SMARA DESIGNATION
REPORT NO. 10

DESIGNATION OF REGIONALLY SIGNIFICANT CONSTRUCTION AGGREGATE RESOURCES IN THE PALM SPRINGS PRODUCTION–CONSUMPTION REGION

DECEMBER 1989

prepared by

THE STATE MINING AND GEOLOGY BOARD

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OF CONSERVATION

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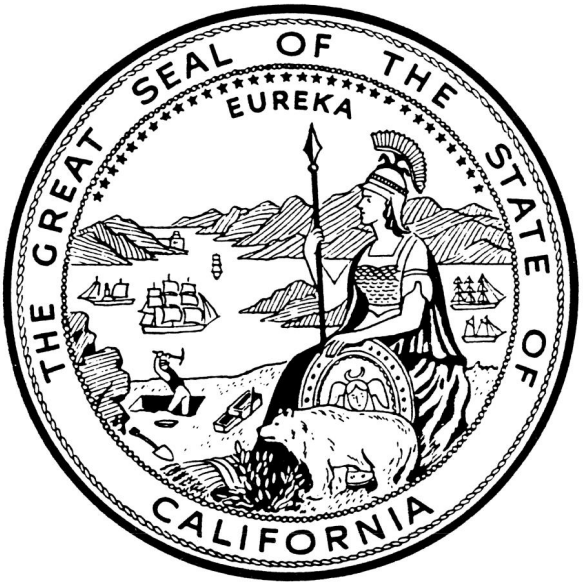
THE GREAT SEAL OF THE STATE OF
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CALIFORNIA

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STATE MINING AND GEOLOGY BOARD
1416 Ninth Street, Room 1326-A
Sacramento, CA 95814

pursuant to the
SURFACE MINING AND RECLAMATION ACT

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I. INTRODUCTION

The purpose of this report is to provide information on the construction aggregate deposits in the Palm Springs Production-Consumption (P-C) Region that have been designated as being of regional significance by the State Mining and Geology Board ("the Board"). Designation of resource areas was undertaken by the Board pursuant to Section 2790 of the California Surface Mining and Reclamation Act of 1975 (SMARA), as amended.

The objective of this action is to identify construction aggregate deposits that remain potentially available and are needed to meet future demands in this region.

Designation Map No. 89-2, Plates #1 and #2 displaying the areas designated as being of regional significance, are included as part of this report.

Construction Aggregate Resources

The first mineral commodity selected by the State Mining and Geology Board for classification by the State Geologist was construction aggregate--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 (blacktop), railroad ballast, stucco, road base, and fill. Aggregate provides from 80 to 100 percent of the material volume in these products. Portland cement concrete is used to produce concrete blocks and pipes, foundation pilings, precast concrete beams, and tilt-up concrete walls. Therefore, aggregate is very important to the construction industry and the local economy.

The construction industry is dependent on readily available aggregate deposits within reasonable distance to market regions. Because aggregate is a low unit-value, high bulk-weight commodity, aggregate for construction must be obtained from nearby sources in order to minimize costs to the aggregate consumer. If nearby sources do not exist, then transportation costs can quickly exceed the value of aggregate. In fact, transportation cost is the principal constraint defining the market area for an aggregate operation.

II. CLASSIFICATION-DESIGNATION PROCESS

The rapid growth of many California communities, particularly during the past two decades, has served to

emphasize the continuing importance of mineral resource conservation as a land-use issue. Adequate supplies of a variety of mineral commodities must be available at a reasonable cost to support the maintenance of our existing community infrastructure as well as to provide for its continued growth. Yet, urban expansion itself has been a major cause of a decline in the availability of many important minerals. In many areas, for example, pressure from competing land uses has severely reduced or completely eliminated access to available mineral resources such as sand and gravel deposits. The loss of these deposits has occurred because land-use planning decisions have often been made with little, if any, knowledge of the location and importance of these resources.

In an effort to remedy this problem, SMARA provides for a mineral lands inventory process termed "classification-designation". The Department of Conservation, its Division of Mines and Geology, and the State Mining and Geology Board are the State agencies responsible for administering this process. The primary objective of this process is to provide local agency decision makers with information on the location, need and importance of mineral resources within their jurisdiction. Another objective of this process is to assure that this information will be considered in local land-use planning decisions. This objective is met through the adoption of local mineral resource management policies.

