STATE MINING AND GEOLOGY BOARD

Updated Designation of Regionally Significant Aggregate Resources in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma, and Southwestern Solano Counties, California

Department of Conservation
Natural Resources Agency
January 2018
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Updated Designation of Regionally Significant Aggregate Resources in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin, and Southwestern Solano Counties, California

Jeffrey Schmidt
Executive Officer
State Mining and Geology Board

EXECUTIVE SUMMARY

This report updates the designation information previously presented in SMARA Designation Report No. 7 “Designation of Regionally Significant Construction Aggregate Resource Areas in the South San Francisco Bay, North San Francisco Bay, and Monterey Bay Production-Consumption Region”, published in 1987. It should be noted that this report only covers the North San Francisco Bay Production-Consumption (P-C) Region. An updated mineral land classification report published in 2013 by the California Geological Survey (CGS), “Special Report 205 - Update of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin, and Southwestern Solano Counties, California, provided updated information on the resources within the North San Francisco Bay P-C Region.

In 1987, the Board designated 7,586 acres, containing 1,876 million tons of aggregate resources, to be of regional significance in the North San Francisco Bay P-C Region. Since that time, the designated aggregate resources have been reduced by about 19 percent, or 363 million tons, due to depletion by mining (16%) and urbanization (3%). An additional 2,869 acres containing 821 million tons have been newly designated.

The projected 50-year demand for construction aggregate in the North San Francisco Bay P-C Region is 521 million tons, of which 130 million tons must be PCC-grade. The presently permitted aggregate reserves of 115 million tons are projected to last until 2023. The PCC-grade reserves of 27 million tons may last until 2023, but are likely to be depleted sooner. If a large scale construction project or catastrophic event requiring rebuilding occurs in the P-C Region, existing reserves may be depleted sooner than projected.
INTRODUCTION

Designation is the formal recognition by the State Mining and Geology Board (Board) of lands containing mineral resources of regional or statewide economic significance that are needed to meet the demands of the future. This report updates the information previously presented in SMARA Designation Report No. 7 “Designation of Regionally Significant Construction Aggregate Resource Areas in the South San Francisco Bay, North San Francisco Bay, Monterey Bay Production-Consumption Regions” published in 1987. It should be noted that this report only updates the North San Francisco Bay P-C Region. The updates reflect the updated mineral land classification information provided by the California Geological Survey (CGS) in Special Report 205 “Update of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin, and Southwestern Solano Counties, California” published in 2013.

This report describes the classification-designation process, the Lead Agency responsibilities related to the classification and designation of mineral lands, and the pertinent statutory and regulatory authority (Appendix A). This report outlines the administrative process leading to the designation and termination of designation of mineral lands (Appendix B), and describes revisions to the previous designation of the North San Francisco Bay P-C Region, including descriptions of mineral lands where designation continues, those where designation is terminated, and newly designated areas. The final regulatory language pertaining to the updated designation of the North San Francisco Bay P-C Region is included in Appendix C and maps depicting the updated designation are included as Plates 1, 2, and 3.

CLASSIFICATION-DESIGNATION PROCESS

The rapid growth of many California communities, particularly during the past several decades, has served to emphasize the continuing importance of mineral resource conservation as a land-use issue. To support the maintenance of existing community structure, and state infrastructure, adequate supplies of a variety of mineral commodities must be available. Urban expansion, however, has been a major cause of a decline in the availability of many important mineral resources. In many areas, for example, pressure from competing land use has severely reduced or completely eliminated access to available construction material resources such as sand and gravel. This includes local permitting of land uses incompatible with mining activities.

In an effort to mitigate this issue, the Surface Mining and Reclamation Act (SMARA) provides for a mineral lands inventory process termed “classification-designation”. The Department of Conservation’s CGS, and the Board are the state agencies responsible for administering this process. The primary objective of this process is twofold. First is to provide local agency decision makers with information on the location, need and importance of mineral resources within their respective jurisdictions. Second is to assure that this information will be considered in local land-use planning decisions.
Classification

During the first phase of this process, known as classification, the State Geologist is responsible for preparing a geological inventory of selected mineral commodities within a defined study region. As set forth in Section 2761 (b) of SMARA, the State Geologist shall classify land solely on the basis of geologic factors and without regard to existing land use. Areas subject to mineral land classification studies are divided by the State Geologist into various Mineral Resource Zone (MRZ) categories that reflect varying degrees of mineral resource potential. Following is a brief description of the four MRZ categories used in SR 205:

**MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.

**MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based upon economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.

