# DESIGNATION OF REGIONALLY SIGNIFICANT CONSTRUCTION AGGREGATE RESOURCES IN THE STOCKTON-LODI PRODUCTION-CONSUMPTION REGION

MAY 1989 REVISED JULY 1990

prepared by

THE CALIFORNIA DEPARTMENT OF CONSERVATION

under the direction of

THE STATE MINING AND GEOLOGY BOARD





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### I. INTRODUCTION

The purpose of this report is to provide information on the construction aggregate deposits in the Stockton-Lodi 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 these regions.

Designation Map No. 89-1R displaying the areas designated as being of regional significance is 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

# 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 to 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 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 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 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, <u>Special Report 160</u>, <u>Mineral Land Classification of Portland Cement Concrete Aggregate in the Stockton-Lodi Production Consumption Region</u>, by <u>Laurel S. Jensen and Michael A. Silva</u>, <u>1988</u>, <u>Division of Mines and Geology</u>,. The Board's guidelines for the classification and designation of mineral lands are provided in <u>Special Publication 51</u>, <u>California Surface Mining and Reclamation Policies and Procedures</u>.

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, San Luis Obispo-Santa Barbara, and Palm Springs.

Designation of regionally significant construction aggregate resource areas has been completed in the following regions: (1) Tujunga and Pacoima Wash areas of the San Fernando Valley Region, Los Angeles County; the Santa Clara River Valley area of the Western Ventura County Region, Ventura County; (3) the Simi Valley area of the Simi Region, Ventura County; (4) the Santa Ana River, Santiago Creek, Arroyo Trabuco, San Juan Creek, and Temescal Valley areas of the Orange County-Temescal Valley Region, Orange, Riverside, and San Bernardino Counties; (5) the San Gabriel River, Eaton Wash, Devils Gate, and Palos Verdes areas of the San Gabriel Valley Region, Los Angeles County; (6) the Western San Diego County Region; (7) the Claremont-Upland Region; (8) the San Bernardino Region; (9) the Saugus-Newhall and Palmdale Regions; (10) the South San Francisco Bay Region; (11) the North San Francisco Bay Region; (12) the Monterey Bay Region; and (13) the Fresno Region. Designation proceedings have been initiated in the Palm Springs P-C Region.

# III. LEAD AGENCY RESPONSIBILITIES

# 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 (1) recognize the mineral information classified by the state Geologist and transmitted by the Board; (2) assist in state Geologist and transmitted by the Board; (2) assist in the management of land use that affects areas of statewide and regional significance (designated areas); 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 be made in accordance with its mineral resource management policies, and that they mineral resource to the consider the importance of the mineral resource to the region or the State as a whole and not just the lead region or the State as a whole and not just the lead agency's area of jurisdiction. Prior to the adoption of mineral resource management policies, lead agencies are 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 require Board review and comment.

The lead agencies for areas designated regionally significant for construction aggregate resources in the Stockton-Lodi Production Consumption Region are the County of San Joaquin and the City of Tracy.

## Goals and Policies

The Board has adopted the following regulations (California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1, Article 6, Sections 3675-3676), to guide local government in the development of mineral resource management policies.

# 3675. Definitions

The following definitions as used herein shall govern the interpretation of these regulations:

Compatible Land Use. Land uses inherently compatible with mining and/or that require a minimum public or private investment in structures, land improvements, and which may allow mining because of the relative economic value of the land and its improvements. Examples of such uses may include, but shall not be limited to, very low density residential, geographically extensive but low impact industrial, recre-ational, agricultural, silvicultural, grazing, and open space.

Incompatible Land Use. Land uses inherently incompatible with mining and/or that require public or private investment in structures, land improvements, and landscaping and that may prevent mining because of the greater economic value of the land and its improvements. Examples of such uses may include, but shall not be limited to, high density residential, low density residential with high unit value, public facilities, geographically limited but impact intensive industrial, and commercial.

