to the release of the financial assurance obligation.
- (8) No sooner than three years after the SMGB has assumed the County's SMARA lead agency responsibilities and obligations per this MOU, and if the SMGB finds, after a public hearing, that the County wishes to and evidences its capability to resume its SMARA lead agency role, the SMGB shall restore to the County its powers assumed by the SMGB through this MOU, pursuant to Public Resources Code Section 2774.4(b)

Effective Date of this Agreement:

This agreement shall become binding upon each party by authorized signature of each party.

Modification of this Agreement:

This agreement may be modified upon the initiative of any of the parties for the purpose of ensuring consistency with state or federal statutes or regulations, or for any other purpose mutually agreed upon. In order to be effective, any such modification must be in writing, subject to thirty (30) days' notice, and must be signed by all of the designated parties.

Termination of this Agreement:

This agreement shall continue in force until terminated when the SMGB restores the County to lead agency status under SMARA as set forth herein.

STATE OF CALIFORNIA

COUNTY OF ALPINE

OSB Erin Garner, Chairman
State Mining and Geology Board

OSB Tom Sweeney, Chairman
Board of Supervisors

Approved as to Form
OSB Martin Fine, County Counsel

Date: June 30, 2011

APPENDIX C

Aggregate Availability Group Charter

CHARTER

I. Name

The Aggregate Availability Group

II. Mission

Ensure the availability and sustainability of aggregate resources to improve California's economy and environment while maintaining its natural resources.

III. Purpose

The group meets to identify and initiate actions that will accomplish its mission. By considering economic, social, and environmental factors as well as available tools and avenues of communication, this group aims to strengthen policies, laws, and regulations to benefit all of California.

IV. Goals

- **Enhance The State's economy by promoting positive environmental and social outcomes associated with mineral extraction, reclamation, and transportation process**
- **Promote the protection, conservation, and permitting of aggregate resources close to consumption areas- "Distance Matters"**
- **Build partnerships through education and outreach that foster consensus about the importance of adequate aggregate reserves**
- **Collaborate in the production of decision-making tools and information**

V. Members

The group is comprised of experts and policymakers from both the public and private arenas. Membership includes, but shall not be limited to:

Co-Sponsors:

Business Transportation and Housing Agency - R. Gregg Albright, Deputy Secretary
CalCIMA - Gary W. Hambly, President/CEO

Other Members:

Bureau of Land Management - Steven A. Kupferman, Geologist
California Department of Conservation - Bridgett Luther, Director
California Geological Survey - Dr. John Parrish, State Geologist
California Department of Transportation – Sharon Scherzinger, ActingChief, Transportation Planning
Office of Planning and Research - Scott Morgan, Senior Planner
State Mining and Geology Board - Stephen Testa, Executive Officer

Approved by:

OSB R. Gregg Albright, Business, Transportation, and Housing Agency

OSB Gary Hambly, California Construction and Industrial Materials Association