**MRZ-3:** Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.

**MRZ-4:** Areas where available information is inadequate to assign any other classification.

In many regions, large portions of the areas classified as MRZ-2 are already committed to various urban uses which limit or prohibit access to 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 of the region. In other words, areas currently permitted for mining and areas found to have land uses compatible with possible mining are identified as sectors.

Designation

Once a classification report has been completed, the Board may choose, based on recommendations from the State Geologist, to proceed with the second step in SMARA’s mineral land identification process, designation of those mineral 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 are of prime importance in meeting future needs of the region or State.
In the case of construction aggregate resources, areas considered for designation are those deposits situated within the resource sectors.

**LEAD AGENCY RESPONSIBILITIES**

**General Plan Recognition**

Both the classification report and designation information are transmitted to the appropriate lead agencies as they are completed. Within 12 months of the receipt of classification information and also within 12 months of the designation of an area, local lead agencies are required by PRC Section 2762(a) to establish Mineral Resource Management Policies (MRMP) in their general plan. The MRMP 1) recognizes the mineral land classification information generated by the State Geologist and transmitted to the Board; 2) assists in the management of land use that affects areas of statewide and regional significance (designated areas); and 3) emphasizes the conservation and development of the identified mineral deposits.

Prior to adoption of the MRMP, lead agencies are required to submit them to the Board for review and comment. Any subsequent amendment to the MRMP also requires Board review and comment.

The Board has adopted mineral resource goals and policies to guide local government in the use of information developed by the Classification-Designation process. The criteria to be used by affected cities and counties in developing their own MRMP are laid out by the Board (California Code of Regulations (CCR), Title 14, Section 3676), and should include, but not be limited to, the following:

- A summary of the data and analysis provided in the classification and/or designation reports, incorporation of PRC Section 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 reports and maps.

- Policies that:
  - Recognize the mineral information transmitted by the Board,
  - Assist in the management of land uses affecting areas of regional and statewide significance and,
  - Emphasize the conservation and development of the identified mineral deposits.

- Implementation measures, including:
  - Reference in the general plan to the location of identified mineral deposits and a discussion of those areas targeted for conservation and possible future resource extraction.
  - Use of maps to clearly delineate identified mineral deposits and those areas targeted for conservation and possible future resource extraction.
  - At least one of the following:
Special purpose overlay zones, mineral resource/open-space zoning, or any other appropriate zoning that identifies the presence of mineral deposits and restricts the encroachment of incompatible land uses in those areas that are to be conserved.

Requirements for recording notice of the presence of identified mineral deposits in the chain of property title.

Conditions placed upon incompatible land uses within and next to any areas containing identified mineral deposits for the purpose of mitigating any significant land use conflicts.

**Land Use Decisions in Classified and Designated Areas**

If an area is classified by the State Geologist, and the lead agency either has designated that area in its general plan as having important minerals to be protected, or otherwise has not yet acted, then prior to permitting a use which would threaten the potential to extract minerals in that area, the lead agency shall prepare, in conjunction with preparing any environmental document required by Division 13 (commencing with Section 21000), or in any event, if no such document is required, a statement specifying its reasons for permitting the proposed use, and shall forward a copy to the State Geologist and the board for review.

If the proposed use is subject to the requirements of Division 13 (commencing with Section 21000), the lead agency shall comply with the public review requirements of that division. Otherwise, the lead agency shall provide public notice of the availability of its statement by 1) publishing the notice at least one time in a newspaper of general circulation in the area affected by the proposed use, and 2) directly mailing the notice to owners of property within one-half mile of the parcel or parcels on which the proposed use is located as those owners are shown on the latest equalized assessment role.

The public review period shall not be less than 60 days from the date of the notice and shall include at least one public hearing. The lead agency shall evaluate comments received and shall prepare a written response. The written response shall describe the disposition of the major issues raised. In particular, when the lead agency's position on the proposed use is at variance with recommendations and objections raised in the comments, the written response shall address in detail why specific comments and suggestions were not accepted.

