SMARA DESIGNATION
REPORT NO. 5

DESIGNATION OF REGIONALLY SIGNIFICANT CONSTRUCTION AGGREGATE RESOURCE AREAS IN THE CLAREMONT-UPLAND AND SAN BERNARDINO PRODUCTION-CONSUMPTION REGIONS

JANUARY 1987

prepared by

THE CALIFORNIA DEPARTMENT OF CONSERVATION
DIVISION OF MINES AND GEOLOGY

under the direction of

THE STATE MINING AND GEOLOGY BOARD

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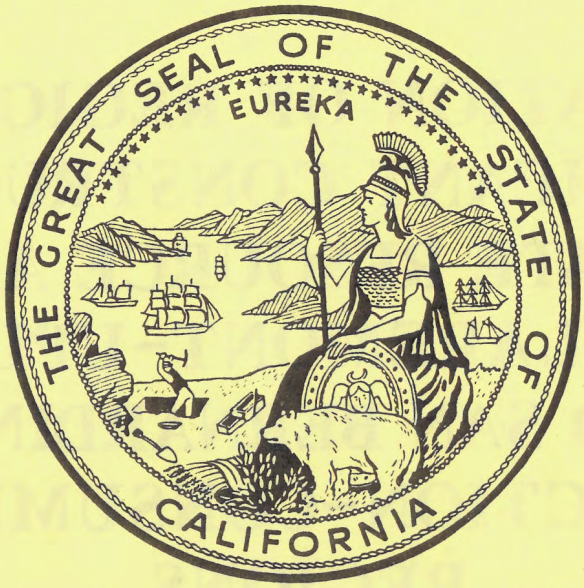

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DESIGNATION OF REGIONALLY SIGNIFICANT CONSTRUCTION AGGREGATE RESOURCE AREAS IN THE CLAREMONT-UPLAND AND SAN BERNARDINO PRODUCTION-CONSUMPTION REGIONS

I. INTRODUCTION

The purpose of this report is to provide information on the construction aggregate deposits in the Claremont-Upland and San Bernardino Production-Consumption (P-C) Regions that have been designated as being of regional significance by the State Mining and Geology 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 these regions.

Maps displaying the areas designated as being of regional significance are provided on Plates 1 through 3 and Plates 1 through 12, for the Claremont-Upland and San Bernardino P-C Regions, respectively, and are included as part of this report.

II. CLASSIFICATION-DESIGNATION PROCESS

A. Identifying Important Mineral Lands

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. To support the maintenance of our existing community structure as well as provide for its continued growth, adequate supplies of a variety of mineral commodities must be available at a reasonable cost. 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 agencies--such as cities and counties--with information on the location, need, and importance of mineral resources within their jurisdiction. The second objective of this process is to assure that this information will be considered in local land-use planning decisions. This objective is implemented through the adoption of local general plan 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-year) 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 geological factors. By statute, existing land-use is 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. The classification report also describes other categories of mineral resource zones -- MRZ-1, 3, and 4. The first two of these categories are used to indicate if an area contains no resources (MRZ-1) or contains potential but presently unproven 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 nonurbanized areas, called resource sectors, are important because they contain resources that remain potentially available for future use.

Once the classification report has been completed, the State Mining and Geology 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, the purpose of designation is to identify those deposits that are potentially available from a land-use perspective and are of prime importance in meeting future needs of the production-consumption region. The areas normally considered for designation are the deposits situated within the resource sectors.

The Board's guidelines for the classification and designation of mineral lands are provided in Part II of Special Publication 51, California Surface Mining and Reclamation Policies and Procedures.

B. 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. While its importance is often overlooked, sand and gravel is an essential commodity in today's society. As a construction material, sand and gravel is a key component in products such as Portland cement concrete, asphaltic concrete (blacktop), railroad ballast, stucco, road base, and fill. Aggregate normally provides from 80 to 100 percent of the material volume in these products. Portland cement concrete, in turn, is also used in a number of building materials such as concrete blocks and pipes, foundation pilings, precast concrete beams, and tilt-up concrete walls. In total, aggregate as a basic construction material has important economic multiplier effects. The availability of aggregate is essential, for example, to the construction industry. Developers, building and highway contractors, cement manufacturers, asphalt producers, construction workers, and truck drivers are dependent, either directly or indirectly, on a ready supply of aggregate. Therefore, the availability of aggregate deposits and their proximity to markets are critical factors in the strength of the economy.