Note: Authority cited: Section 2755, Public Resources Code. Reference: Section 2761-2762, Public Resources Code.

### 3676. Mineral Resource Management Policies

Lead agency mineral resource management policies adopted pursuant to the provisions of PRC Sections 2762 shall include but not be limited to, the following:

- (a) A summary of the information provided by the classification and/or designation reports, or incorporation of PRC Sections 2710 et seq., and state policy by reference, together with maps of the identified mineral deposits, or incorporation by reference of the classification and/or designation maps provided by the Board.
- (b) Statements of policy in accordance with the provisions of the PRC Section 2762(a).
- (c) Implementation measures that shall include:
  - (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. <u>DESIGNATION OF RESOURCE AREAS IN THE STOCKTON-LODI</u> P-C REGION

# Actions Leading to Designation

On May 13, 1988 the Board accepted the classification report for the Stockton-Lodi P-C Region, and on May 19, 1988 transmitted the report to the affected lead agencies for their action pursuant to SMARA Section 2762. upon available production data and population projections, the Stockton-Lodi P-C Region will need 281 million tons of aggregate during the next 50 years. Of this projected demand, approximately 40 percent (113 million tons) must be suitable for Portland cement concrete. The 79 million tons of aggregate reserves calculated to exist within the P-C region represent 28 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 by the year If a major earthquake, or similar unforeseen 2004. catastrophic event, strikes the P-C region and necessitates reconstruction, existing reserves would be depleted sooner. 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 September 30, 1988 in the City of Stockton. The Final Environmental Impact Report was certified by the Board on November 18, 1988.

A public hearing was held to receive testimony concerning proposed designation regulations for the Stockton-Lodi P-C Region on March 10, 1989 in the City of Tracy. Regulations describing the areas designated as being of regional significance in the P-C Region were formally adopted May 10, 1989, together with environmental findings and a statement of overriding consideration (Resolution #89-08). After review and approval by the Office of Administrative Law, these regulations were incorporated into the California Code of Regulations as Section 3550.14 (Title 14, Division 2, Chapter 8, Subchapter 1, Article 2), effective July 29, 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:

Subsector A-1a. Located west of Corral Hollow Road in the middle of the extreme western edge of the deposit, this subsector is approximately 4 acres in size containing 1 million tons of aggregate.

Subsector A-1b. Located directly east of Subsector A-1a on the east side of Corral Hollow Road, this subsector consists of approximately 3 acres containing 800,000 tons of aggregate.

Subsector A-1c. Located directly south of Subsector A-1b in west-central portion of Corral Hollow fan, this subsector consists of less than 3 acres and the resource information is proprietary.

Subsector A-1d. Located directly southwest of Subsector A-1c near Corral Hollow Road. Consisting of approximately 9 acres, the resource information in this subsector is proprietary.

Subsector A-le. Located between the Tracy Airport and the Delta-Mendota Canal near the center of the Corral Hollow fan, this subsector consists of approximately 24 acres containing 4.5 million tons of aggregate.

Subsector A-1f. Located south of the Tracy Airport near the intersection of Tracy Boulevard and the Delta-Mendota Canal, this subsector consists of approximately 16 acres containing 2.5 million tons of aggregate.

Subsector A-1g. Located near the edge of the Coral Hollow Creek fan, west of Corral Hollow Road, this subsector consists of approximately 37 acres containing 7.3 million tons of aggregate.

Subsector A-1h. Located east of Corral Hollow Road near the Tracy Airport, this subsector consists of approximately 144 acres. The resource information is proprietary and this area is permitted for mining.

Subsector A-1i. Located southeast of Subsector A-1h near the intersection of Tracy Boulevard and Delta-Mendota Canal, this subsector consists of approximately 46 acres containing 8.1 million tons of aggregate. Subsector A-1j. Located directly southeast of Subsector A-1i, this subsector consists of approximately 28 acres. The resource volume is proprietary.

Subsector A-1k. Located directly east of the California Aqueduct near the southern edge of the Corral Hollow fan, this subsector consists of approximately 68 acres. The resource volume is proprietary.

