



State Mining and Geology Board

Annual Report

2011-2012



Department of Conservation
Natural Resources Agency

December 2012



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Governor
State of California

John Laird
Secretary
Natural Resources Agency

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Director
Department of Conservation

Cover Photo: Former Big Gun Mine located in the City of Rocklin.

ANNUAL REPORT
of the
STATE MINING AND GEOLOGY BOARD

2011-2012

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ANNUAL REPORT of the STATE MINING AND GEOLOGY BOARD 2011-2012

EXECUTIVE SUMMARY

The 2011-2012 *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 2011-2012 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 2011-2012 reporting period, thirteen 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.

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 2011-2012 reporting period, one updated SHMA maps was received for hearings to be scheduled by the SMGB to receive comment. This map representing Earthquake Zones of Required Investigation for the Lick Observatory Quadrangle in Santa Clara County, was modified to include both Alquist-Priolo Earthquake Fault Zones and Seismic Hazard Zones.

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 2011-2012 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 113 SMARA lead agencies in California. At the end of this reporting period, the SMGB served as a lead agency under SMARA for three counties, seven cities, and nine marine dredging operations within the jurisdiction of the San Francisco Bay Conservation and Development Commission (BCDC). Based on review of the OMR Lead Agency Review Team

(LART) reports, the SMGB issued 45-Day Notices to Correct Deficiencies to five counties. During the reporting period the SMGB also 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 is responsible for reviewing and accepting mineral resource lands classification reports prepared by CGS, and for designation of such lands of regional significance. One classification petitions were reviewed, and subsequently accepted by the SMGB, during this reporting period: CGS's Special Report 223 on *Mineral Lands Classification of the Proposed Riddle Surface Mine Property, Stanislaus County, California*.

The SMGB accepted CGS Special Report 215 titled "Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region, California." This report updated information originally published in 1989 by the California Division of Mines and Geology (CDMG; now CGS) as Special Report 162 (SR 162 – *Mineral Land Classification: Portland Cement Concrete Aggregate and Active Mines of All Other Mineral Commodities in the San Luis Obispo-Santa Barbara Production-Consumption Region*). The reevaluation and update in Special Report 215 identified an additional 2,991 acres of land containing concrete aggregate resources. 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.

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. Eighteen administrative penalty appeals were heard by the SMGB based on penalties issued by the Department of Conservation. Six requests for consideration of an exemption from SMARA were considered by the SMGB.

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 restates in its Observations and Recommendations section of this report where it believes the Legislature could address specific elements of 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 2011 – 2012

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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 or as-needed basis.

The SMGB has one 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. The Executive Officer has been assigned the responsibility to prepare the report based on discussions of the A-P TAC which is process. Upon completion the report will be reviewed by the A-P TAC and the report, including recommendations, will be forwarded to 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:

- 113 "Lead Agencies" (counties and cities), with authority over surface mining operations within their jurisdictions;
- 1,132 reporting surface mining operations within the State as of 2011;
- 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 2011-2012 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. Overall, the A-P EFZ Program has been severely impacted by budgetary constraints for the past several years.

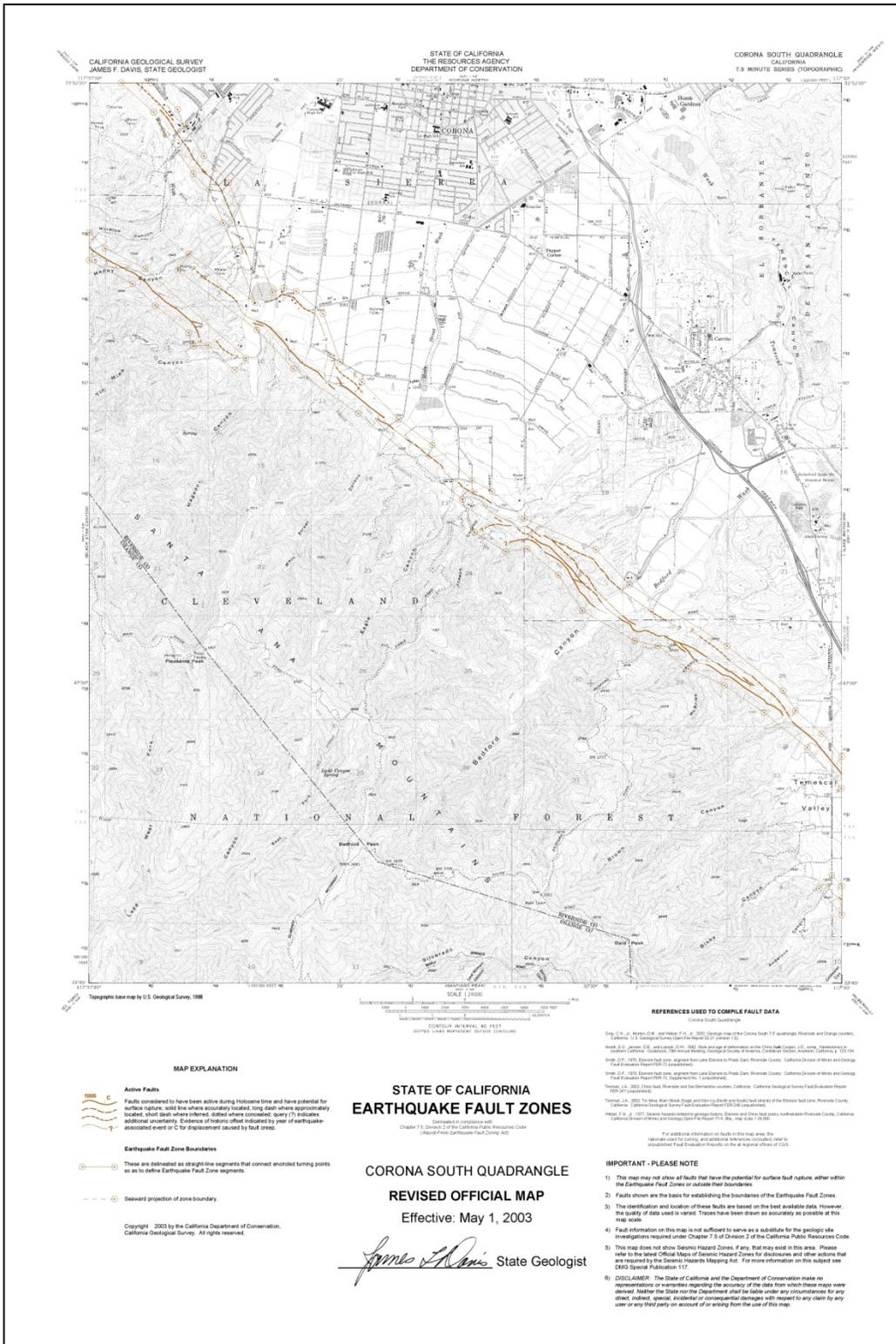


Figure 1. Earthquake Fault Zone Map for the Corona South Quadrangle Revised Official Map Effective May 1, 2003.

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.

The policy and criteria of the SMGB, with reference to the Alquist-Priolo Earthquake Fault Zoning Act, provides an administrative procedure for the receipt of public comments regarding new or revised preliminary earthquake fault zone maps.

Pursuant to the California Code of Regulations (CCR), Article 10, Section 3602(a):

"Within 45 days from the issuance of proposed new or revised preliminary earthquake fault zone map(s), cities and counties shall give notice of the Board's announcement of a ninety (90) day public comment period to property owners within the area of the proposed zone."

Pursuant to CCR, Article 10, Section 3206(c):

"The Board shall receive public comments during the 90-day public comment period. The Board shall conduct at least one-public hearing on the proposed zone map(s) during the 90-day public comment period."

Pursuant to CCR, Article 10, Section 3206(d):

"Following the end of the 90-day public comment period, the Board shall forward its comments and recommendations with supporting data received to the State Geologist for consideration prior to the official earthquake fault zone map(s)."

Public Resources Code (PRC) Section 3722(b) further states *"Following the end of the review period, the Board shall forward its comments and recommendations, with supporting data received, to the State Geologist for consideration prior to revision and official issuance of the maps."* At its May 10, 2012, regular business meeting, the SMGB held a public hearing to receive comments on the thirteen Preliminary Map of Proposed Earthquake Fault Zones on March 7, 2012 (Table 2). The specific maps were:

Hayward	Carrizo Mountain
Piru	Painted Gorge
Mecca	Plaster City
Mortmar	Coyote Wells
Orocopia Canyon	Yuha Basin
Salton	Mount Signal
Durmid	

No comments were received in regards to the thirteen maps referenced above.

**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
Carrizo Mountain, Coyote Wells, Durmid, Hayward, Mecca, Mortmar, Mount Signal, Orocopia Canyon, Painted Gorge, Piru, Plaster City, Salton, and Yuha Basin.	Cities of Hayward, Oakland, and San Leandro; Counties of Alameda, Imperial, San Diego, Riverside and Ventura.	13	May 10, 2012

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.

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. 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 and comment. The SMGB's Geohazards Committee, or in some cases the whole SMGB, conducts public hearings within the affected local jurisdictions to receive both general and 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 new Preliminary Seismic Hazard Zone Map was released by CGS for review and comment. The preliminary map, issued on April 26, 2012, is specific to the area encompassed in the Lick Observatory Quadrangle, Santa Clara County. The resulting map was modified relative to earlier versions and included both Alquist-Priolo Earthquake Fault Zones and Seismic Hazard Zones (Figure 2). Lead Agencies affected by the Seismic Hazards Zone Maps are presented in Table 3. A summary of Public Hearings on Preliminary Seismic Hazards Maps Held by SMGB since 2000 is presented in Table 4.