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. Several other metropolitan areas have also been classified or are in the process of being classified. These areas include Bakersfield, Fresno, Sacramento, San Luis Obispo - Santa Barbara, and Palm Springs.

Designation of regionally significant construction aggregate resource areas has been completed in the San Fernando Valley region of Los Angeles, the Ventura County region, the Orange County-Temescal Valley and San Gabriel P-C Regions, and the Western San Diego County P-C Region. The designation of aggregate resources in the Claremont-Upland and San Bernardino P-C Regions was completed concurrently with the Saugus-Newhall, Palmdale, North San Francisco Bay, South San Francisco Bay, and Monterey Bay P-C Regions.

III. LEAD AGENCY RESPONSIBILITIES

A. General Plan Recognition

Both the classification report and the designation information are transmitted to the appropriate lead agencies as they are completed. Within 12 months of the receipt of this information, local lead agencies are required by the Act (Section 2762[a]) to establish mineral resource management policies in their general plans that: (1) recognize the mineral information classified by the State Geologist and transmitted by the Board; (2) assist in the management of land use that affects areas of regional significance; and (3) emphasize the conservation and development of the identified mineral deposits.

SMARA requires that a lead agency's land-use decisions involving designated areas are in accordance with its mineral resource management policies. In addition, a lead agency, in determining land use in designated areas, must balance mineral value against alternative land uses and consider the importance of the designated mineral resources to their market region as a whole and not just their importance to the lead agency's area of jurisdiction.

Prior to the adoption of mineral resource management policies, lead agencies are required to submit them to the Board for review and comment (Section 2762[b] and [c], SMARA). Any subsequent amendment to these resource management policies also requires Board review and comment.

B. Goals and Policies

The Board has adopted interim criteria to guide local government in the development of mineral resource management policies.

The following advisory criteria shall apply until the formal adoption and approval of State regulations governing lead agency mineral resource management policies:

Data and Analysis

The Surface Mining and Reclamation Act (SMARA) requires all affected cities and counties to incorporate into their general plans the mineral classification and designation information prepared by the State Geologist and approved and transmitted by the Board. Lead agencies shall incorporate into their general plan: (1) a summary of the information provided by the classification and designation reports or incorporate SMARA and Board policy by reference, and (2) maps of mineral resource areas (or incorporate by reference the classification and designation maps provided by the Board).

Policy Statements

Lead agencies shall adopt statements of policy recognizing the importance of the identified mineral resources, clarifying the intent that this information is to be used when making land use decisions in areas designated to be of statewide or regional significance, and emphasizing the conservation and development of identified mineral deposits.

Implementation Measures

In addition to a summary of the data and the adoption of policies to protect the identified mineral resources, lead agencies shall develop implementation procedures. These shall include at least two of the following:

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

- Use of overlay maps or inclusion of information on any appropriate planning maps to clearly identify mineral resource areas, and those areas targeted by the lead agency for conservation and possible future extraction.

- Use of special purpose overlay zones, mineral resource/open space zoning, or any other appropriate zoning that would: (1) identify the presence of important mineral resources, and (2) restrict the encroachment of incompatible land uses, in those areas that are to be conserved.

- Record on property titles in the affected mineral resource areas a notice identifying the presence of important mineral resources.

- Impose conditions upon incompatible land uses in and surrounding mineral resource zones for the purpose of mitigating the significant land use conflicts prior to approving a use that would otherwise be incompatible with mineral extraction.

C. Land-Use Categories

The Board has also developed land-use categories that are to serve as a guide to local government in establishing land uses on or adjacent to lands classified as MRZ-2 that have been designated as being of regional significance. These land-use categories are as follows:

- Incompatible - Land uses inherently incompatible with mining and/or that require a high public or private investment in structures, land improvements, and landscaping and that would prevent mining because of the higher economic value of the land and its improvements.

  Examples of such uses include high density residential, low density residential with high unit value, public facilities, intensive industrial, and commercial.