Subsector A-11. Located west of Corral Hollow Road near the Interstate 580 intersection, this subsector consists of approximately 16 acres containing 2.1 million tons of aggregate.

Subsector A-1m. Located east of Corral Hollow Road near the interchange with Interstate 580, this subsector consists of approximately 37 acres containing 7.8 million tons of aggregate.

Subsector A-1n. Located south of Corral Hollow Road between the California Aqueduct and Interstate 580, this subsector consists of approximately 22 acres. The resource information is proprietary.

Subsector A-10. Located south of Corral Hollow Road between the California Aqueduct and Interstate 580, this subsector consists of approximately 42 acres. The resource information is proprietary.

Subsector A-1p. Located south of Corral Hollow Road between the California Aqueduct and Interstate 580, this subsector consists of approximately 53 acres. The resource information is proprietary.

Subsector A-1q. Located in the southernmost end of the Corral Hollow fan between the California Aqueduct and Interstate 580 and adjacent to Subsector A-1p, this subsector consists of approximately 28 acres containing 5.7 million tons of aggregate.

Subsector A-2a. An isolated parcel at the extreme northwest corner of Corral Hollow alluvial fan near the City of Tracy, this subsector consists of approximately 43 acres containing 7.4 million tons of aggregate.

Subsector A-2b. Located west of Corral Hollow Road between Valpico Road and Linne Road on the northwestern edge of the Corral Hollow alluvial fan, this subsector consists of approximately 211 acres containing 41.9 million tons of aggregate.

Subsector A-2c. Located north of Linne Road between Corral Hollow Road and Tracy Boulevard near the City of Tracy, this subsector consists of approximately 400 acres containing 80 million tons of aggregate.

Subsector A-2d. Located southwest of the intersection of Corral Hollow Road and Linne Road on the western edge of the alluvial fan, this subsector consists of approximately 27 acres containing 4.5 million tons of aggregate.

Subsector A-2e. Located between the northern edge of the Tracy Airport property and Linne Road, this subsector consists of approximately 165 acres containing 26 million tons of aggregate. This area is not permitted for mining.

Subsector A-2h. Located southwest of the intersection of Valpico Road and MacArthur Drive, this subsector consists of approximately 71 acres containing 12.9 million tons of aggregate.

Subsector A-2i. Located north of Linne Road and west of MacArthur Drive on the east side of the alluvial fan, this subsector consists of approximately 152 acres containing 29.3 million tons of aggregate.

Subsector A-2j. Located directly southwest of the intersection of Linne Road and MacArthur Drive, this subsector consists of approximately 38 acres. The resource information is proprietary.

Subsector A-2n. Located on the eastern edge of the alluvial fan east of MacArthur Road, this subsector consists of approximately 323 acres containing 65.6 million tons of aggregate.

Subsector A-20. Located on the extreme southeastern edge of the Corral Hollow alluvial fan at the south end of MacArthur Drive, this subsector consists of approximately 111 acres containing 21.4 million tons of aggregate.

Subsector A-2p. Located south of the Western Pacific right-of-way on MacArthur Drive, this subsector consists of approximately 33 acres. The resource information is proprietary.

Subsector A-2q. Located south of Subsector A-2p on the west side of MacArthur Drive, this subsector consists of approximately 73 acres. The resource information is proprietary and the area is permitted for mining.

Subsector A-2r. Located adjacent to the Lone Star Industries plant site between Tracy Boulevard and MacArthur

Drive, this subsector consists of approximately 10 acres containing 1.4 million tons of aggregate.

Subsector A-2s. Located west of the intersection of Tracy Boulevard and the Delta-Mendota Canal near the middle of the Corral Hollow alluvial fan, this subsector consists of approximately 51 acres. The resource information is proprietary.

Subsector A-2t. Located south of the channel of Corral Hollow between MacArthur Drive and Tracy Boulevard, this subsector consists of approximately 39 acres. The resource information is proprietary and the area is permitted for mining.