**Table 3
Lead Agencies Affected
By the Seismic Hazards Zone Maps**

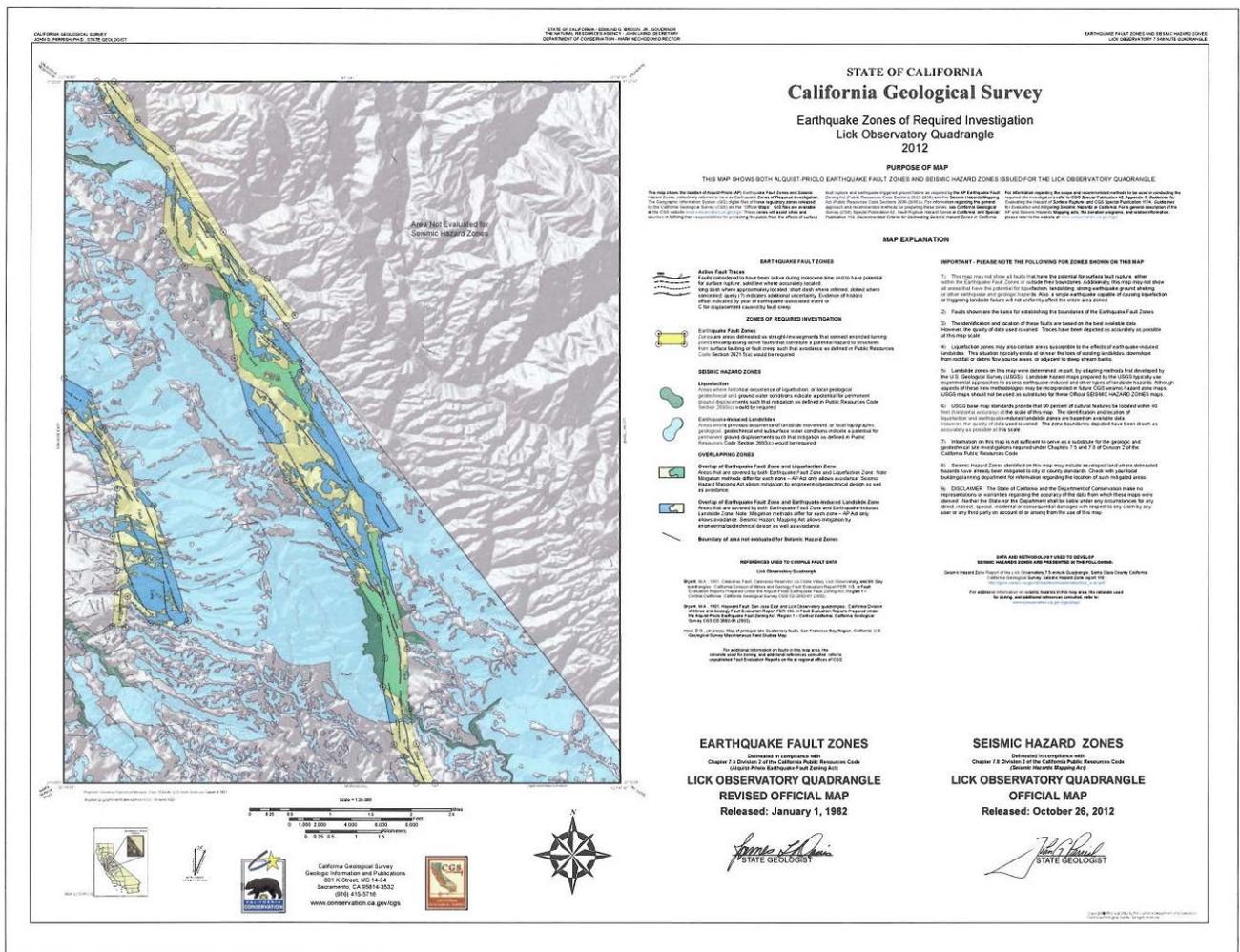
Cities		Counties
Agoura Hills	Industry	Orange
Anaheim	Inglewood	Palos Verdes Estates
Arcadia	Irvine	Paramount
Artesia	Irwindale La Canada-	Pasadena
Azusa	Flintridge	Pico Rivera
Baldwin Park	La Habra	Placentia
Bell	La Habra Heights	Pomona
Bell Gardens	La Mirada	Rancho Palos Verdes
Bellflower	La Palma	Redondo Beach
Beverly Hills	La Puente	Rolling Hills
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	

**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	1	June 12, 2007
Dublin Quadrangle	Alameda County	1	May 10, 2008
Livermore Quadrangle	Alameda County	1	May 10, 2008
Lick Observatory Quadrangle	Santa Clara County	1	September 13, 2012



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 62 Cities and 51 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 2011-2012 reporting period.

Regulatory Changes

New regulations for the designation of regionally significant aggregate resources in the Bakersfield Production-Consumption Region were enacted on August 30, 2011. In addition, several policy matters were discussed by the SMGB during this reporting period which would potentially require regulations. Notably, such discussions focused on the need for address due process when the Office of Mine Reclamation considers removal of a surface mining operator is from the AB 3098 List, and assuring that annual mine fees are determined in an equitable manner.

Guidelines Considerations

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 guidelines were enacted during the 2011-2012 reporting period.

AB 3098 List: The Department of Conservation, Office of Mine Reclamation (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 Policy and Legislation Committee held several meetings to discuss proposed regulations and take public comment. The need for a due process for the removal and reinstatement of a surface mining operation from the AB 3098 List has been recognized by the SMGB, and draft regulatory language was discussed.

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 2011 is shown in Figure 3.

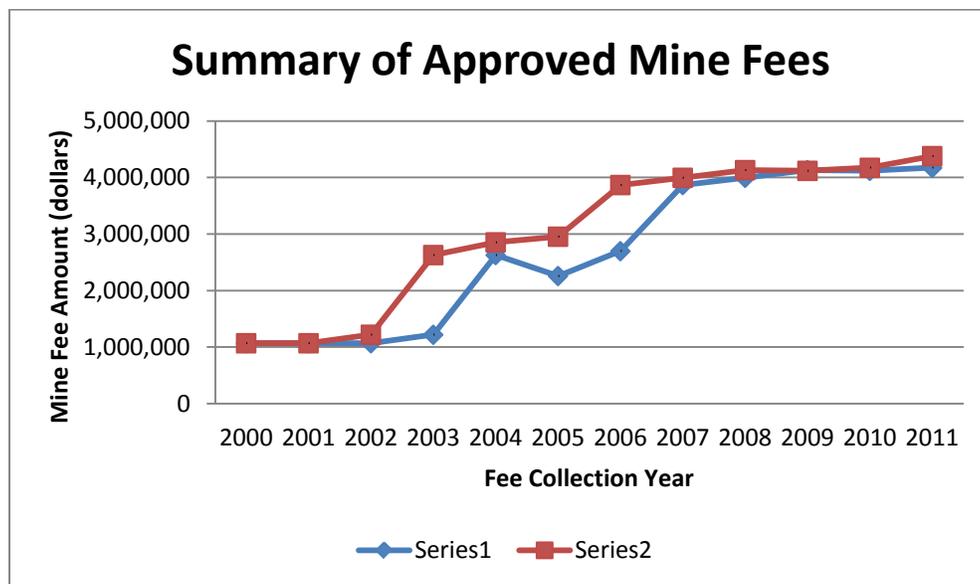


Figure 3. Summary of approved mine fees from year 2000-2011.

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.

Lead Agency Financial Interest Concerns: At its September 8, 2011, regular business meeting, the SMGB discussed financial interest conflicts concerns. Pursuant to the Surface Mining and Reclamation Act (SMARA), all surface mining operations must be inspected by their respective lead agency. The State Mining and Geology Board (SMGB) serves as the lead agency under SMARA for forty-five (45) individual surface mining operations, including operations located in three counties (Alpine County, El Dorado County and Yuba County), eight (8) San Francisco Bay marine dredging operations, and seven (7) cities that do not have mining ordinances. In review of the SMARA database, potential conflicts of interest have been identified which contradicts Title 14, Division 2, Chapter 8, Subchapter 1, Section 3504.5(c) of the California Code of Regulations (CCR). Specifically, CCR Section 3504.5(c) states:

“A surface mine inspection shall not be performed by any person who holds a financial interest in or has been employed by the surface mining operation in any capacity, including as a consultant or as a contractor, during the year preceding the inspection.”

A review of all surface mining operations statewide has commenced. To date, 42 out of 58 counties have been evaluated. A total of 34 surface mining operations within nine counties have been identified where the SMARA lead agency has a potential financial interest (i.e., either as an operator or property owner).

In addition to continuing the evaluation of remaining counties and cities, SMGB staff has initiated inspections of those specific surface mining operations where a financial interest has been confirmed. Under these circumstances, inspections are performed by SMGB staff and upon acceptance by the SMGB, such inspection reports are to be forwarded to the respective SMARA lead agency. The lead agency would be invoiced appropriately and responsible for the cost of conducting such inspections. The lead agency, however, maintains its overall role pursuant to SMARA, and thus is responsible for subsequent compliance and enforcement actions, as deemed necessary and appropriate.

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 2010, California ranks sixth after Alaska, Minnesota, Utah, Arizona and Nevada, in the value of non-fuel production, accounting for approximately 4.2 percent of the nation's total. There were approximately 700 active mines and quarries in the State for calendar year 2010. Combined production from these mines totaled approximately \$2.9 billion worth of non-fuel minerals in that same year (Figure 4), down from \$3.4 billion during the preceding year. Approximately 5,300 people were employed at these mines and their processing facilities.

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 \$809 million for 82 million tons produced. California's second largest mineral commodity was Portland Cement valued at \$546 million for 7.2 million tons produced, down from \$855 million for 9.3 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.

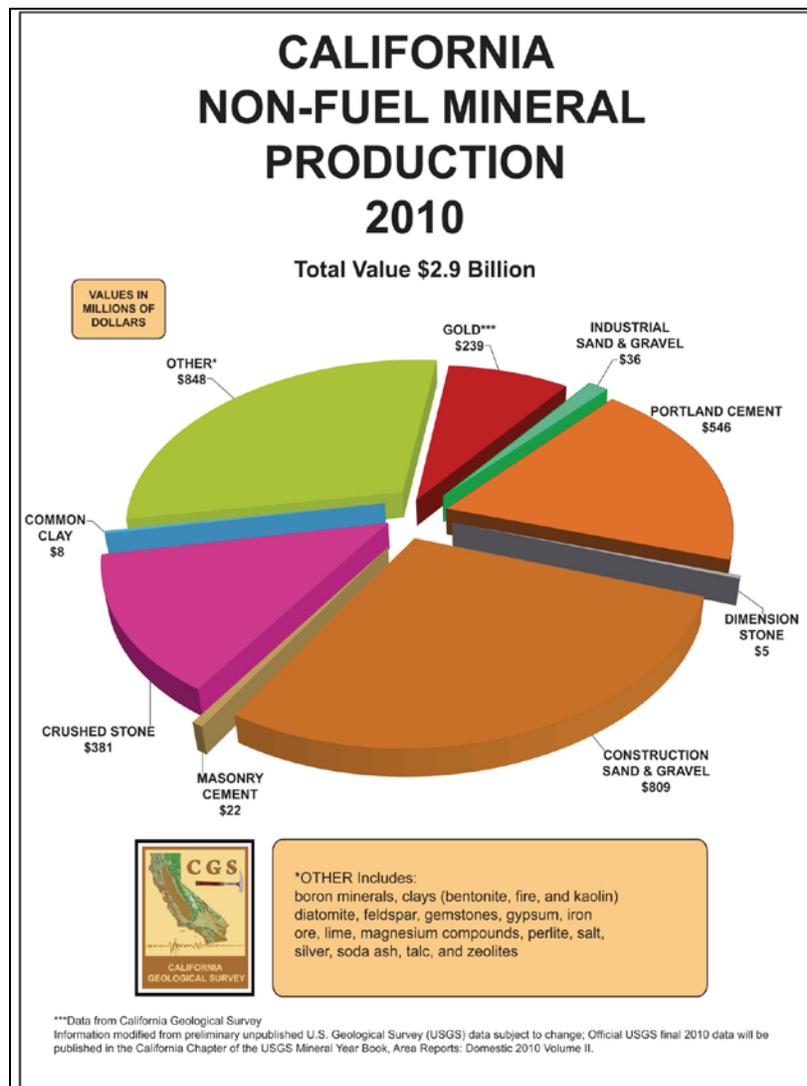


Figure 4. California non-fuel mineral production for 2010.