During the first phase of this program, classification, the State Geologist is responsible for preparing a geological inventory of select mineral commodities within a defined study region. Major objectives of a classification report include: (1) identifying the market area of the commodity (a production-consumption region); (2) projecting the future (50-years) needs for the commodity within the study region; and (3) geologically classifying the lands within the region as to the presence or absence of the commodity.

The State Geologist classifies mineral lands solely on the basis of geologic factors. By statute, land-use and land ownership are not considered. Classification of an area as Mineral Resource Zone-2 (MRZ-2) indicates the existence of a deposit that meets certain criteria for value and marketability. Classification studies describe other categories of mineral resource zones, "MRZ-1", "MRZ-3", and "MRZ-4". The first two of these categories are used to indicate if an area contains no resource (MRZ-1) or contains potential but presently unproved resources (MRZ-3). Areas where it is not possible to assign any of these three categories are classified MRZ-4.

In many regions, large portions of the areas classified as MRZ-2 are already committed to various urban uses which limit access to the underlying resources. As an aid to local planning agencies, classification reports prepared for metropolitan areas also identify MRZ-2 areas that have not been urbanized. These non-urbanized areas, called resource sectors, are areas judged to contain a significant deposit of construction quality aggregate that is available, from a general land-use perspective, to meet future needs (50 years) of the region. The boundaries of each resource sector encompass a fairly uniform deposit in terms of its geology and geometrical configuration. For example, sector boundaries would be established between that part of a natural deposit formed on an alluvial fan, and that part within the confines of an adjacent modern stream channel and its floodplain. The use of resource sectors assists in the estimation of the tonnage of material available in each mineral deposit.

Once the classification report has been completed, the Board may choose to proceed with the second step in SMARA's mineral lands identification process--designation of those deposits that are of regional or statewide significance. In contrast to classification, which inventories mineral deposits without regard to land use or land ownership, the purpose of designation is to identify those deposits that are potentially available from a land-use perspective and that are of prime importance in meeting future needs of the region or the state. Areas considered for designation are those deposits situated within the resource sectors.

The classification study completed for this region is entitled, Special Report 159, Mineral Land Classification: Aggregate Materials in the Palm Springs Production-Consumption Region, by Russell V. Miller, 1988, Division of Mines and Geology. The Board's guidelines for the classification and designation of mineral lands are provided in Special Publication 51, California Surface Mining and Reclamation Policies and Procedures.

In establishing priorities for the classification program, the Board initially directed the Division of Mines and Geology to evaluate construction aggregate deposits in the Los Angeles, San Francisco, and San Diego metropolitan areas. Other metropolitan areas have also been classified or are in the process of being classified. These areas include Bakersfield, Fresno, Sacramento, Yuba City-Marysville, Stockton-Lodi, and San Luis Obispo-Santa Barbara.

Designation of regionally significant construction aggregate resource areas has been completed in the following regions:

(1) Reference in the general plan of the location of identified mineral deposits, and a discussion of those areas targeted for conservation and possible future extraction by the lead agency.

(2) Use of overlay maps or inclusion of information on any appropriate planning maps to clearly delineate identified mineral deposits and those areas targeted by the lead agency for conservation and possible future extraction.

(3) At least one of the following:

(A) Use of special purpose overlay zones, mineral resource/open space zoning, or any other appropriate zoning that identifies the presence of identified mineral deposits and restricts the encroachment of incompatible land uses in those areas that are to be conserved.

(B) Record, on property titles in the affected mineral resource areas, a notice identifying the presence of identified mineral deposits.

(C) Impose conditions upon incompatible land uses in and surrounding areas containing identified mineral deposits for the purpose of mitigating the significant land use conflicts prior to approving a use that would otherwise be incompatible with mineral extraction.

Note: Authority cited: Section 2755, Public Resources Code.
Reference: Section 2757 and 2761-63, Public Resources Code.