Subsector A-2u. Located in the southeast corner of the Corral Hollow alluvial fan near the end of MacArthur Road, this subsector consists of approximately 43 acres. The resource information is proprietary and the area is permitted for mining.

Subsector A-2v. Located southeast of the intersection of Tracy Boulevard and the Delta-Mendota Canal in the southern portion of the alluvial fan, this subsector consists of approximately 19 acres. The resource information is proprietary.

Subsector A-2w. Located on the east side of the south end of Tracy Boulevard, this subsector consists of approximately 65 acres. The resource information is proprietary.

Subsector A-2x. Located south of the alignment of Durham Ferry Road between Tracy Boulevard and the Delta-Mendota Canal, this subsector consists of approximately 30 acres containing 4.6 million tons of aggregate.

Subsector A-2y. Located west of the south end of Tracy Boulevard within the area presently mined by Granite Construction Company, this subsector consists of approximately 37 acres. The resource information is proprietary and the area is permitted for mining.

Subsector A-2z. Located at the extreme southern edge of the MRZ-2 area near the southern end of Tracy Boulevard, this subsector consists of approximately 16 acres containing 2.2 million tons of aggregate.

Subsectors A-3a-c. Three contiguous parcels situated in the middle of the Corral Hollow Creek alluvial fan directly east of the Tracy Airport. These three subsectors cover

approximately 140 acres. This area is permitted for mining.

Subsectors A-4a-b. Located at the southeastern edge of the boundaries of the Tracy alluvial fan west of MacArthur Drive, these two contiguous parcels cover approximately 55 acres. The resource information is proprietary. The area is permitted for mining.

Subsector B-1. Consists of the channel and immediate floodplain of the Lone Tree Creek west of Interstate 580. This subsector is approximately 17 acres and contains 400,000 tons of aggregate.

Subsector B-2. Located west of south end of Bird Road, this subsector consists of approximately 24 acres containing 1.2 million tons of aggregate.

Subsector B-3. Located east of Subsector B-2 at the south end of Bird Road, this subsector consists of approximately 17 acres containing 900,000 tons of aggregate.

Subsector B-4. Located south of Blewett Road and east of Bird Road, this subsector consists of approximately 256 acres containing 13.6 million tons of aggregate.

Subsector B-5. Located between Blewett Road, the California Aqueduct, and Interstate 5, this subsector consists of approximately 19 acres containing 900,000 tons of aggregate.

Subsector B-6. Located between Blewett Road and the California Aqueduct, this subsector consists of approximately 85 acres containing 4.5 million tons of aggregate.

Subsector B-7. Located near the middle of the Lone Tree Creek fan between the California Aqueduct and the Delta-Mendota Canal, this subsector consists of approximately 374 acres containing 19.9 million tons of aggregate.

Subsector B-8. Located east of Interstate 5 between Blewett Road and Vernalis Road, this subsector consists of approximately 57 acres containing 2.9 million tons of aggregate.

Subsector B-9. Located southwest of the intersection of Bird Road and Highway 132, this subsector consists of approximately 12 acres containing 600,000 tons of aggregate.

Subsector B-11. Located northwest of the intersection of Bird Road and Highway 132, this subsector consists of approximately 27 acres containing 1.4 million tons of aggregate.

Subsector B-12. Located between the Delta-Mendota Canal and Highway 132 east of Bird Road, this subsector consists of approximately 47 acres containing 2.4 million tons of aggregate.

Subsector B-13. Located at the downstream end of the Lone Tree Creek alluvial fan immediately west of Bird Road, this subsector consists of approximately 87 acres containing 4.6 million tons of aggregate.

Subsector B-14. Located between Bird Road and Interstate 5, the Delta-Mendota Canal is the southern boundary of the deposit. This subsector consists of approximately 204 acres containing 10.8 million tons of aggregate.