PROTECTION OF MINERAL LANDS

As California's population continues to grow, 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 2011-2012 reporting period.

Table 6
SMGB Certified Surface Mining and Reclamation Ordinances
July 2000 - June 2012

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 2012 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 2011-2012 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 2012**

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 2011-2012 reporting period, one new mineral classification for construction aggregate was considered, the proposed Riddle Surface Mine Property site located in Stanislaus County, was considered. For a mineral deposit to be considered significant, and thus eligible for MRZ-2 classification, the deposit must meet criteria established by the SMGB for material quality, marketability, and economic value. The category of MRZ-2 is defined as areas where adequate information indicates that significant mineral resources are present, or where it is judged that a high likelihood for their presence exists. Land included in MRZ-2 is of prime importance because it contains known economic mineral deposits. Significance of the deposit is determined by evaluating the quality of the deposit, its suitability as a marketable commodity, and by calculating the volume, tonnage and value of available aggregate resources contained within the property. Following completion of the classification study, CGS concluded that:

- Aggregate tests results provided by the petitioner and analyzed by CGS staff indicate that the material present on the subject site meets the specifications for a variety of construction aggregate uses up to and including PCC-grade aggregate.
- Aggregate resources exceed the minimum economic threshold value of \$17.3 million (2010 dollars) as established by the SMGB and
- Both the northern 315-acre and southern 121-acre parcels have been reclassified MRZ-2 for construction aggregate.

Those petitions accepted since July 2000, are summarized in Table 8.

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. Nineteen classification reports were completed between July 2000 and June 2011 (Table 9).

**Table 8
Mineral Lands Classification Petitions
Received from July 2000 through June 2012**

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	9/08/11	Acceptance of California Geological Survey Special Report 223 for Mineral Land Classification for the Proposed Riddle Surface Mine Property, Stanislaus County, California.

One new classification report was completed and subsequently accepted by the SMGB during the 2011-2012 reporting period. At its December 8, 2011, regular business meeting, the SMGB accepted California Geological Survey Special Report 215, titled "*Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region, California.*"

**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
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

**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
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
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
San Luis Obispo County-Santa Barbara County	SR 215	Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region, California	2,991	12/08/2011
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 215, Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region, California: California Geological Survey (CGS) Special Report 215 updated information previously presented in a classification report on Portland cement concrete-grade (PCC) aggregate in the San Luis Obispo-Santa Barbara Production-Consumption (P-C) Region first published in 1989. The previous report was published by the California Division of Mines and Geology (CDMG; now CGS) as Special Report 162– *Mineral Land Classification: Portland Cement Concrete Aggregate and Active Mines of All Other Mineral Commodities in the San Luis Obispo-Santa Barbara Production-Consumption Region*.

The updated report presented the following conclusions:

- Seventy-five (75) million tons of currently permitted construction aggregate reserves are projected to last through the year 2006, 16 years from the present (2010).
- An additional 2,991 acres of land containing concrete aggregate resources are identified in areas in and near the San Luis Obispo-Santa Barbara P-C Region.
- Anticipated consumption of construction aggregate in the San Luis Obispo-Santa Barbara P-C Region for the next 50 years (through the year 2060) is estimated to be 263 million tons, of which 137 million tons must be concrete-grade. This is 57 million tons more than the prior 50-year projection made in 1989.
- An estimated 10,700 million tons of concrete aggregate resources are identified in the San Luis Obispo-Santa Barbara P-C Region.

The SMGB accepted the report on December 8, 2011.

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 until November 2011 with the publication of SMGB Designation Report No. 11 titled “*Designation of Regionally Significant Construction Aggregate Resources in the Bakersfield Production-Consumption Region*” dated November 2011.

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 113 lead agencies: 51 counties, 62 cities. The SMGB also serves in the capacity of administering SMARA as a lead agency.

There are 51 counties and 62 cities that serve as lead agencies under SMARA. 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 9 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 the counties, several cities without certified mining ordinances, and all marine dredging operations within the jurisdiction of the Bay Conservation and Development Commission (BCDC). 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. As a result, 2007, the Department of Conservation, Office of Mine Reclamation (OMR) established the Lead Agency Review Team (LART).

During the 2011-2012 reporting period, LART completed its Lead Agency Review Report for the cities of Chula Vista and Oceanside, and counties of Colusa, Lake, Madera, Mariposa, Merced, Nevada and San Diego. The SMGB upon receiving the LART report directed the Executive Officer to prepare a 45-Day Notice to Correct Deficiencies to the counties of Colusa, Madera and Mariposa.

Since 2007 the SMGB has received public complaints pertaining to the ability of the City of Lake Elsinore to effectively administer mining activities within its jurisdiction pursuant to the SMARA. Seven surface mining operations were situated within the jurisdiction of the City. Products produced include rock, sand and gravel, and clay. An aerial showing the footprint of several surface mining operations is shown in Figure 5. At its December 9, 2010 regular business meeting, issued a 45-Day *Notice to Correct Deficiencies* to the City of Lake Elsinore, pursuant to Public Resources Code (PRC), Section 2774.4 (Exhibit A). The 45-Day Notice to Correct Deficiencies, dated December 21, 2010, was forwarded to the City. The City subsequently responded on February 3, 2010.

The SMGB at its May 12, 2011, regular business meeting, considered the City's response and whether the SMGB should assume none, in part or whole, the City's SMARA lead agency responsibilities, with exception to permitting. The SMGB moved to find that the City of Lake Elsinore made some progress to fulfill its responsibilities and obligations as a lead agency under SMARA, but that the SMGB would continue to monitor the City of Lake Elsinore's progress. At its January 12, 2012, regular business meeting, the SMGB determined that the City of Lake Elsinore has made a good faith effort to resolve the deficiencies to the satisfaction of the SMGB.

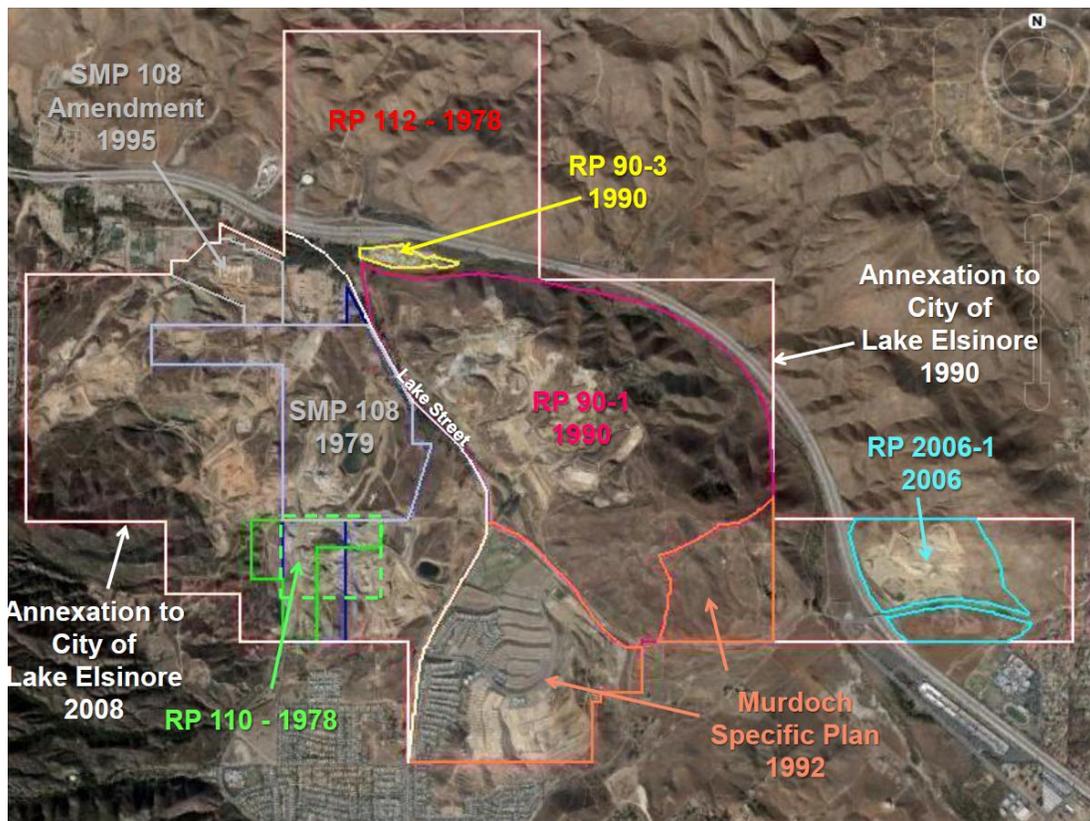


Figure 5. Overview of various surface mining operations within the jurisdiction of the City of Lake Elsinore.

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. One Order to Comply was issued by OMR during the 2011-2012 reporting period. At its March 8, 2012, regular business meeting, the SMGB upheld the Order to Comply issued by the Director to the operator of the Red Ink Maid Mine located in Placer County.

Administrative Penalties Appeals

Eighteen administrative penalties appeals were heard by the SMGB during the 2011-2012 reporting period. A summary of such hearings is presented in Table 11.