Prior to permitting a use which would threaten the potential to extract minerals in an area classified by the State Geologist as an area containing mineral deposits but the significance of which requires further evaluation, the lead agency may cause to be prepared an evaluation of the area in order to ascertain the significance of the mineral deposit located therein. The results of such evaluation shall be transmitted to the State Geologist and the Board.
Additional Requirements for Designated Areas

PRC Section 2763 notes that if an area is designated by the Board as an area of regional significance, and the lead agency either has designated that area in its general plan as having important minerals to be protected pursuant to PRC Section 2762(a), or otherwise has not yet acted pursuant PRC Section 2762(a), then prior to permitting a use which would threaten the potential to extract minerals in that area, the lead agency shall prepare a statement specifying its reasons for permitting the proposed use, in accordance with the requirements set forth in PRC Section 2762(d). Lead agency land use decisions involving areas designated as being of regional significance shall be in accordance with the lead agency's MRMP and shall also, in balancing mineral values against alternative land uses, consider the importance of these minerals to their market region as a whole and not just their importance to the lead agency's area of jurisdiction.

If an area is designated by the Board as an area of statewide significance, and the lead agency either has designated that area in its general plan as having important minerals to be protected pursuant PRC Section 2762(a), or otherwise has not yet acted pursuant to PRC Section 2762(a), then prior to permitting a use which would threaten the potential to extract minerals in that area, the lead agency shall prepare a statement specifying its reasons for permitting the proposed use, in accordance with the requirements set forth in PRC Section 2762(d). Lead agency land use decisions involving areas designated as being of statewide significance shall be in accordance with the lead agency's MRMP and shall also, in balancing mineral values against alternative land uses, consider the importance of the mineral resources to the state and nation as a whole.

PRC Section 2764 further notes that upon the request of a surface mining operator or other interested person and payment by the requesting person of the estimated cost of processing the request, the lead agency having jurisdiction shall amend its general plan, or prepare a new specific plan or amend any applicable specific plan. The amended general plan or new specific plan, with respect to the continuation of the existing surface mining operation for which the request is made, must address future land uses in the vicinity of, and access routes serving, the surface mining operation in light of the importance of the minerals to their market region as a whole, and not just their importance to the lead agency's area of jurisdiction.

In adopting amendments to the general plan, or adopting or amending a specific plan, the lead agency shall make written legislative findings as to whether the future land uses and particular access routes will be compatible or incompatible with the continuation of the surface mining operation, and if they are found to be incompatible, the findings shall include a statement of the reasons why they are to be provided for, notwithstanding the importance of the minerals to their market region as a whole or their previous designation by the Board, as the case may be. Any evaluation of a mineral deposit prepared by a lead agency shall be transmitted to the State Geologist and the Board. These procedures are not to be undertaken in any area that has already been designated and if a MRMP has been established and incorporated in the lead agency's general plan.
THE NORTH SAN FRANCISCO BAY PRODUCTION-CONSUMPTION REGION

The North San Francisco Bay P-C Region (Figure 1) encompasses approximately 3,087 square miles and includes all of Marin, Napa, and Sonoma counties and the southwest part of Solano County. Major metropolitan centers include the cities of Santa Rosa, Sonoma, Napa, Vallejo, San Rafael, and Sausalito.

Figure 1. North San Francisco Bay P-C Region Location Map
Table 1
Lead Agencies within the North San Francisco Bay P-C Region

<table>
<thead>
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<th>Lead Agencies with Land Designated for PCC-Grade Aggregate within their Jurisdiction</th>
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<td>City of Calistoga</td>
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The Importance of PCC-Grade Construction Aggregate in the North San Francisco Bay P-C Region

Sand, gravel and crushed stone are “construction materials”. These commodities, collectively referred to as construction aggregate, provide the bulk and strength to portland cement concrete (PCC), asphaltic concrete (AC, commonly called “black top”), plaster, and stucco. Aggregate is also used as road base, subbase, railroad ballast,
and fill. Aggregate normally provides from 80 to 100% of the material volume in the above uses. Because material specifications for PCC-grade aggregate are more restrictive than specifications for other grades of aggregates, deposits suitable for use as PCC aggregate are the scarcest and most valuable of aggregate resources.