IV. DESIGNATION OF RESOURCE AREAS IN THE PALM SPRINGS P-C REGION

Actions Leading to Designation:

On January 8, 1988, the Board accepted the classification report for the Palm Springs Production-Consumption Region, and on February 3, 1988 transmitted the report to the affected lead agencies for their action pursuant to SMARA Section 2762. Based upon available production data and population projections, the Palm Springs P-C Region will need an estimated 156.1 million tons of construction aggregate during the next 50 years. Of this projected demand, approximately 54 percent or 84.4 million tons must be suitable for Portland Cement Concrete (PCC). The approximately 67 million tons of aggregate reserves calculated to exist within the region amount to 43 percent of the projected demand for all aggregate over the next 50 years. Unless new resources are permitted for mining, or alternative resources are utilized, existing reserves will be depleted during the year 2011. If a major earthquake, or

similar unforeseen catastrophic event, was to strike the region and necessitate reconstruction, the depletion of existing reserves would be faster. Consequently, the Board resolved to initiate designation proceedings to identify important mineral resource areas within the region.

Prior to designating mineral resource areas as being of statewide or of regional significance, an environmental assessment is completed to enable the Board to assess potential impacts of the designation process. Consequently, an environmental impact report was prepared pursuant to the provisions of the California Environmental Quality Act (CEQA), and a public hearing on the Draft Environmental Impact Report was held on January 13, 1989 in the City of Palm Desert. The Final Environmental Impact Report was certified by the Board on March 10, 1989.

A public hearing was held to receive testimony concerning proposed designation regulations for the Palm Springs P-C Region on July 14, 1989 in the City of Palm Desert. Regulations describing the areas designated as being of regional significance in the P-C Region were formally adopted September 8, 1989, together with environmental findings and a statement of overriding consideration (Resolution #89-12). After review and approval by the Office of Administrative Law, these regulations were incorporated into the California Code of Regulations as Section 3550.15 (Title 14, Division 2, Chapter 8, Subchapter 1, Article 2), effective December 13, 1989.

Designated Areas

Based upon information in the classification study, the environmental impact report, and that provided by public testimony, the Board designated the following areas as being of regional significance:

Sector A-1. Aggregate deposit located adjacent to the southeast border of the community of Cabazon at the base of the San Jacinto Mountains.

Sector A-2. Aggregate deposit located between the Colorado River Aqueduct and the Morongo Indian Reservation.

Sector A-3. Aggregate deposit located directly south of Interstate 10 two miles east of the community of Cabazon.

Sector B-1. Aggregate deposit located at the mouth of the Whitewater Canyon north of Interstate 10.

Sector B-2. Aggregate deposit located immediately south of Interstate 10 at the intersection of Highway 62.

Sector B-3. Aggregate depsit located immediately south of Section B-2 and east of the San Gorgonio Pass to Garnet Hill.

Sector B-4. Aggregate deposit located east of Indian Avenue and south of Garnet Hill.

Sector B-5. Aggregate deposit located adjacent to the northern border of Sector B-3 and the southern border of Interstate 10 near Garnet Hill.

Sector C. Aggregate deposit located in the Little Morongo Canyon approximately one mile north of the City of Desert Hot Springs.

Sector D. Aggregate deposit located in a small unnamed wash in the foothills north of the community of Thousand Palms.

Sector E-1. Aggregate deposit located northeast of Dillon Road, approximately six miles northeast of the City of Indio.

Sector E-2. Aggregate deposit located approximately six miles northeast of the City of Indio.

Sector F. Aggregate deposit located approximately four miles northeast of the City of Indio.

Sector G. Aggregate deposit located approximately three miles north of the City of Indio.

Sector H-1. Aggregate deposit located approximately four miles east of the community of Thermal.

Sector H-2. Aggregate deposit located northeast of the Coachella Canal approximately three and a half miles east of the community of Thermal.

Sector H-3. Aggregate deposit located southwest of the Coachella Canal approximately three miles east of the community of Thermal.