Table 10 Summary of Administrative Penalties Appeals for the 2011-2012 Reporting Period	
Administrative Penalty Public Hearing	SMGB Public Hearing Date
Public Hearing Case No. AP #91-03-0029-09-AR: South Arkansas Creek (CA Mine ID# 91-03-0029, County of Amador	June 9, 2011
Public Hearing Case No. AP #91-15-0095-09-AR: Sand Canyon Pit (CA Mine ID #91-15-0095), Kern County	June 9, 2011
Public Hearing Case No. AP #91-18-0047-09-AR: Pozzolan Hill Pit (CA Mine ID #91-18-0047), Lassen County	June 9, 2011
Public Hearing Case No. AP #91-23-0033-09-AR: McKenzie Mine (CA Mine ID #91-23-0033), Mendocino County	June 9, 2011
Public Hearing Case No. AP #91-32-0033-09-AR: CBS Aggregates (CA Mine ID #91-32-0033), Plumas County	June 9, 2011
Public Hearing Case No. AP #91-33-0042-09-AR: Shamrock Sand & Gravel (CA Mine ID #91-33-0042), Riverside County	June 9, 2011
Public Hearing Case No. AP #91-36-0074-09-AR: K-1 Pit (CA Mine ID #91-36-0074), San Bernardino County	June 9, 2011
Public Hearing Case No. AP #91-47-0053-09-AR: Lor O (CA Mine ID #91-47-0053), Siskiyou County	June 9, 2011
Public Hearing Case No. AP #91-03-0022-09-AR: Jackson Valley Energy Mine (CA Mine ID #91-03-0022), Amador County	September 8, 2011
Public Hearing Case No. AP #91-04-0029-09-AR: Pentz Mine (CA Mine ID #91-04-0029), Butte County	September 8, 2011
Public Hearing Case No. AP #91-12-0037-09-AR: Ammon Quarry (CA Mine ID #91-12-0037), Humboldt County	September 8, 2011
Public Hearing Case No. AP #91-14-0018-09-AR: Ash Meadows Plant (CA Mine ID #91-14-0018), Inyo County	September 8, 2011
Public Hearing Case No. AP #91-15-0095-09-AR: Sand Canyon Pit (CA Mine ID #91-15-0095), Kern County	September 8, 2011
Public Hearing Case No. AP #91-18-0047-09-AR: Pozzolan Hill Pit (CA Mine ID #91-18-0047), Lassen County	September 8, 2011
Public Hearing Case No. AP #91-18-0049-09-AR: Long Valley Mine (CA Mine ID #91-18-0049), Lassen County	September 8, 2011
Public Hearing Case No. AP #91-25-0016-09-AR: Duval Borrow Mine (CA Mine ID #91-25-0016), Modoc County	September 8, 2011
Public Hearing Case No. AP #91-32-0029-09-AR: Heinz Pit (CA Mine ID #91-32-0029), Plumas County	September 8, 2011
Public Hearing Case No. AP #91-32-0034-09-AR: Mill Bar Pit (CA Mine ID #91-32-0034), Plumas County	September 8, 2011

Table 10 (Continued) Summary of Administrative Penalties Appeals for the 2011-2012 Reporting Period	
Administrative Penalty Public Hearing	SMGB Public Hearing Date
Public Hearing Case No. AP #91-58-0015-09-AR: Point Clark Mine (CA Mine ID #91-58-0015), Yuba County	September 8, 2011
Public Hearing Case No. AP #91-58-0021-09-AR: Blue Point Mine (CA Mine ID #91-58-0021), Yuba County	September 8, 2011

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 2012, the SMGB heard twenty-seven (27) such exemption requests, with five being heard during the 2011-2012 period. 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(f). 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.

The SMGB must contemplate four specific criteria in considering granting a one-time exemption:

Criteria No. 1: Pursuant to PRC Section 2712(a), has an environmental review been completed on the proposed activity either separately or as part of a larger project?

Criteria No. 2: Pursuant to PRC Sections 2715 and 2770(a), is the proposed activity permitted or otherwise authorized by a local lead agency?

Criteria No. 3: Pursuant to PRC Sections 2711(b) and 2712, is the end use or proposed end use of property on which the proposed activity is to occur defined?

Criteria No. 4: Pursuant to PRC Sections 2714(b), have the potential impacts on commercial interests resulting from the proposed activity been considered?

Table 11
Summary of SMARA Exemption Requests
From July 2000 to June 2012

Date	City or County	Exemption Request
11/19/00	Fresno County	Strahm Engineering, Gegunde Stock Pond,
8/16/01	Yuba County	Jon Messick
8/16/01	Lassen County	Fitch Sand & Gravel,
12/13/01	City of Red Bluff	Ladd & Associates, Adobe Road-Interchange
7/11/02	Yuba County	Baldwin Contracting Company
11/14/02	Yuba County	Alice Sohrakoff,
4/10/03	Kern County	Cactus Mine
5/23/03	Yuba County	Baldwin Contracting,
3/12/04	Kern County	B&B Materials, Inc.
6/10/04	Santa Barbara County	Jeff & Shawn Montgomery, Montgomery Family Trust, Lambert Road, Carpinteria,
7/23/04	Kern County	Smeed Family Trust, Tehachapi
03/13/08	Mendocino	Willits Bypass,
	San Diego County	Hester Granite Pit
04/09/09	Yuba County	Three Rivers Levee Improvement Authority
11/12/09	Sacramento County	Natomas Urban Development Borrow Site, Sacramento Area Flood Control Agency
03/11/10	Kern County	California Vision, Inc.
04/15/10	Sacramento County	M & T Ranch
04/15/10	Tehama County	Ford Construction
05/13/10	Imperial County	The California Energy Commission
06/10/10	Tulare County	Tea Pot Dome Water District
12/09/10	Ventura County	California State University Channel Islands (CSUCI)
02/10/11	Ventura County	Ojai Oil Company Project
09/08/11	City of San Diego	Regional Beach Sand Project

Table 11 (Continued)
Summary of SMARA Exemption Requests
From July 2000 to June 2012

Date	City or County	Exemption Request
01/12/12	County of Sutter	Goose Club Farms North Project
03/08/12	County of Plumas	Spanish Creek in Meadow Valley Restoration Project
03/08/12	County of Stanislaus	West Stanislaus Irrigation District (WSID) Main Canal Renovation Project
05/10/12	County of Colusa	Proposed Sand Creek Project
06/14/12	City of Santa Paula, County of Ventura	Proposed East Area I Property, Limoneira Company and Teague Construction (Operator)

Regional Beach Sand Project, City of San Diego: At its September 8, 2011, regular business meeting, the SMGB considered granting an one- time exemption from SMARA for the Regional Beach Sand Project, City of San Diego, pursuant to Section 2714(f).

The San Diego Association of Governments (SANDAG) on March 8, 2011, submitted a request for a one-time exemption from SMARA for the Regional Beach Sand Project (RBSP) II, a proposed regional beach nourishment project led by SANDAG. This project would place beach-quality sand along 11 beach receiver sites within six municipalities in San Diego County. The receiver sites are to be replenished with sand extracted from one of three borrow sites which are located offshore along the coast from Encinitas to Mission Beach: west of San Elijo Lagoon (SO-6), offshore of the San Dieguito River (SO-5), and offshore of Mission Beach (MB-1). The project as proposed is similar to an earlier request by SANDAG, which was granted by the SMGB in 2000.

The proposed project exceeded 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 are being extracted for export and commercial gain.

The SMGB granted the exemption since a) an Environmental Impact Report / Environmental Assessment had been prepared by SANDAG (Final EIR/EA for the San Diego Regional Beach Sand Project II, SCH No. 2010051063, 2011), b) SANDAG was the authorizing lead agency for the Regional Beach Sand Project, c) the submarine borrow pits would be naturally replenished with sand and re-contoured by marine actions to their original sea bed configurations, and d) supplying two million cubic yards of beach quality marine sand from other, distant inland sources along the length of coastline involved would not be economical for the project because of the mechanics of transportation. Also, the probability of increased congestion of land traffic along the affected beaches, as well as undesirable air quality problems from surface supply trucks, may preclude inland mine sources from participating. No opposition from local commercial surface mine operators was received.

Goose Club Farms North Project, County of Sutter: Goose Club Farm North (GCFN) submitted a request on December 20, 2011, for a one-time exemption from SMARA to remove silt, sand and debris derived from over flow and flooding from the Feather River onto GCFN's property. GCFN proposed to grade the land suitable for agricultural purposes. About 300 acres of land surface had been previously disturbed. The amount of material previously extracted had been reported by OMR to have exceeded 1,000 cubic yards. The anticipated volume of material to be removed was not available at the time this Executive Officer's report was prepared. No excavation of a pit or trenches is proposed. An aerial view of the project vicinity is shown in Figure 6.

While the specific number of cubic yards of materials that would be excavated and removed is unknown at this time, the Central Valley Flood Protection Board's (CVFPB) permitting process would be in a position to determine this amount with greater certainty. More specifically, this permitting process would require GCFN to submit an updated permit application to the CVFPB, including: (1) an Encroachment Permit Application (CVFPB Form No. 3516) and; (2) an Environmental Assessment Questionnaire (CVFPB Form No. 3615a) and; (3) a Topography map of existing ground elevations and; (4) a Grading plan showing proposed ground elevations with areas of cut or fill.



Figure 6. Aerial view of project area.

At its January 12, 2011, regular business meeting, the SMGB granted the exemption pending compliance with all appropriate permit conditions set forth by the County of Sutter, Central Valley Flood Protection Board, and any other agencies that have jurisdiction over any aspects of this project. The basis for such decision was that relevant agencies (including the CVFPB, the Department of Water Resources, the Department of Conservation and Sutter County) have been actively involved in the proposed activity and none have raised any concerns regarding

GCFN's ability to comply with CEQA. The only mention of CEQA had been in correspondence from the Central Valley Flood Protection Board ("CVFPB") dated December 21, 2011 (Exhibit A), indicating that the CVFPB "*will support further sediment removal [by GCFN], provided that an upgraded grading plan is submitted as part of an application for a new Reclamation Board Permit.*" GCFN was also informed in such correspondence that the application would require a CEQA Notice of Determination (NOD). A NOD is a brief notice to be filed by a public agency after it approves a project that is subject to CEQA (14 CCR Section 15373) and shall include the determination by the agency that the project will not have a significant effect in the environment (14 CCR Section 15075). The CVFPB also indicated the following regarding GCFN's application: "*[GCFN's] application will be expeditiously reviewed by staff, sent to the U.S. Army Corps of Engineers for comments, and presented to the Central Valley Flood Protection Board for vote. This action, if approved, will authorize Goose Club Farms to remove sediment from the Bypass, which is beneficial to enhancing flood control.*" Thus, CVFPB's consideration of GCFN's forthcoming application for a new Board permit would include the appropriate level of CEQA environmental review (i.e., the determination by the agency that the project would not have a significant effect in the environment), so as to satisfy PRC Section 2712(a).