- Compatible - Land uses inherently compatible with mining and/or that require a low public or private investment in structures, land improvements, and landscaping and that would allow mining because of the low economic value of the land and its improvements.

  Examples of such uses include very low density residential (for example 1 unit per 10 acres), extensive industrial, recreation (public/commercial), agricultural, silvicultural, grazing, and open space.

- Interim - Land uses that require structures, land improvements, and landscaping of a limited useful life and from an economic and political standpoint can be converted to mining at the end of that limited life.

IV. DESIGNATION OF RESOURCE AREAS IN THE CLAREMONT-UPLAND AND SAN BERNARDINO P-C REGIONS

A. Actions Leading to Designation

On August 27, 1984 the Board accepted the classification reports for the Claremont-Upland and San Bernardino P-C Regions, and in mid-October 1984, transmitted the reports to the lead agencies.

A public hearing on the Draft Environmental Impact Report for the two P-C regions was held on March 7, 1985 in the City of Claremont. The Final Environmental Impact Report was distributed on July 26, 1985 and was certified by the Board on August 19, 1985.

Two public hearings were held to receive testimony concerning the designation of the Claremont-Upland and San Bernardino P-C Regions and several other P-C regions. The first meeting was held in Palm Desert on November 15, 1985, the second in Santa Rosa on January 31, 1986.

Regulations describing the areas designated as being of regional significance in the study regions were formally adopted on October 2, 1986, by Resolution #86-7. After review and approval by the Office of Administrative Law, these regulations were incorporated into the California Administrative Code as Sections 3550.7 (Claremont-Upland Region) and 3550.8 (San Bernardino Region) (Title 14, Division 2, Chapter 8, Subchapter 1, Article 2), effective January 3, 1987.

B. Areas of Regional Significance in the Claremont-Upland P-C Region

Classification. Information on the construction aggregate resources of this area are provided in California Division of Mines and Geology (CDMG) Special Report 143, Part VI, classification report for the Claremont-Upland P-C Region.

The Claremont-Upland P-C Region encompasses the smallest area of the eleven P-C regions in the Southern California area. This region includes major population centers such as the cities of Claremont, Upland, Ontario, Rancho Cucamonga, and Chino. Physiographic features of the region include the alluvial fans of San Antonio, Cucamonga, Day, and Deer Creeks, and small parts of the foothills of the San Gabriel Mountains. The population of this region is approximately 500,000.

The Claremont-Upland P-C Region is bordered by the San Bernardino P-C Region on the east, the San Gabriel Valley P-C Region on the west, and the Orange County-Temescal Valley P-C Region on the south.

Several areas within the Claremont-Upland P-C Region have been classified Mineral Resource Zone-2. Aggregate resources in these MRZ-2 areas are located in both existing stream channels and their respective flood plains. While some resources are located in highly urbanized areas--Cities of Claremont, Upland, and Rancho Cucamonga--a substantial portion of the remaining available resources are located in the more rural area on the northern parts of the Day and Deer Creek fans.

Within the areas classified as MRZ-2, Special Report 143, Part VI identified 4 resource sectors that contain aggregate resources that remain potentially available from a general land-use perspective. These 4 resource sectors, (identified alphabetically in the report, A through D) are the areas the Board considered for designation as being of regional significance.

Designated Areas. Based upon information in Special Report 143, Part VI, the environmental impact report prepared for this action, and public testimony, the Board designated all or portions of the areas delineated as Resource Sectors A through D in the Claremont-Upland P-C Region. These areas are described as follows:

Sector A - The annual recharge area upstream from the San Antonio Creek Flood Control Dam.

Sector B - Eight parcels south of San Antonio Creek Flood Control Dam in the unurbanized areas of the San Antonio Creek Fan, northeast of the City of Claremont. Sector B is roughly bounded by Foothill Boulevard on the south, San Antonio Avenue on the east, and Thompson Creek on the west.

Sector C - Four parcels in the proximal part of the Cucamonga Creek Fan, north of the City of Upland. The area is generally north of 19th Street, west of Carmelian Avenue, east of Euclid Avenue, and south of the San Bernardino National Forest.