Subsector C-1. Located at the upper end of the area classified as MRZ-2 of the Hospital Creek, this deposit is approximately one mile west of Interstate 580. This subsector consists of approximately 29 acres containing 700,000 tons of aggregate.

Subsector C-2. This deposit encompasses the streambed and floodplain of Hospital Creek between the powerline corridor to the west and Interstate 580 to the east. Consisting of approximately 107 acres, this subsector contains 2.7 million tons of aggregate.

Subsector C-3. This deposit encompasses the channel area of Hospital Creek between Interstate 580 and a gas pipeline near Interstate 5. This parcel is 12 acres and the resource information is proprietary. This area is permitted for mining.

Subsector C-4. Located on the southern edge of Hospital Creek at the Intersection of Interstate 5 and 580. This 26 acre parcel is permitted for mining and the resource information is proprietary.

Subsector C-6. Located east of Interstate 5 and the California Aqueduct, this subsector consists of approximately 151 acres containing 7 million tons of aggregate.

Subsector C-7. Located east of the California Aqueduct and west of Koster Road, this subsector consists of approximately 142 acres containing 6.5 million tons of aggregate.

Subsector C-8. Located between Koster Road and the Delta-Mendota Canal, this subsector consists of approximately 20 acres containing 800,000 tons of aggregate.

Subsector C-9. This parcel encompasses the downstream (east) end of the Hospital Creek alluvial fan. The southeast portion of this subsector is in Stanislaus County. Consisting of approximately 390 acres, this deposit contains 18.3 tons of aggregate.

Subsector D-1. Located on the northwestern edge of the MRZ-2 area, this parcel is separated from subsector D-2 by the Southern Pacific railroad embankment. Consisting of approximately 5 acres, this subsector contains 500,000 tons of sand.

Subsector D-2. Located between the Southern Pacific railroad and Interstate 5 west of the San Joaquin River. Consisting of approximately 86 acres, this subsector contains 9 million tons of sand.

Subsector D-3. Located south of Interstate 5 and west of the San Joaquin River, this subsector consists of approximately 23 acres containing 2.7 million tons of sand.

Subsector D-4. Located south of Interstate 5, west of the San Joaquin River, and north of the Western Pacific railroad tracks, this subsector consists of approximately 130 acres containing 13.9 million tons of sand.

Subsector D-6. Located along the edge of the floodplain of the San Joaquin River, the western boundary of the sector is a levee and the Western Pacific railroad embankment. Consisting of approximately 39 acres, this subsector contains 3.8 million tons of sand.

Subsector D-7. Located on the east side of the San Joaquin River between the alignment of Highway 120 and the Western Pacific railroad tracks, this subsector consists of approximately 153 acres containing 16.2 million tons of sand.

Subsector D-8. Located directly south of Sector D-7 and north of the Western Pacific railroad embankment, this subsector consists of approximately 31 acres containing 3.5 million tons of sand.

Subsectors D-9, D-10, D-11, and D-12. Contiguous deposits located between the Western Pacific railroad right-of-way and Woodward Avenue east of the San Joaquin River. Consisting of approximately 370 acres, the resource

information for this subsector is proprietary. Portions of the area are permitted for mining.

Subsector D-13. Located south of Woodward Avenue near the entrance to the Oakwood Resort, this subsector consists of approximately 40 acres containing 3.9 million tons of sand.

TABLE 1

DATA ON SAND AND GRAVEL RESOURCES IN SECTOR A-1
WITHIN THE STOCKTON-LODI P-C REGION

RESOURCE AREA	SECTOR	(SHORT <u>NON-PERMITTED</u> <u>RESOURCES</u>	TONS)  PERMITTED  RESOURCES
REDUCTION INCES	<u>DDOION</u>	NID CONCID	<u> </u>
Corral Hollow	A-1a	1,000,000	
Creek Alluvial	A-1b	800,000	
Fan (Tracy)	A-1c	*	*
	A-ld	*	*
	A-1e	4,500,000	
	A-1f	2,500,000	
	A-1g	7,300,000	
	A-1h	*	*
	A-1i	8,100,000	
	A-1j	*	*
	A-1k	*	*
	A-11	2,100,000	
*	A-1m	7,800,000	
	A-1n	*	*
	A-10	*	*
	A-1p	*	*
	A-1q	5,700,000	
	Total:	97,600,000	*