Second, the proposed activity was in the process of being permitted or otherwise authorized by a local lead agency. The proposed project would require GCFN to submit, an updated permit application to the CVFPB, including: (1) an Encroachment Permit Application (CVFPB Form No. 3516), (2) an Environmental Assessment Questionnaire (CVFPB Form No. 3615a), (3) a topographic showing map existing ground elevations, and (4) a Grading Plan showing proposed ground elevations with areas of cut or fill. GCFN is in the process of completing these application requirements and the CVFPB had indicated that GCFN's "*application would be expeditiously reviewed by staff, sent to the U.S. Army Corps of Engineers for comments, and presented to the Central Valley Flood Protection Board for vote.*" In correspondence dated December 22, 2011 (Exhibit A), the CVFPB affirmed its "*support for sediment removal from land within the Sutter Bypass provided that the work is done as specified in a valid encroachment permit issues by the [Reclamation] Board.*" In correspondence dated December 22, 2011 (Exhibit A), the Department of Water Resources, Division of Flood Management's Flood Maintenance Office also expressed its support of the Board's approval of a one-time exemption under Public Resource Code Section 2714(f) stating "*DWR's Flood Maintenance Office supports property owners efforts, and land uses, that result in improved channel capacity of the flood protection system. The removal of flood related sediment deposits and debris by landowners for agricultural purposes ensures just such channel capacity and furthers statewide flood protection goals. To this end, the Flood Maintenance Office is supportive of efforts of the [State Mining and Geology] Board and Mr. Lowry to identify a pathway forward that ensures just such continued flood protection.*"

Third, the end use or proposed end use of property on which the activity is proposed is defined as restoring the land to agricultural use. Finally, the potential impacts on commercial interests resulting from the proposed activity have been considered. GCFN claims that 1) the materials to be excavated from GCFN's property are not commercial products such as spec-based aggregate, 2) GCFN will not process any of the silt, sand and debris that are proposed to be removed so as to make it suitable on a profitable commercial basis, and 3) is not in the surface mining business and seeks only to remove the material that has been deposited on GCFN's property and to offset its costs in doing so, so that the land may be restored to its agricultural purpose. Accordingly, no impact on commercial interests or competitive advantage exists.

Spanish Creek in Meadow Valley Restoration Project, County of Plumas: On January 19, 2012, Terry Benoit on behalf of the Feather River Coordinated Resource Management Group (FRCRM) submitted a request for a one-time exemption from SMARA for the Spanish Creek in

Meadow Valley Restoration Project, located in Plumas County. The non-profit FRCRM was established in 1985 to protect, maintain and enhance ecosystems and community stability in the Feather River Watershed through collaborative landowner participation. The FRCRM group is a partnership of 24 public and private sector groups who formed in 1985 to collectively improve watershed health in the upper Feather River Watershed.

The proposed project incorporates plans to commence efforts to reduce the excessive sediment load to Spanish Creek, by implementing certain projects in Meadow Valley, upstream of the American Valley, resulting in a reduction in sediment sources within the entrenchment, stabilization of entrenchment banks, relief of constrictions, and provide for long-term recruitment and removal of excess gravel. The entire project area incorporates approximately 72 acres in four distinct, but connected, project reaches. Approximately 4.4 acres are planned to be disturbed within the downstream project reach, with an estimated 4,600 cubic yards of material relocated within the project reach and an additional 3,900 cubic yard excavated and removed from the project site. A project overview is provided in Figure 7.

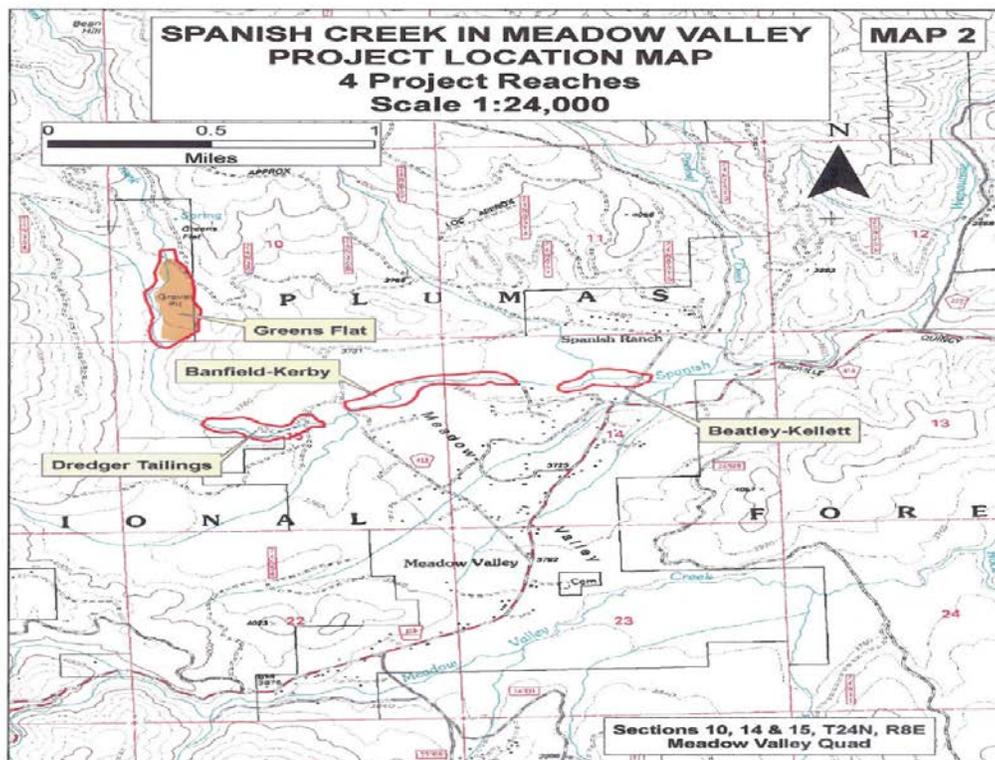


Figure 7. Overview of project area.

At its March 8, 2012, regular business meeting, the SMGB conditionally granted a one-time exemption from SMARA for this project under its authority provided by PRC Section 2714(f), pending compliance with all appropriate permit conditions set forth by the County of Plumas, and any other agencies that have jurisdiction over any aspects of this project. Basis for such decision was a) the County will be the responsible CEQA lead agency for this project, b) permitting would be pursued with the County and other appropriate agencies. Such permits would include Clean Water Act Section 401 Water Quality Certification from the State Regional Water Resources Control Board, a Section 404 permit for dredge-and-fill from the U.S. Army Corps of Engineers, and a stream bed alteration permit from the California Department of Fish and Game, c) the end use or proposed end use of property on which the activity is defined as open space and the stream will be realigned, with banks reconfigured and excess gravel

removed, and d) the potential impacts on commercial interests resulting from the proposed activity have been considered. FRCRM is not in the surface mining business and seeks only to rehabilitate the subject area in corporation with numerous other agencies and groups. A permit to extend the life of the Green Flats pit is being pursued; whereas, the downstream dredging operation remains active. All material generated is anticipated to be used by the County. No impact on commercial interests or competitive advantage is anticipated.

West Stanislaus Irrigation District (WSID) Main Canal Renovation Project, County of Stanislaus: A request for a one-time exemption from SMARA for the West Stanislaus Irrigation District (WSID) Main Canal Renovation Project, County of Stanislaus was received on February 14, 2012. The project includes the removal of approximately 5,000 cubic yards of material to be used for foundation and pipe fill for the pumping station situated approximately two miles from the project site. A topographic overview of the project area is provided in Figure 8.

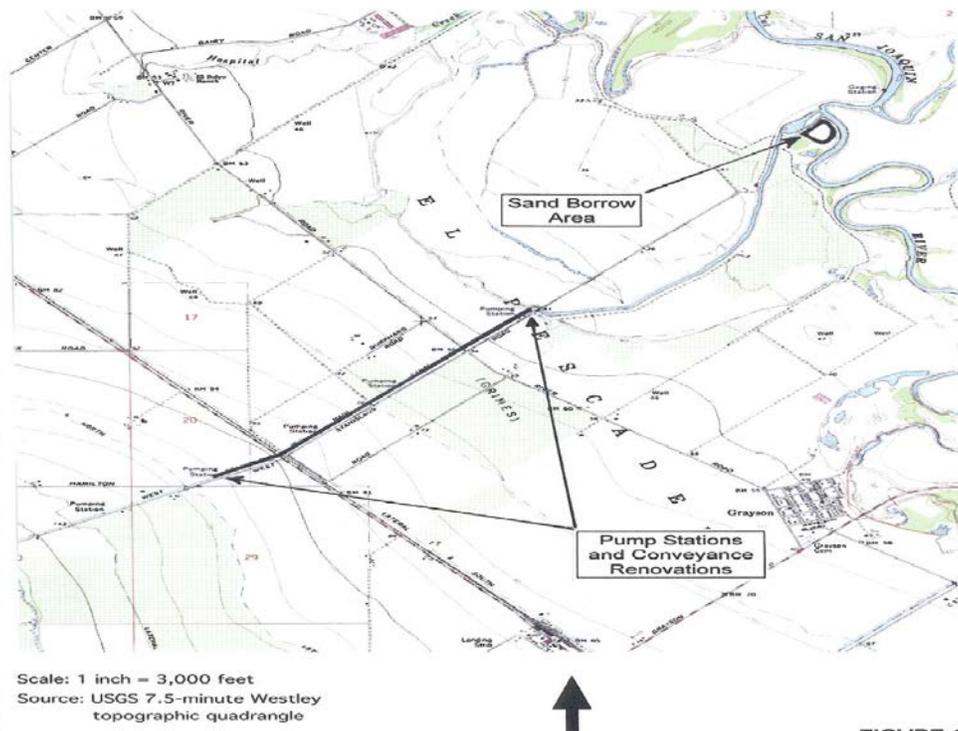


Figure 8. Overview of project area.

The SMGB granted the exemption since a) the project was categorically exempt from the California Environmental Quality Act (CEQA), Class 1, Existing Facilities and Class 2, Replacement or Reconstruction, CEQA Guidelines Section 15201 and 15302, and would not result in a direct or reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15060(c)(2)), b) the proposed activity was permitted or otherwise authorized by the County of Stanislaus, c) the end use or proposed end use of property is deemed agricultural, and d) the potential impact on commercial interests is considered to be non-existent or insignificant.

Proposed Sand Creek Project, County of Colusa: On April 19, 2012, Ryan Brown, Regulatory Biologist with Foothill Associates, and on behalf of Strain Orchards submitted a request for a one-time exemption from SMARA for the Proposed Sand Creek Project, located in Colusa

County (County). The purpose of the project is to complete removal of accumulated material from Sand Creek to prevent overland flooding and minimize adverse impact on private property used for agricultural purposes.