Table 1. Aggregate resources in the Palm Springs P-C Region

Sector	Density (tons/ cu.ft)	Waste (%)	Thick-ness (feet)	Area (Acres) [Under Permit]	Reserves (million tons)	*Resources (million tons)
A-1	.063	0	100	172	0	43.7
A-2	.063	0	100	21	0	4.3
A-3	.063	0	100	150	0	37.3
				---	--	----
		Subtotals		343	0	125.3
B-1	.063	0	100	193 [30]	**	48.2
B-2	.063	0	100	232	0	57.8
B-3	.063	0	100	637	0	162.4
B-4	.063	1	100	68 [68]	**	18.7
B-5	.063	1	100	118	0	26.8
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		Subtotals		1,248 [98]	**	313.9
C	.063	10	30	57	0	4.2
D	.063	3	35	27 [26]	**	2.1
E-1	.063	5	25	1,340 [38]	**	86.4
E-2	.063	5	25	1,358	0	87.5
				-----	--	----
		Subtotals		2,698 [38]	**	173.9
F	.063	15	25	3,295 [40]	**	190.7
G	.063	20	60	754 [416]	**	73.2
H-1	.063	0	15	77 [21]	**	3.1
H-2	.063	0	30	194 [183]	**	15.1
H-3	.063	0	35	457	0	43.1
				----	--	----
		Subtotals		728 [204]	**	61.3
				----- ----	---	----
		GRAND TOTALS		9,150 [822]	67	944.6

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* Includes reserves
** Confidential information

Sectors Considered But Not Designated

As a result of the changes in existing land use and concern about the availability of some of these aggregate resources, the Board deleted portions of the following sectors during the designation process:

Subsector A-3 -	The portion of subsector A-3 within the Habitat Conservation Plan was deleted because it is a managed area for the fringe-toed lizard, which is an endangered species.
Subsector B-1 -	The northern portion of this subsector was deleted because it was identified as a sensitive resource area.
Subsector B-2 -	Most of this subsector was deleted except the eastern portion because of existing wind turbines and gas lines, high winds, visual concerns, and the potential for high water.
Subsector B-3 -	All of this subsector was within the Habitat Conservation Plan was deleted.
Subsector B-4 -	All of this subsector within the Whitewater Floodplain Reserve was deleted because of endangered species.
Subsector B-6 -	This subsector was deleted because of high winds and scenic corridor.
Subsector B-7 -	This subsector was deleted because of high winds and scenic corridor.
Subsector B-8 -	This subsector was deleted because of high winds and scenic corridor.

V. ADDITIONAL INFORMATION

Questions on this designation report, the classification-designation program, or the requirements of the Surface Mining and Reclamation Act, should be directed to the State Mining and Geology Board, 1416 9th Street, Room 1326-A, Sacramento, California 95814, telephone (916) 322-1082.

Copies of the classification study prepared for the Palm Springs P-C Region, Special Report 159, Mineral Land Classification: Aggregate Materials in the Palm Springs

Production-Consumption Region, by Russell V. Miller, 1987, Division of Mines and Geology, are available for purchase from the California Department of Conservation, Division of Mines and Geology, Post Office Box 2980, Sacramento, California 95812. Copies of the classification reports are also available for reading at the Riverside City and County Public Library, 3851 Seventh Street, P. O. Box 468, Riverside, CA 92502-0468 or the Palm Springs Public Library, 300 South Sunrise Way, Palm Springs, California 92262-7699.

Copies of the draft and the final environmental impact reports may be obtained from the State Mining and Geology Board's office, 1416-9th Street, Room 1326-A, Sacramento, California 95814.

Title 14. Natural Resources
Division 2. Department of Conservation
Chapter 8. Mining and Geology
Subchapter 1. State Mining and Geology Board
Article 2. Areas Designated to be of Regional Significance

Section 3550.15 Construction Aggregate Resources, Palm Springs Production-Consumption Region

Two maps identifying the exact locations of the designated resource areas entitled, "Regionally Significant Construction Aggregate Resource Areas in the Palm Springs Production-Consumption Region, 1989 (Designation Map No. 89-2, Plates 1 and 2)", are incorporated by reference into this regulation. These maps are available from the State Mining and Geology Board's office in Sacramento.

The aggregate deposits in the following areas are designated as being of regional significance:

Sector A-1. Aggregate deposits located adjacent to the southeast border of the community of Cabazon at the base of the San Jacinto Mountains.

Sector A-2. Aggregate deposits located between the Colorado River Aqueduct and the Morongo Indian Reservation.

Sector A-3. Aggregate deposits located directly south of Interstate 10 two miles east of the community of Cabazon.

Sector B-1. Aggregate deposits located at the mouth of the Whitewater Canyon north of Interstate 10.

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