\*Cannot be shown due to confidentiality

TABLE 2

DATA ON SAND AND GRAVEL RESOURCES IN SECTOR A-2
WITHIN THE STOCKTON-LODI P-C REGION

(SHORT TONS) NON-PERMITTED PERMITTED SECTOR RESOURCES **RESOURCES** RESOURCE AREA Corral Hollow A-2a 7,400,000 Creek Alluvial A-2b 41,900,000 A-2c Fan (Tracy) 80,100,000 A-2d 4,500,000 A-2e A-2h 12,900,000 A-2i 29,300,000 A-2j 65,600,000 A-2n 21,400,000 A-20 A-2p \* \* A-2q A-2r 1,400,000 A-2s 700,000 \* **A-2t** \* \* A-2u \* A-2v A-2w 4,600,000 A-2xA-2y A-2z2,200,000 351,900,000 Total:

\*Cannot be shown due to confidentiality

TABLE 3

DATA ON SAND AND GRAVEL RESOURCES IN SECTOR A-3
WITHIN THE STOCKTON-LODI P-C REGION

		(SHORT	TONS)
RESOURCE AREA	SECTOR	NON-PERMITTED RESOURCES	PERMITTED RESOURCES
Corral Hollow	A-3a	*	*
Creek Alluvial Fan (Tracy)	A-3b A-3c	*	*
	Total:	*	*

\*Cannot be shown due to confidentiality

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TABLE 4

DATA ON SAND AND GRAVEL RESOURCES IN SECTOR A-4
WITHIN THE STOCKTON-LODI P-C REGION

<sup>\*</sup>Cannot be shown due to confidentiality

TABLE 5

DATA ON SAND AND GRAVEL RESOURCES IN SECTOR B
WITHIN THE STOCKTON-LODI P-C REGION

(SHORT TONS) NON-PERMITTED PERMITTED RESOURCES RESOURCE AREA **RESOURCES** SECTOR Lone Tree Creek 400,000 B-1 Alluvial Fan B-2 1,200,000 900,000 B-3 B-4 13,600,000 B-5 900,000 4,500,000 B-6 B-7 19,900,000 B-8 2,900,000 B-9 600,000 B-11 1,400,000 2,400,000 B-12 B-13 4,600,000 B-14 10,800,000 Total: 64,100,000

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TABLE 6

DATA ON SAND AND GRAVEL RESOURCES IN SECTOR C
WITHIN THE STOCKTON-LODI P-C REGION

		(SHORT TONS)	
		NON-PERMITTED	PERMITTED
RESOURCE AREA	<b>SECTOR</b>	RESOURCES	RESOURCES
Hospital Creek	C-1	700,000	
Alluvial Fan	C-2	2,700,000	
Alluviai Fan	C-3	z,700,000 *	*
	C-4	7k	*
	C-6	7,000,000	
	C-7	6,500,000	
	C-8	800,000	
	C-9	18,300,000	
	,		
	Total:	37,600,000	*

<sup>\*</sup>Cannot be shown due to confidentiality

TABLE 7

TOTAL SAND AND GRAVEL RESOURCES
FOR SECTORS A-1, A-2, A-3, A-4, B, AND C

		(SHORT	TONS)
		NON-PERMITTED	PERMITTED
RESOURCE AREA	SECTOR	RESOURCES	<b>RESOURCES</b>
Corral Hollow	A: A-1		
Creek Alluvial	A-2		
Fan (Tracy	A-3		
(52.002	A-4	464,200,000	*
		111/200/000	
Lone Tree Creek	В	64,100,000	*
Alluvial Fan	_		
Hospital Creek	С	37,600,000	*
Alluvial Fan		, , , , , , , , , , , , , , , , , , , ,	
	Total:	+565,800,000	79,600,000