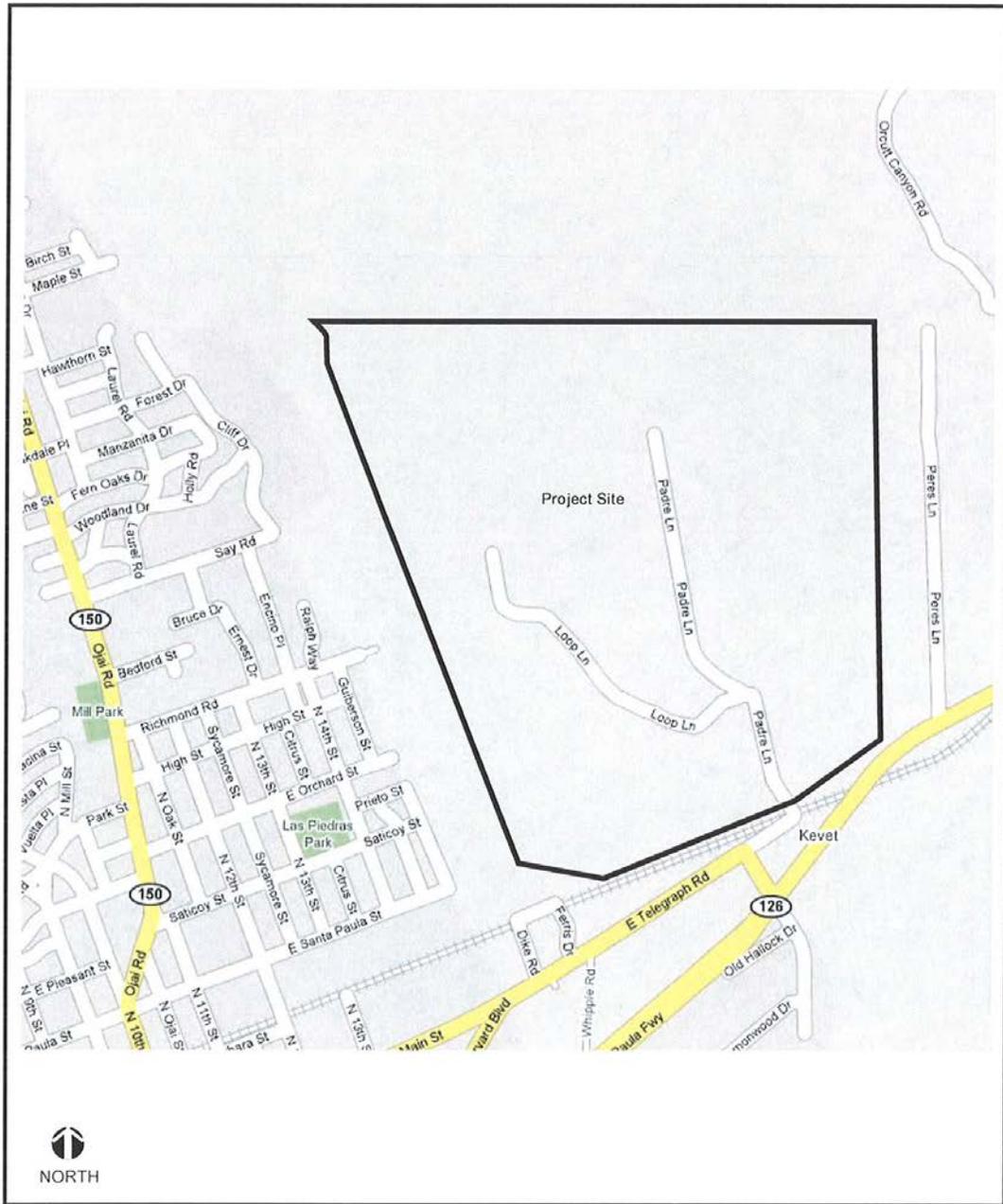
The proposed project includes the removal of approximately 30,000 cubic yards of sand and gravel that has accumulated in what is referred to as Sand Creek. Such accumulations occur about every 4 to 10 years, depending on precipitation, and should the accumulated material remain in place, substantial property damage and adverse impact to Interstate 5, a Union Pacific railway line, and Old Highway 99, all located immediately downstream, also occurs.

Currently, the sand and gravel is stockpiled, but the property owner is prohibited from selling the material without coming under SMARA. The property owner had no desire to develop and operate a surface mining operation.

At its SMGB May 10, 2012, regular business meeting, the SMGB conditionally granted a one-time exemption from SMARA for this project under its authority provided by Public Resources Code Section 2714(f), pending compliance with all appropriate permit conditions set forth by the County of Colusa, and any other agencies that have jurisdiction over any aspects of this project. This decision reflected a) the County being the responsible CEQA lead agency for this project, b) the property owner would be responsible for attaining all pertinent permits from the County and other appropriate agencies, and such permits may include Clean Water Act Section 401 Water Quality Certification from the State Regional Water Resources Control Board, a Section 404 permit for dredge-and-fill from the U.S. Army Corps of Engineers, and a stream bed alteration permit from the California Department of Fish and Game, c) the end use or proposed end use of property on which the activity is proposed is agriculture, and the creek would be cleaned out, excess sand and gravel removed, and the banks reconfigured, and d) the potential impacts on commercial interests resulting from the proposed activity have been considered. The operator of Strain Orchards is not in the surface mining business and seeks only to rehabilitate the subject area. No impact on commercial interests or competitive advantage is anticipated.

Proposed East Area I Property, Limoneira Company and Teague Construction (Operator), City of Santa Paula, County of Ventura: On May 18, 2012, Jane Farkas, consultant with Sespe Consulting, Inc., and on behalf of the Limoneira Company and Teague Construction, submitted a request for a one-time exemption from SMARA for the Proposed East Area I Project (Figure 9), located in the City of Santa Paula (City), County of Ventura (County). The purpose of the project is to complete mass grading associated with development of a 500 acre area, and will include offsite exportation of excess material to be used in the local market.

The East Area I property will need extensive grading and onsite earthmoving of a 500 acre area in order to prepare the site for construction of structures, infrastructure and roads. About 350 acres will require over-excavation and recompaction for development purposes, with 150 acres of this area containing 20 to 25% rock eight inches or larger in maximum dimension which will need to be removed from the site. The estimated volume of material anticipated to be excavated and removed from the site is on the order of 140,000 to 340,000 tons, out of a total of about 540,000 tons to be generated for the project.



Source: P&D Consultants, Inc. (2007)

Figure 9. Overview of proposed project area.

At its June 14, 2012, regular business meeting, the SMGB denied a one-time exemption from SMARA for this project under its authority provided by PRC Section 2714(f). An approved Environmental Impact Report (EIR) was prepared for the East Area 1 Specific Plan and approved by the City in 2008, EIR Section 4.8 Geology and Soils and 4.8.5 Mitigation Measures G-1, G-8, G-9, G-10, G-11, G-12, G-13, and G-14, discuss the need for removing oversized material during the site grading phase of the project. The proposed project was authorized by a local lead agency, albeit not all permits have been attained. The City had approved an application from the Limoneira Company for a Specific Plan to develop properties in the City's East Area I General Plan Expansion Area. On June 3, 2008, the voters of Santa Paula

approved Measure G, an initiative measure amending the City Urban Restriction Boundary (CURB) and approving an intensification of use in accordance with Santa Paula General Plan Sections III (G) ("SOAR") and III (F) ("Citizens Advocating Responsible Expansion Initiative"). On February 26, 2008, the City Council and Planning Commission approved the project's proposed specific plan and the project's Environmental Impact Report. Teague Construction, on behalf of the Limoneira Company, would obtain a Grading Permit from the City's Public Works Department to move the material. No existing Grading Permits have been obtained as of yet, pending a decision from the SMGB as to whether an exemption would be granted. It was also noted that PRC Section 2714(c) states:

"Operation of a plant site used for mineral processing, including associated onsite structures, equipment, machines, tools, or other materials, including the onsite stockpiling and onsite recovery of mined materials, subject to all of the following conditions:

(1) The plant site is located on lands designated for industrial or commercial uses in the applicable county or city general plan.

(2) The plant site is located on lands zoned industrial or commercial, or are contained within a zoning category intended exclusively for industrial activities by the applicable city or county.

(3) None of the minerals being processed are being extracted onsite.

(4) All reclamation work has been completed pursuant to the approved reclamation plan for any mineral extraction activities that occurred onsite after January 1, 1976."

These criteria for conduct of a mineral processing facility is not currently met. The end use or proposed end use of property is mixed housing, among other uses (Refer to response to Criteria No. 1). The potential impacts on commercial interests resulting from the proposed activity were also considered. Surplus material would be exported from the site and be utilized in the local market. Western Ventura County has high demand for crushed rock and most of the material to be removed will be supplied to an asphalt plant located less than 6 miles away. Currently rock for the plant is trucked approximately 70 miles (one way) from their quarry located in the City of Palmdale. Moving this material from the East Area I site to the plant site will result in cost and environmental benefits. Local contractors will be utilized for the earthmoving and processing activities. Surplus materials shall not be exported from the site unless and until actual construction work has commenced and shall cease if it is determined that construction activities have terminated, have been indefinitely suspended, or are no longer being actively pursued.

Lastly, nearby mines includes Santa Paula Materials, which was in support of the exemption, and Upland Rock which produces small quantities of rip rap and non Portland Concrete Cement (PCC)-grade aggregates. In addition, within about 20 miles are four quarries in the Grimes Canyon area including CEMEX, Grimes Rock, Wayne J Sand and Gravel and Best Rock. These four quarries all produce from the Saugus formation which is 85% sand and 15% rock and tend to use all of the rock internally. Ventura County is general is deficient of quality aggregate. The intended use of the rock generated by the project will be to create PCC and Hot Mix Asphalt (HMA)-grade aggregates, and supply the nearby Granite Construction HMA Plant and CEMEX RMC Plants, both of which currently import rock from Palmdale or Irwindale.

RECLAMATION PLAN APPEAL

No reclamation plan appeals were held during the 2011-2012 period.

SMARA Lead Agency Review

The SMGB received comments and complaints about SMARA lead agencies through three venues: public complaints (i.e., citizen, operator, environmental groups, etc.), referrals from OMR Lead Agency Review Team (LART), or follow-up from a 15-Day Notice issued by OMR to a SMARA lead agency.

California is the only state in the conterminous United States where surface mine reclamation is not regulated 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 Public Resources Code (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 the California Surface Mining and Reclamation Act of 1975 (SMARA), there are currently 103 lead agencies: 52 counties, 50 cities, and the SMGB.