The Public Resources Code recognizes the value of construction aggregates, as well as other mineral resources, in PRC Section 2711, which states:

- “the production and development of local mineral resources that help maintain a strong economy and that are necessary to build the state’s infrastructure are vital to reducing transportation emissions that result from the distribution of hundreds of millions of tons of construction aggregates that are used annually in building and maintaining the state.” and

- “that the state’s mineral resources are vital, finite, and important natural resources and the responsible protection and development of these mineral resources is vital to a sustainable California.”

The projected 50-year demand for construction aggregate in the North San Francisco Bay P-C Region is 521 million tons, of which 130 million tons must be PCC-grade. The presently permitted aggregate reserves of 115 million tons are projected to last until 2023. The PCC-grade reserves of 27 million tons may last until 2023, but are likely to be depleted sooner. If a large scale construction project or catastrophic event requiring rebuilding occurs in the P-C Region, existing reserves may be depleted sooner than projected.

DESIGNATION OF RESOURCE AREAS IN THE NORTH SAN FRANCISCO BAY P-C REGION

In 1987, the Board designated approximately 7,586 acres containing 1,876 million tons of PCC-grade aggregate resources. This designation included 25 Sectors (A through Y), with Sectors A, B, C, D, and G further divided into 24 subsectors.

Previously Designated Sectors

Listed below are a description and location of the sectors and subsectors originally designated in 1987.

Sector A – Alluvial deposits in the recent river channel of the Russian River in Alexander Valley in Sonoma County, extending from near the City of Cloverdale to a point three miles southeast of the community of Jimtown. This sector was divided into ten subsectors identified as A-1, A-2a, A-2b, A-2c, A-2d, A-3a, A-3b, A-3c, A-4a, and A-4b, and covers 2,330 acres.

Sector B – Alluvial deposits in the middle reach of the Russian River, and a small area of the Dry Creek channel one-half mile west of Healdsburg, in Sonoma County,
extending from the City of Healdsburg to a point near the Wohler Road Bridge. This sector was divided into seven subsectors identified as B-1, B-2a, B-2b, B-2c, B-2d, B-4d, and B-4e, and covers 1,964 acres.

Sector C – Alluvial deposits in two small areas along Sonoma Creek in Sonoma County. This sector was divided into two subsectors identified as C-2a, located one mile south of Sonoma State Hospital, and C-3, located one mile south of Boyes Hot Springs. This sector covers 18 acres.

Sector D – Consists of two areas near Black Point in eastern Marin County. This sector was divided into two subsectors identified as D-1 and D-2 and covers 357 acres.

Sector E – A 51-acre area on Petaluma Hill, near the southeastern edge of the City of Petaluma in Sonoma County.

Sector F – 31 acres west of the City of Cotati in Sonoma County.

Sector G – Three contiguous subsectors east of the City of Vallejo on the southern end of Sulfur Springs Mountain in Solano County. The subsectors are identified as G-1, G-2, and G-3, and cover 643 acres.

Sector H – 1,181 acres southeast of the City of Napa in Napa County.

Sector I – A 145-acre area on Point San Pedro in eastern Marin County.

Sector J – An area on Burdell Mountain, two miles north of the City of Novato in Marin County covering 49 acres.

Sector K – Two areas east of Dunbar Union School and northeast of the community of Glen Ellen in Sonoma County covering 127 acres (in two separate parts).

Sector L – A 15-acre area in Millerton Gulch about 3.5 miles north of the community of Point Reyes Station in Marin County.

Sector M – A small area in upper Bowman Canyon on Burdell Mountain, about three miles northwest of Novato in Marin County covering 36 acres.

Sector N – A 36-acre area one mile west of the community of Forestville and south of Highway 116 in Sonoma County.

Sector O – A 45-acre area one mile west of the community of Forestville and north of Highway 116 in Sonoma County.

Sector P – 78 acres on the west side of Green Valley, about three miles southwest of Forestville in Sonoma County.
**Sector Q** – A 55-acre area in Cheney Gulch, north of Highway 1 about 2.5 miles east of Bodega Bay in western Sonoma County.

**Sector R** – A 112-acre area 2.5 miles southeast of the City of Petaluma in Sonoma County. Estimated resources are 23 million tons of subbase-grade aggregate; reserve totals are proprietary.