Sector D - Three parcels covering parts of the Day Creek and Deer Creek Fans between the cities of Cucamonga and Fontana. It is bounded by the San Gabriel Mountains on the north and Highland Avenue on the south.

TABLE I

DATA ON RESOURCE AREAS AND SECTORS
OF THE CLAREMONT-UPLAND P-C REGION

(Taken from Table 6.2, California Division of Mines and Geology, Special Report 143, Part VI updated to reflect designation boundary changes of resource sectors).

Resource Area	Sector	Million Short Tons Resources*, (Reserves)	
San Antonio Reservoir	A	39	
	Total:	39	
Upper San Antonio Fan	B-1	228	(**)
	B-2	3.5	
	B-3	8.3	
	B-4	8.4	
	B-5	6.6	(**)
	B-6	7	
	B-9	7	
	B-10	13	
	Total:	282	(**)
Upper Cucamonga Fan	C-1	19.6	
	C-2	14.1	
	C-5	9.8	
	C-6	34.4	(**)
	Total:	78	(**)
Deer and Day Fans	D-1	61.8	
	D-3	86.4	
	D-16	13.9	
	Total:	162	
	GRAND TOTAL:	561	(60)

*Includes Reserves.
**Cannot be shown individually due to confidentiality; however, amount is included in total at bottom of page.

As noted earlier, the designation of the Claremont-Upland P-C Region was incorporated into the California Administrative Code as Section 3550.7 (Title 14, Division 2, Chapter 8, Subchapter 1). The locations of these sectors are provided on Claremont-Upland Region Plates 1 through 3. The complete text of Section 3550.7 and the accompanying maps are provided in Appendix A of this report.

As a result of changes in existing land use and concern about the availability of aggregate resources in areas, the Board deleted portions of three resource sectors during the designation process. The following summarizes changes to resource sectors in the Claremont-Upland P-C Region:

1. Sector B-1 - Boundaries of the sector were amended to delete urbanized areas.

2. Sector B-3 - Boundary of the sector was amended to delete urbanized area.

3. Sector B-7 - This deposit was not designated.

4. Sector B-8 - This deposit was not designated.

5. Sector C-1 - Boundary of this sector was amended to delete urbanized area.

6. Sector C-2 - Boundary of this sector was amended to delete urbanized area.

7. Sector C-3 - This deposit was not designated.

8. Sector C-5 - Boundaries of this sector were amended to delete urbanized areas.

9. Sector C-6 - Boundaries of this sector were amended to delete pipeline and urbanized areas.

10. Sector C-8 - This deposit was not designated.

11. Sector D-3 - Boundaries of this sector were amended to delete urbanized areas.

12. Sector D-4 - This deposit was not designated.

13. Sector D-5 - This deposit was not designated.

14. Sector D-16 - Boundary of this sector was amended to delete urbanized area.

Although some of the above described areas were not designated as being of regional significance, these deposits remain classified as MRZ-2 for construction aggregate. A comparison of the changes to the resource sector boundaries can be made by reviewing Plates 1 through 3 (SMARA Designation Map No. 85-1), issued September 1985.

C. Areas of Regional Significance in the San Bernardino P-C Region

Classification. Information on the construction aggregate resources of this area are provided in California Division of Mines and Geology Special Report 143, Part VII, classification report for the San Bernardino P-C Region.

The San Bernardino P-C Region encompasses the largest area of the seven P-C regions in the greater Los Angeles area. This region includes major population centers such as the cities of Fontana, San Bernardino, Riverside, Redlands, Beaumont, Hemet, and Lake Elsinore. Physiographic features of the region include the eastern San Bernardino Valley, parts of the San Gabriel and San Bernardino mountains, the San Jacinto and Perris valleys, the San Timoteo Badlands, the Lakeview Mountains, and part of the Elsinore Trough, including Lake Elsinore.

The population of this region is approximately 900,000.

The San Bernardino P-C Region is bordered on the west by the Claremont-Upland and Orange County - Temescal Valley P-C Regions, and on the east by the Palmdale P-C Region.