In 2007, the SMGB published Information Report IR 2006-07 titled “*Report on SMARA Lead Agency Performance Regarding Mine Reclamation.*” 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 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 was found to significantly vary throughout the state. For the most part, overall performance was found to be poor, reflecting a number of factors including primarily financial constraints, and limited or absence of technical expertise. In 2007, the Department of Conservation through OMR established the Lead Agency Review Team (LART).

A summary of lead agency issues heard by the SMGB, including review of LART reports, is summarized in Table 13. 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 2011-2012 reporting period, the SMGB reviewed the SMARA programs for the cities of Chula Vista and Oceanside, and counties of Colusa, Lake, Madera, Mariposa, Merced, Nevada and San Diego. As of June 2012, LART has completed a review of seventeen SMARA lead agencies: thirteen counties and four cities.

Table 12
Summary of SMARA Lead Agencies Addressed by the SMGB as of June 2012

LART Report	Description	Date of LART Report	SMGB Action
	Chula Vista	February 15, 2012	No action taken
	Irwindale	Not applicable	45-Day Notice to Correct Deficiencies issued
	Lake Elsinore	Not applicable	45-Day Notice to Correct Deficiencies issued
	Oceanside	February 15, 2012	No action taken
	Truckee	February 17, 2011	No action taken

Table 12 (Continued)
Summary of SMARA Lead Agencies Addressed by the SMGB as of June 2012

LART Report	Description	Date of LART Report	SMGB Action
Counties	Alameda	February 22, 2011	No action taken
	Alpine	September 8, 2010	Assumed via agreement
	Colusa	April 15, 2012	45-Day Notice to Correct Deficiencies issued
	El Dorado County	Not applicable	45-Day Notice to Correct Deficiencies issued; assumed by SMGB in 2002
	Lake	December 5, 2011	No action taken
	Madera	May 17, 2012	45-Day Notice to Correct Deficiencies Issued
	Mariposa	May 29, 2012	45-Day Notice to Correct Deficiencies Issued
	Mendocino	July 19, 2012	45-Day Notice to Correct Deficiencies issued
	Merced	September 20, 2011	No action taken
	Mono	February 28, 2011	45-Day Notice to Correct Deficiencies Issued
	Napa	October 7, 2009	No action taken
	Nevada	February 15, 2012	No action taken
	San Diego	February 17, 2012	No action taken
	Santa Cruz	April 1, 2010	No action taken
	Santa Clara	Not applicable	45-Day Notice to Correct Deficiencies issued
	Sierra	Not applicable	45-Day Notice to Correct Deficiencies issued
	Siskiyou	Not applicable	45-Day Notice to Correct Deficiencies issued
	Tuolumne	August 2009	No action taken
	Yolo	September 5, 2012	County to report back to SMGB
Yuba	Not applicable	45-Day Notice to Correct Deficiencies issued; assumed by SMGB in 2003	

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 were two lead agencies in this category as of June 30, 2012.
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, 2012.
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.

4. When the SMGB determines that a lead agency has failed in one or more of its responsibilities under SMARA. There were three lead agencies in this category as of June 30, 2012; Alpine County, El Dorado County and Yuba County.

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. In 2002 and 2003 the SMGB assumed SMARA lead agency authority from the County of El Dorado and County of Yuba, respectively. On June 7, 2011, the SMGB assumed SMARA lead agency authority from the County of Alpine via a Memorandum of Understanding (MOU).

As of June 2012, the SMGB serves as lead agency under SMARA for 48 individual mining operations located in California. Of these 48 surface mining operations, 28 are located within three counties (County of Alpine, County of El Dorado and County of Yuba), 12 are located within cities that do not have surface mining ordinances, and 8 are dredging operations located within the San Francisco Bay and bay delta areas (Table 10).

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 10 through 13.



Figure 10. 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 2012, the SMGB serves as SMARA lead agency for eight 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 2012 there were eight marine dredging operations that have approved reclamation plans in place, for which the SMGB oversees SMARA compliance (Figure 14).



Figure 11. The Diamond Quarry located in El Dorado County. (Photo credit: Will Arcand)



Figure 12. Atkinson Pit No. 1 located in the City of Compton. This former open pit clay mine is being reclaimed via backfilling to the adjacent street level for future retail or industrial land use. (Photo credit: Will Arcand)



Figure 13. View of the open pit of the former Big Gun Quarry within the City of Rocklin. This historic granite quarry is currently undergoing reclamation. (Photo credit: Will Arcand)



Figure 14. 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, 2012, is summarized in Table 14.

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	Mining Completed - Reclamation In Progress	Sand and Gravel	County of Alpine
91-02-0005	Fredricksburg Gravel Pit	Idle	Sand and Gravel	County of Alpine

Table 13 (Continued)
SMGB SMARA LEAD AGENCY SURFACE MINES

CA ID No.	Mine Name	Status	Primary Commodity	Local Lead Agency
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	Idle	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
91-09-00XX	Big Cut Mine	Active, Unpermitted Illegal Mining Operation	Sand, Gravel, Placer Gold	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	Mining Completed - Reclamation In Progress	Granite	City of Rocklin
91-33-0002	Avalon Mine	Active	Sand and Gravel	City of Jurupa Valley
91-33-0029	Philadelphia Recycling Mine	Active	Fill Dirt	City of Jurupa Valley
91-33-0061	Harlow Quarry	Active	Sand and Gravel	City of Jurupa Valley
91-33-0062	Pyrite Quarry	Active	Sand and Gravel	City of Jurupa Valley
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
91-56-0034	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

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

CA ID No.	Mine Name	Status	Primary Commodity	Local Lead Agency
91-58-0003	Cal Sierra Development	Active	Gold	County of Yuba
91-58-0004	Sperbeck Quarry	Active	Metabasalt	County of Yuba
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
91-58-0019	Teichert Marysville (Yuba-Hofman)	Idle	Alluvial Sand and Gravel	County of Yuba
91-58-0021	Blue Point Mine	Reclamation Complete - Post Reclamation Monitoring	Alluvial Sand and Gravel	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

During the 2011-2012 reporting period, SMGB SMARA Lead Agency staff conducted 35 annual on-site inspections of surface mining operations, prepared and completed 45 annual inspection reports, and presented 45 annual inspection reports to the SMGB at their regularly scheduled meetings. In addition, SMGB SMARA Lead Agency staff reviewed 11 revised financial assurance cost estimates that were provided by mine operators directly under SMGB SMARA Lead Agency jurisdiction. SMGB staff also received and reviewed two amended reclamation plans provided by mine operators directly under SMGB SMARA Lead Agency jurisdiction.

During the reporting period the SMGB while serving as a SMARA Lead Agency issued one Order to Comply, conducted one OTC public hearing and upheld one OTC. In addition, the SMGB at its January 12, 2012, regular business meeting and in its capacity as a SMARA lead agency, issued an Administrative Penalty in the amount of \$750,000 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 reclamation plan and financial assurance mechanism approved by the SMGB as the SMARA lead agency (Figure 15). This penalty was in addition to an Administrative Penalty of \$100,000 issued to the individuals on March 10, 2011.



Figure 15. Big Cut Mine located in El Dorado County as of January 27, 2012.

SMGB SMARA Lead Agency staff initiated one contract for CEQA services during the reporting period by issuing a Request for Proposals in July of 2011. SMGB staff subsequently received and reviewed 21 Contractor Statements of Qualifications. In October 2011 SMGB staff selected a Contractor and initiated the process of contract finalization.

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 four units: the Reclamation Unit, the Reporting and Review Unit, the Compliance Unit which includes the Lead Agency Review Team (LART), and the Abandoned Mine Lands Unit (AMLU). 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 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.

The Reclamation Unit is responsible for the review, processing and analysis of annual mine operation report data from mining operators, and collection of mining fees. The Unit also audits lead agencies for performance of their individual SMARA programs.

OMR's Compliance Unit is responsible for the enforcement of SMARA statutes and regulations for both lead agencies and mine operations, and completes mine inspections for the Lead Agency Review audits.

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 reporting fees to the Department for operations conducted during calendar year 1990.

Annual mining operation 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 notices and/or 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 by the SMGB in 2012.

When surface mine operators do not provide reports and fees, as required by SMARA and PRC Section 2207, the Reporting and Reclamation 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 Reporting and Review Unit recommends enforcement action to the Director.

The number of mines reporting per year since 1990 is shown in Table 15. Because annual reports are filed with OMR by July 1 for the previous calendar year, the total number of reporting mines is not available for calendar year 2011 at the time this report was prepared. The figures reported below for the 2011 reports are as of the date of publication, and do not reflect all mines that will eventually report and pay fees for the year. Also, note that the numbers of mines reporting each year has changed from previous reports to reflect final tallies; previous reports reflected preliminary tallies. The general trend in mines reporting is consistent with earlier reports.

OMR's Reporting Section of the Reporting and Review Unit is responsible for the review and processing of annual reports and mining fees. In 2012, this unit processed 1,132 annual reports filed for calendar year 2011. Mine reporting fees of \$3,138,033.28 have been collected to date for the 2012-13 fiscal year. The Governor's Budget authorizes mine fees in the amount of \$4,284,416 for collection to run the Department and SMGB's SMARA programs.

SMARA Compliance Actions Fiscal Year 2011-12

During fiscal year 2011-12, administrative actions taken by Compliance Unit including issuance of 15-day Notices to SMARA lead agencies, and Notices of Violation (NOVs), Orders to Comply (OTCs) and/or Administrative Penalties to specific operators pursuant to PRC 2774.1, is summarized in Table 16.

Table 14 Summary of Number of Reporting Mines from 1990 through 2011	
Reporting Year	Number of Mines
1990	1,255
1991	1,367
1992	1,477
1993	1,467
1994	1,473
1995	1,474
1996	1,483
1997	1,499
1998	1,501
1999	1,485
2000	1,447
2001	1,427
2002	1,416
2003	1,390
2004	1,369
2005	1,375
2006	1,359
2007	1,362
2008	1,327
2009	1,291
2010	1,267
2011	1,132

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 unit (AMLU) 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 16). 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_lands.)