\*Cannot be shown due to confidentiality +Does not replicate due to rounding

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TABLE 8

DATA ON SAND RESOURCES IN SECTOR D
WITHIN THE STOCKTON-LODI P-C REGION

		(SHORT	
DECOUDER ADEA	CECTOD	NON-PERMITTED	PERMITTED
RESOURCE AREA	SECTOR	RESOURCES	RESOURCES
Lathrop	D-1	500,000	
Deposit	D-2	9,000,000	
	D-3	2,700,000	
	D-4	13,900,000	
	D-6	3,800,000	
	D-7	16,200,000	
	D-8	3,500,000	
	D-9	*	*
	D-10	*	*
	D-11	sle	*
*	D-12	*	*
	D-13	3,900,000	
	Total:	89,600,000	*

<sup>\*</sup>Cannot be shown due to confidentiality

# Sectors Considered But Not Designated

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

Subsector A-2f. Approximately 17 acres, this was deleted because this area was urbanized with high density residential development.

Subsector A-2g. Approximately 41 acres, this was deleted because it has been partially developed to industrial uses and the remainder has been approved and subdivided for industrial uses.

Subsector A-2k. Approximately 94 acres, this was deleted because the entire area is approved for rural residential zoning.

Subsector A-21. Approximately 23 acres; this was deleted because the area is zoned for rural residential development.

Subsector A-2m. Approximately 16 acres; this was deleted because this and adjacent lands to the north are zoned for rural residential development.

Subsector B-10. Approximately 11 acres; deleted due to its small size and its isolation by the surrounding canal and highway.

Subsector C-5. Approximately 2 acres; deleted due to its small size and its location. This subsector is situated between a gas pipeline and Interstate 5.

Subsector D-5. Approximately 5 acres; deleted due to the small size of the parcel, nearby residential properties, and concerns for the loss of heritage oak trees near the river. Heritage oak trees could be habitat for Swainson's Hawks (a State-listed threatened bird species).

# 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 Stockton-Lodi P-C Region, <u>Special Report 160</u>, <u>Mineral Land</u>

Classification of Portland Cement Concrete Aggregate in the Stockton-Lodi Production-Consumption Region, by Laurel S. Jensen and Michael A. Silva, 1988, Division of Mines and Geology, are available 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 at the Stanislaus Classification reports are also available at the Stanislaus County Library, 1500 I Street, Modesto, California 95354 or the San Joaquin County Library (Stockton Public Library), 605 North El Dorado, Stockton, California 95202.

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 3550.14 Construction Aggregate Resources, Stockton-Lodi Production-Consumption Region

A map identifying the exact locations of the designated resource areas entitled, "Regionally Significant Construction Aggregate Resource Areas in the Stockton-Lodi Production-Consumption Region 1989," is incorporated by reference into this regulation. This map is 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 - Aggregate deposits on the alluvial fan created by Corral Hollow Creek, situated south of the City of Tracy.

Sector B - Aggregate deposit on the alluvial fan created by Lone Tree Creek. Deposit extends from just west of Interstate 580 near the base of the Coast Range hills northwest to the alignment of Interstate 5.

Sector C - Aggregate deposit that consists of the alluvial fan formed by Hospital Creek. Deposit extends from west of Interstate 580 within the foothills of the Coast Range and east into the San Joaquin Valley.

Sector D - Sand deposit centered on the San Joaquin River near the intersection of Highway 120 and Interstate 5 west of the City of Manteca.

Note: Authority cited: Section 2790, Public Resources Code. Reference: Sections 2762, 2761-63, and 2790-92, Public Resources Code.



DESIGNATION OF REGIONALLY SIGNIFICANT CONSTRUCTION AGGREGATE RESOURCES IN THE STOCKTON-LODI PRODUCTION-CONSUMPTION REGION

SMARA DESIGNATION REPORT NO. 9