Several areas within the San Bernardino P-C Region have been classified Mineral Resource Zone-2 (MRZ-2). Aggregate resources in these MRZ-2 areas are located in both existing stream channels and their respective flood plains and alluvial fans. While a large part of the resources are located in highly urbanized areas--cities of San Bernardino, Fontana, and Rialto--some of the remaining available resources are located in the more rural areas such as San Gorgonio Pass and the Lake Elsinore area.

Within the areas classified as MRZ-2, Special Report 143, Part VII, identified 9 resource sectors that contain aggregate resources that remain potentially available from a general land-use perspective. These 9 resource sectors, (identified alphabetically in the report, A through I) are the

areas the Board considered for designation as being of regional significance.

Designated Areas. Based upon information in Special Report 143, Part VII, the environmental impact report prepared for this action, and public testimony, the Board designated all or portions of the areas delineated as Resource Sectors A through I in the San Bernardino P-C Region. These areas are described as follows:

Sector A - Eighteen parcels on the Lytle Creek Fan, in and around the City of Fontana. The larger parcels of this sector are north of Fontana; several smaller parcels are scattered to the east and south of Fontana to the Santa Ana River.

Sector B - Thirteen parcels covering the unurbanized portions of Lytle Creek Wash from north of Freeway 15, west to the downtown area of the City of San Bernardino.

Sector C - Seven parcels along Cajon Creek Wash from the bend in the wash south of Lost Lake, southward to the confluence of Cajon Creek and Lytle Creek.

Sector D - Five parcels in a generally oval-shaped area southeast of the City of Ontario. The area is generally bounded by Freeway 10 on the south, Marlay Avenue on the north, Haven Avenue on the west, and Etiwanda Avenue on the east.

Sector E - Fourteen parcels in and along the Santa Ana River from Freeway 395, south and west to the town of Rubidoux.

Sector F - Seventeen parcels along the upper Santa Ana River and Santa Ana Wash and areas along smaller drainages merging with the Santa Ana Wash, including Warm Creek, City Creek, and Mill Creek.

Sector G - Two parcels covering parts of the San Gorgonio River alluvial fan, east of the City of Banning. Sector G extends from the mouth of Banning Canyon, southeastward to the community of Cabazon.

Sector H - The alluviated area of the Rice Canyon drainage, about one mile south of Alberhill.

Sector I - The alluvial deposits in the lower part of McVickers Canyon and the alluvial fan near the mouth of McVickers Canyon. Sector I is a few miles northwest of Lake Elsinore.

As noted earlier, the designation of the San Bernardino P-C Region was incorporated into the California Administrative Code as Section 3550.8 (Title 14, Division 2, Chapter 8, Subchapter 1). The locations of these sectors are provided on San Bernardino Region Plates 1 through 13. The complete text of Section 3550.8 and the accompanying maps are provided in Appendix B of this report.

As a result of changes in existing land use and concern about the availability of aggregate resources in areas, the Board deleted portions of resource sectors during the designation process. The following summarizes changes to resource sectors in the San Bernardino P-C Region:

1. Sector A-1 - This deposit was not designated.
2. Sector A-2 - This deposit was not designated.
3. Sector A-3 - This deposit was not designated.
4. Sector A-7 - Boundaries of this sector were amended to delete urbanized areas.
5. Sector A-9 - Boundaries of this sector were changed to delete urbanized areas.
6. Sector A-10 - This deposit was not designated.
7. Sector A-11 - This deposit was not designated.
8. Sector A-13 - Boundary of this sector was amended to delete urbanized area.
9. Sector A-14 - Boundary of this sector was amended to delete urbanized area.
10. Sector A-21 - This deposit was not designated.
11. Sector A-24 - Boundary of this sector was amended to delete urbanization.
12. Sector A-25 - This deposit was not designated.
13. Sector A-26 - This deposit was not designated.
14. Sector A-28 - Boundaries of this sector were amended to delete urbanized areas.
15. Sector B-1 - Boundary of this sector was amended to delete water line.
16. Sector B-5 - Boundaries of this sector were amended to delete pipelines.