**Table 15
Summary of Compliance Actions Initiated by OMR**

Mine Name	Type of Violations	Date 15 Day Issued	Date NOV Issued	Date OTC Issued	Hearing Date/ Outcome	Date Admin Penalties Letter Sent
Goose Club Farms	Illegal mine.	December 20, 2010	6/6/2011	8/19/2011	10/13/2011 (one-time exemption)	
Kaiser Eagle Mtn.	Abandoned mine.	May 26, 2011	6/11/2011 (draft)			
McLaughlin	Incomplete reclamation.	June 15, 2011	8/5/2011	9/9/2011	10/13/2011 (postponed)	
Red Ink Maid	Incomplete reclamation, off-site sedimentation, unsecured adits, and no financial assurance.	June 27, 2011	8/11/2011	1/9/2012	3/8/2012 SMGB upholds OTC, adding 45 days to Schedule of Compliance timeline	
Schneider Historic Mine	Substandard reclamation plan approved by county without seeking OMR review. Large pit adjacent to Cosumnes River exceeds reclamation plan limits, with stability and pit capture issues.	July 21, 2011	1/24/2011 (by lead agency)	6/10/2011	12/12/2011 lead agency upholds OTC	12/23/2011 (by lead agency)
Syndex Ready Mix	No financial assurance.	January 12, 2012	Action deferred pending outcome of BOS hearing	Not initiated ^(a)	Not initiated	Not initiated
Standard Gypsum Mine	Inadequate financial assurance mechanism.	January 18, 2012	Not initiated	Not initiated	Not initiated	Not initiated
P.T.L. Transportation D G mine	Expired financial assurance mechanism and unpaid fees.	January 20, 2012	New FACE and FAM submitted by operator	Not initiated	Not initiated	Not initiated
Standard Gypsum Mine (CA Mine ID #91-33-0076)	Financial assurance mechanism	February 16, 2012	Not initiated	Not initiated	Not initiated	Not initiated
Best Rock at Grimes Canyon (CA Mine ID #91-56-0010)	Mining outside reclamation plan footprint, mining 100 feet below maximum depth of excavation, over-steepened slopes, and inadequate financial assurance.	May 22, 2012	Not initiated	Not initiated	Not initiated	Not initiated

(a) NI = Not initiated as of June 30, 2012.

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 for 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) funding was obtained from the National Park Service to inventory all 5,307 AML sites located in California's 13 national parks by September 20, 2013. In addition, \$1.516 million in ARRA (Stimulus Act) funding was obtained from the U.S. Bureau of Land Management to remediate approximately 350 AML features on lands in the California Desert District (Barstow, El Centro, Ridgecrest, Palm Springs Field Offices) and the Mother Lode Field Office area, by September 30, 2014.

The AMLU estimates that the 47,000 abandoned mine sites in the State shown on Figure 16 contain an estimated 165,000 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 two 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 address 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 Department's California Geological Survey Library provides a wealth of historical information. Local knowledge is also a valuable resource for historic abandoned mine information. AMLU offers a toll-free telephone number (1-877-OLD-MINE) for Californians to easily contribute to the inventory.

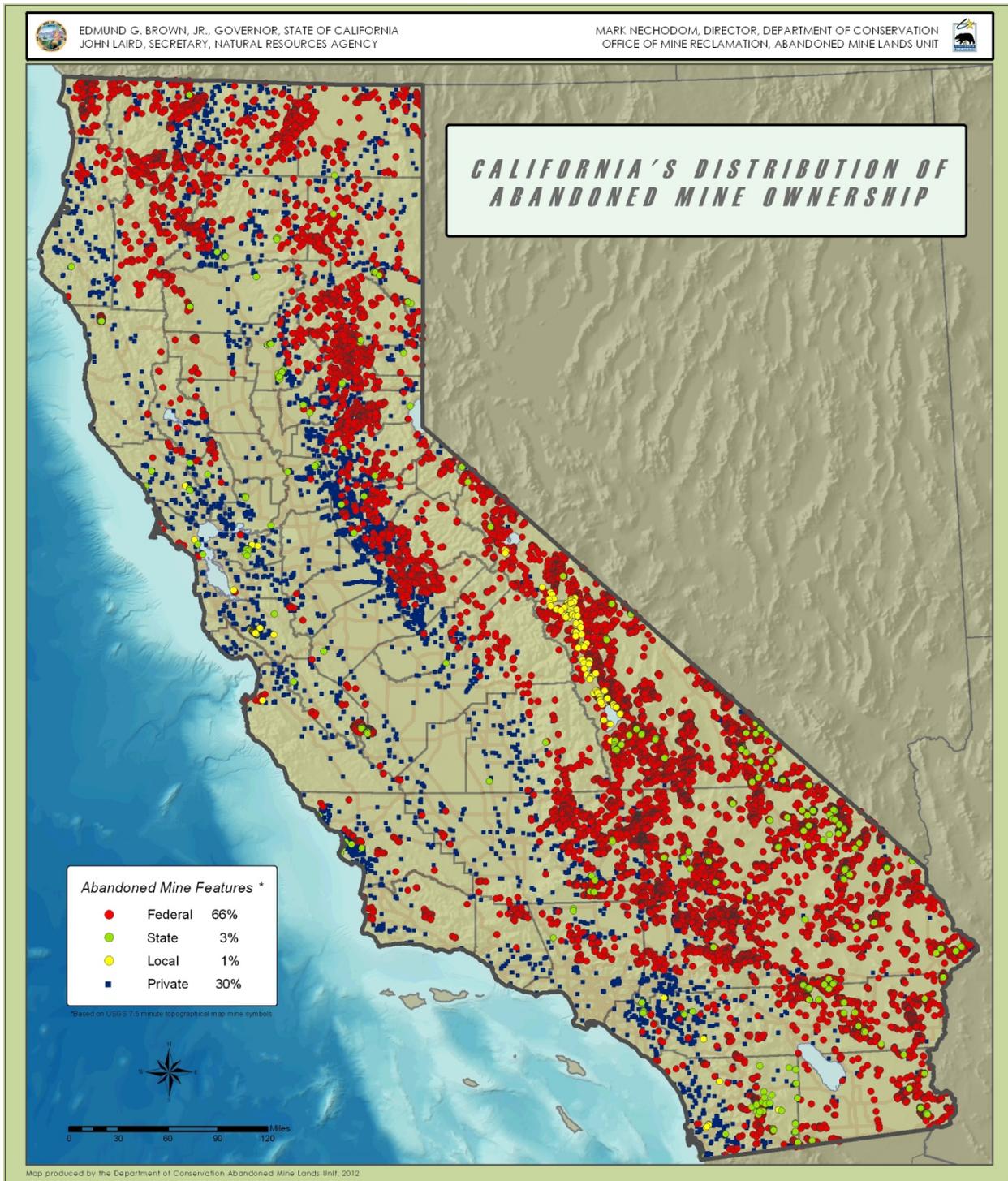


Figure 16. Location of abandoned mine features in California.

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 statutorily authorized

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 California Environmental Quality (CEQA) or National Environmental Policy Acts (NEPA).

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 assisted Placer County in the closure of an unnamed abandoned mine near Folsom, east of Sacramento (Figures 17 and 18). The mine had gone unseen below Auburn-Folsom Road for many years, but in 2010 it was exposed by a road-widening project that lowered the roadbed. The resulting horizontal mine opening in the road-cut was immediately adjacent to a busy road, and a simple backfill with soil had proven inadequate. In August 2011, AMLU staff installed a PUF plug inside the opening, and a Placer County road crew (already on-site working on the road-widening project) poured a concrete cap on top. Soil was tamped into the wet concrete to disguise the closure and complete the project. This project was given news by the local media, including three television news channels.



Figure 17. AMLU staff installs a PUF plug in the recently-uncovered abandoned mine.



Figure 18. Placer County road crew pours concrete cap on top of PUF plug while members of the media look on.

As California's representative to the National Association of Abandoned Mine Land Programs (NAAML), the AMLU co-hosted with the State of 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.

In summary, through December 31, 2011, the AMLU collected inventory data on 3,459 abandoned mine sites and 40,300 features. Through the end of fiscal year 2010-11, the AMLU in partnership with more than two dozen local, State and federal partners, also helped to close and/or remediate more than 1,164 hazardous abandoned mine features,. The AMLU provided \$1.2 million to its landowning agency partners who contributed approximately \$3.5 million to close and/or remediate physical hazards on their lands.

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 17.

Table 16 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
SMGB IR 2012-08	Report on Survey of Lead Agencies Affected by the Surface Mining and Reclamation Act	March 2012	Stephen M. Testa
SMGB IR 2012-09	A Survey of California Surface Mining Operations: Satisfaction with Annual Mining Operation Reporting Fees	June 2012	Stephen M. Testa

Two Information Reports were published during this reporting period. Information Report 2012-08 titled “*Report on Survey of Lead agencies Affected by the Surface Mining and Reclamation Act*” explored ways the SMGB and Department of Conservation could better assist lead agencies affected by SMARA. SMARA provides a comprehensive surface mining and reclamation policy for the regulation of surface mining operations, and 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. The SMGB conducted a survey of affected lead agencies between December 2010 and February 2011. A ten-question questionnaire was forwarded to all 115 lead agencies. Slightly over two-thirds of the Counties, and less than one-quarter of the Cities responded to the questionnaire. Results received were compiled and tabulated. Based on responses received, lead agencies affected by SMARA could be well-served by enhancing and expanding outreach efforts toward those lead agencies affected by SMARA, commencing efforts to streamline SMARA and minimize the amount of duplicity in the SMARA program, continuing efforts implemented by OMR to tailor workshops to the specific needs of its stakeholders, encourage lead agencies that do not have sufficient resources to oversee their respective SMARA program to forfeit SMARA responsibilities and obligations to the SMGB for a minimum of three years, and explore funding sources at the State and Federal levels for outreach and education to lead agencies and the public to fulfill the intent of State policy pertaining to SMARA.

In response to numerous comments received over the past few years, Information Report 2012-09 titled "*A Survey of California Surface Mining Operations: Satisfaction with Annual Mining Operation Reporting Fees*" evaluated the equity of the current mine fee schedule. 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 CCR Section 3501. The definition includes operations conducted by public agencies. As of 2010, there are currently 1,355 mining operations subject to the reporting fee regulation. PRC Section 2207(d) states the annual fee imposed shall not be less than \$100 or more than \$4,000 for each operation. Statute requires that these amounts be adjusted annually for cost of living, as measured by the California Consumer Price Index. The SMGB is currently considering the equity of the current reporting fee schedule. In considering changes to the SMGB regulations, the SMGB conducted a survey of affected mining operations. An eight-question survey was conducted of all 1,355 surface mining operations during the period of December 2011 and February 2012. Changing the basis on which Annual Mine Fees are calculated, or increasing the cap for total revenues generated, was considered. Raising the single mining operation cap to about \$8,000, without changing the way or basis in which the fees are calculated, or raising the total revenues generated, provided a more equitable distribution of Annual Mine Fees, and most closely addresses the intent of PRC Section 2207(d)(2).

Several additional reports were in preparation at the time this annual report was being prepared. These information reports will address the role of Engineering Geologists under SMARA, 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 conclusory determination that a reclamation plan is complete and in compliance with SMARA. Only the decision-makers can make such a conclusory 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 wild-land 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.