17. Sector B-10 - Boundaries of this sector were amended to delete two small eastern parts.

18. Sector B-11 - This deposit was not designated.

19. Sector B-13 - This deposit was not designated.

20. Sector C-1 - Boundary of this sector was amended to delete parkland.

21. Sector C-2 - This deposit was not designated.

22. Sector C-3 - Boundary of this sector was amended to delete urbanized area.

23. Sector C-4 - Boundaries of this sector were amended to delete urbanized areas.

24. Sector C-5 - Boundary of this sector was amended to delete southeastern part of area.

25. Sector C-6 - Boundaries of this sector were amended to delete parklands.

26. Sector C-8 - Boundary of this sector was amended to delete parkland.

27. Sector C-10 - Boundaries of this sector were amended to delete flood control channel and parkland.

28. Sector C-13 - This deposit was not designated.

29. Sector D-1 - this deposit was not designated.

30. Sector D-2 - Boundary of this sector was amended to delete power transmission line.

31. Sector D-3 - Boundaries of this sector were amended to delete urbanized areas.

32. Sector D-5 - Boundary of this sector was amended to delete urbanized area.

33. Sector E-2 - Boundary of this sector was amended to delete urbanized area.

34. Sector E-24 - Boundary of this sector was amended to delete parkland.

35. Sector F-2 - Boundary of this sector was amended to delete urbanized area.

36. Sector F-3 - Boundary of this sector was amended to delete urbanized area.

37. Sector F-4 - Boundaries of this sector were amended to delete urbanized areas.

38. Sector F-6 - Boundary of this sector were amended to delete urbanized area.

39. Sector F-10 - This deposit was not designated.

40. Sector F-11 - This deposit was not designated.

41. Sector F-12 - This deposit was not designated.

42. Sector F-14 - Boundary of this sector was amended to delete urbanized area.

43. Sector F-15 - Boundaries of this sector were amended to delete urbanized areas.

44. Sector F-18 - Boundary of this sector was amended to delete urbanized area.

45. Sector F-19 - This deposit was not designated.

46. Sector F-20 - Boundary of this sector was amended to delete Norton Air Force Base land.

47. Sector F-27 - This deposit was not designated.

48. Sector G-1 - Boundary of this sector was amended to delete power transmission line.

49. Sector G-2 - Boundaries of this sector were amended to delete power transmission lines and urbanized areas.

Although some of the above described areas were not designated as being of regional significance, these deposits remain classified as MRZ-2 for construction aggregate. A comparison of the changes to the resource sector boundaries can be made by reviewing Plates 1 through 13 (SMARA Designation Map No. 85-2), issued September 1985.

TABLE II

DATA ON RESOURCE AREAS AND SECTORS
OF THE SAN BERNARDINO P-C REGION

(Taken from Table 7.2, California Division of Mines and Geology, Special Report 143, Part VII, updated to reflect designation boundary changes of resource sectors.)

Resource Area	Sector	Million Short Tons Resources*, (Reserves)	
Lytle Creek Fan	A-4	167.3	
	A-6	21.5	
	A-7	210.8	
	A-8	146.4	
	A-9	104.6	
	A-13	94.8	
	A-14	8.3	
	A-15	14.9	
	A-16	6.8	
	A-17	5.7	
	A-18	9.2	
	A-19	17.2	(**)
	A-23	17	
	A-24	4.3	
	A-27	4	
	A-28	13.6	
	A-29	11.6	(**)
	A-30	2	
	Total:	860	(10)
Lytle Creek Wash	B-1	45.4	
	B-2	1.8	
	B-5	709.2	(**)
	B-6	5.3	
	B-7	47	
	B-8	59.1	(**)
	B-9	28.5	(**)
	B-10	12	(**)
	B-12	0.9	(**)
	B-14	1.3	(**)
	B-15	0.3	(**)
	B-16	0.6	
	B-17	0.3	
	Total:	912	(120)

Cajon Wash	C-1	101.5	
	C-3	39.1	
	C-4	10.8	
	C-5	118.2	
	C-6	344	(**)
	C-8	5.6	
	C-10	5	
	Total:	624	(**)
Day Creek Fan, Mira Loma Area	D-2	9	
	D-3	19.5	
	D-4	7.8	
	D-5	7	
	D-6	5.3	
	Total:	49	
Santa Ana River and Santa Ana Wash (Downstream of Interstate Hwy 395)	E-1	3	
	E-2	0.8	
	E-4	8.9	
	E-5	62.8	
	E-9	4	
	E-10	66.8	
	E-13	30.4	
	E-14	58.3	
	E-17	2.9	
	E-19	18	
	E-20	5.3	
	E-22	6.1	
	E-23	12.1	
	E-24	30.4	
	Total:	310	
Santa Ana River and Santa Ana Wash (Upstream of Interstate Hwy 395)	F-1	4.7	
	F-2	8	
	F-3	17.6	
	F-4	50	
	F-5	1.8	
	F-6	63.7	
	F-9	6.3	
	F-12	3.2	
	F-14	805.2	(**)
	F-15	2,446	
	F-16	17.1	
	F-17	6.9	
	F-18	117.2	
	F-20	164.6	
	F-23	22.6	
	F-32	7.6	
	F-33	10.4	
	Total:	3,753	(**)
San Gorgonio River	G-1	75+	(**)
	G-2	280+	(**)
	Total:	355+	(**)

Rice Canyon	H	5+	(**)
	Total:	5+	(**)
McVickers Canyon	I	20+	(88)
	Total:	20+	(88)
	GRAND TOTAL	6,888+	(430)

* Includes Reserves

** Cannot be shown individually due to confidentiality; however, amount is included in total at bottom of page.

V. BACKGROUND INFORMATION

Questions on this designation report, the Department of Conservation's classification-designation program, or the general planning requirements of the Surface Mining and Reclamation Act should be directed to the State Mining and Geology Board, 1416 9th Street, Room 1326-2, Sacramento, California 95814, telephone (916) 322-1082.

Copies of the classification reports for the Claremont-Upland and San Bernardino P-C Regions are available from the Department's Division of Mines and Geology. The titles of these publications are: Special Report 143, Mineral Land Classification of the Greater Los Angeles Area, Part VI, Classification of Sand and Gravel Resource Areas, Claremont-Upland Production-Consumption Region, 1984, by J. Cole, R. Miller, and S. Kohler, and Special Report 143, Mineral Land Classification of the Greater Los Angeles Area, Part VII, Classification of Sand and Gravel Resource Areas, San Bernardino Production-Consumption Region, 1984, by R. Miller.

Address mail orders to 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 in select public libraries in the Claremont, Upland, and San Bernardino areas.

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 3550.7 Construction Aggregate Resources, Claremont-Upland Region.

A set of maps identifying the exact locations of the designated resource areas entitled "Regionally Significant Construction Aggregate Resource Areas in the Claremont-Upland Production-Consumption Region" is incorporated by reference into this regulation. These maps are available from the State Mining and Geology Board's office in Sacramento.

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

Sector A - The annual recharge area upstream from the San Antonio Creek Flood Control Dam.

Sector B - Eight parcels south of San Antonio Creek Flood Control Dam in the unurbanized areas of the San Antonio Creek Fan, northeast of the City of Claremont. Sector B is roughly bounded by Foothill Boulevard on the south, San Antonio Avenue on the east, and Thompson Creek on the west.

Sector C - Four parcels in the proximal part of the Cucamonga Creek Fan, north of the City of Upland. The area is generally north of 19th Street, west of Carmelian Avenue, east of Euclid Avenue, and south of the San Bernardino National Forest.

Sector D - Three parcels covering parts of the Day Creek and Deer Creek Fans between the Cities of Cucamonga and Fontana. It is bounded by the San Gabriel Mountains on the north and Highland Avenue on the south.

NOTE: Authority Cited: Section 2790, Public Resources Code. Reference: Sections 2726, 2761-63, and 2790-92, Public Resources Code.

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 3550.8 Construction Aggregate Resources, San Bernardino Region.

A set of maps identifying the exact locations of the designated resource areas entitled "Regionally Significant Construction Aggregate Resource Areas in the San Bernardino Production-Consumption Region" is incorporated by reference into this regulation. These maps are available from the State Mining and Geology Board's office in Sacramento.

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

Sector A - Eighteen parcels on the Lytle Creek Fan, in and around the City of Fontana. The larger parcels of this sector are north of Fontana; several smaller parcels are scattered to the east and south of Fontana to the Santa Ana River.

Sector B - Thirteen parcels covering the unurbanized portions of Lytle Creek Wash from north of Freeway 15, west to the downtown area of the City of San Bernardino.

Sector C - Seven parcels along Cajon Creek Wash from the bend in the wash south of Lost Lake, southward to the confluence of Cajon Creek and Lytle Creek.

Sector D - Five parcels in a generally oval-shaped area southeast of the City of Ontario. The area is generally bounded by Freeway 10 on the south, Marlay Avenue on the north, Haven Avenue on the west, and Etiwanda Avenue on the east.

Sector E - Fourteen parcels in and along the Santa Ana River from Freeway 395, south and west to the town of Rubidoux.

Sector F - Seventeen parcels along the upper Santa Ana River and Santa Ana Wash and areas along smaller drainages merging with the Santa Ana Wash, including Warm Creek, City Creek, and Mill Creek.

Sector G - Two parcels covering parts of the San Gorgonio River alluvial fan, east of the City of Banning. Sector G extends from the mouth of Banning Canyon, southeastward to the community of Cabazon.

Sector H - The alluviated area of the Rice Canyon drainage, about one mile south of Alberhill.

Sector I - The alluvial deposits in the lower part of McVickers Canyon and the alluvial fan near the mouth of McVickers Canyon. Sector I is a few miles northwest of Lake Elsinore.

NOTE: Authority Cited: Section 2790, Public Resources Code. Reference: Sections 2726, 2761-63, and 2790-92, Public Resources Code.

DESIGNATION OF REGIONALLY SIGNIGICANT CONSTRUCTION AGGREGATE RESOURCES IN THE CLAREMONT-UPLAND, SAN BERNARDINO PRODUCTION-CONSUMPTION REGIONS

SMARA DESIGNATION REPORT NO. 5
JANUARY 1987

STATE MINING AND GEOLOGY BOARD
JAMES A. ANDERSON, CHAIRMAN

STATE OF CALIFORNIA - GEORGE DEUKMEJIAN, GOVERNOR
THE RESOURCES AGENCY - GORDON K. VAN VLECK, SECRETARY FOR RESOURCES
DEPARTMENT OF CONSERVATION - RANDALL M. WARD, DIRECTOR

ONTARIO QUADRANGLE
SMARA DESIGNATION MAP NO. 85-1
CLAREMONT-UPLAND PLATE 3

SECTOR B-9
SECTOR B-1
SECTOR B-1
SECTOR B-10

TOPOGRAPHIC BASE MAP BY U.S. GEOLOGICAL SURVEY
REDUCED FROM 1:24,000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

ONTARIO, CALIF.

EXPLANATION

Sector boundary

Properties owned or controlled by aggregate producers

Regionally Significant Construction Aggregate Resource Areas In The *CLAREMONT-UPLAND* Production-Consumption Region

STATE MINING AND GEOLOGY BOARD
JANUARY 1987

PREPARED IN COMPLIANCE WITH THE SURFACE MINING AND RECLAMATION ACT OF 1975, ARTICLE 4, SECTION 2790

STATE MINING AND GEOLOGY BOARD
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DEPARTMENT OF CONSERVATION - RANDALL M. WARD, DIRECTOR

MT. BALDY QUADRANGLE
SMARA DESIGNATION MAP NO. 85-1
CLAREMONT-UPLAND PLATE 1

SECTOR A
SECTOR B-1
SECTOR B-2
SECTOR B-3
SECTOR B-4
SECTOR B-5
SECTOR B-6
SECTOR C-1
SECTOR C-2
SECTOR C-5
SECTOR C-6

TOPOGRAPHIC BASE MAP BY U.S. GEOLOGICAL SURVEY
REDUCED FROM 1:24,000

MT. BALDY, CALIF.

EXPLANATION

Sector boundary

Properties owned or controlled by aggregate producers

N

Regionally Significant Construction Aggregate Resource Areas In The *CLAREMONT-UPLAND* Production-Consumption Region

STATE MINING AND GEOLOGY BOARD
JANUARY 1987

PREPARED IN COMPLIANCE WITH THE SURFACE MINING AND RECLAMATION ACT OF 1975, ARTICLE 4, SECTION 2790