**Sector S** – A 54-acre area five miles east of Petaluma on Petaluma Creek Road in Sonoma County.

**Sector T** – A 27-acre area on Austin Creek about 1.5 miles north of Duncan Mills in western Sonoma County.

**Sector U** – A 9-acre area at the confluence of the South Fork and the Wheatfield Fork of the Gualala River near Twin Bridges in northwestern Sonoma County. This sector is too far from the major urban areas of the North Bay P-C Region to be considered part of the available resources or reserves for the P-C region, but is an important local source of material for the Gualala area because of its remoteness.

**Sector V** – An 80-acre area on Burdell Mountain, about two miles north of the City of Novato in Marin County.

**Sector W** – A 61-acre area on Porter Creek Road, about four miles east of the community of Mark West Springs in eastern Sonoma County.

**Sector X** – A 45-acre area along Highway 121, about 2.5 miles north of Sears Point in Sonoma County.

**Sector Y** – A 37-acre area about 2.5 miles west of Healdsburg in Sonoma County.

**Designation Status Terminated**

In the years since the designation of the North San Francisco Bay P-C Region, 1,035 acres containing 363 million tons (19 percent) of designated aggregate resources have been depleted by mining or lost to urbanization. Listed below are a description and location of the sectors and/or subsectors that have had their designation status terminated. In some instances, only a portion of a sector or subsector was terminated. During the regulatory process, the Office of Administrative Law required that those subsectors be individually identified, resulting in a different numbering system from the previous classification and designation.

**Parts of Sectors B-2a, B-2b, B-2c, B-2d, B-4d, and B-4e** – Located along the Middle Reach of the Russian River from Healdsburg south to its confluence with Mark West Creek. Four areas were depleted by mining and one area was urbanized in Sector B-2a; two areas were depleted in Sector B-2b; four areas were depleted in Sector B-2c; two areas were depleted in Sector B-2d; three areas were urbanized in Sector B-4d; and
one area was urbanized in Sector B-4e. A total of 680 acres were depleted by mining and 70 were lost to urbanization.

Sector C – This sector has been urbanized.

Sector D-2b – 71 acres in the northern portion of the sector have been urbanized.

Sector E – This sector has been urbanized.

Sector J – This sector has been urbanized.

Sector Q – This sector has been depleted by mining.

Sector V-1b – Six acres of this sector have been urbanized.

Sector X-1b – 35 acres in the northern portion of the sector have been urbanized.

Newly Designated Resource Areas

Eleven newly identified aggregate resource sectors have been designated to be of regional significance totaling about 2,869 acres. The location and a description of the sectors are provided below.

Sector AA – Alluvial deposits along the Gualala River in northwestern Sonoma County. This sector has been divided into three subsectors, AA-1, AA-2, and AA-3 for a combined area of 860 acres. These resources are too far from the major urban areas of the North Bay P-C Region to be included in the available resource total for the P-C region, but they are important local sources of material for the Gualala area because of its remoteness.

Sector DD – A 691-acre area adjacent to the Mark West Quarry in Sonoma County. This sector has been divided into two subsectors, DD-1, adjacent to the Mark West Quarry, and DD-2, southeast of DD-1.

Sector EE – A 93-acre area surrounding the active Blue Rock Quarry on the west, south, and east sides in Sonoma County.

Sector FF – A 114-acre area surrounding the active Canyon Rock Quarry on the west, north, and east sides in Sonoma County.

Sector GG – A 227-acre hillside area adjacent to the Bohan and Canelis Quarry on the east and south.

Sector HH – A 15-acre area of Austin Creek near the Bohan and Canelis Quarry, adjacent to and south (downstream) of Sector T.
Sector II – A 27-acre hillside area adjacent to the Bohan and Canelis Quarry in Sonoma County.

Sector JJ – A 30-acre area adjacent to and west of the Stony Point Rock Quarry (Sector F) in Sonoma County.

Sector KK – A 113-acre area south of Roblar Road, about five miles west of Cotati in Sonoma County.

Sector LL – A 186-acre area south of Roblar Road, about five miles west of Cotati in Sonoma County.

Sector MM – A 513-acre area adjacent to and east of Sector H in Napa County.

Mineral resource areas designated, and areas where designation has been terminated, are shown on three Plates: Plate 1, “Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California – Northern Part”; Plate 2, “Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California – Central Part”; and Plate 3, “Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California – Northwestern and Southeastern Part”. These plates are included at the end of this report.

Table 2 provides a summary of the currently designated sectors and subsectors and the estimated acres and designated resources.

### Table 2
**Summary of Currently Designated Sectors and Subsectors**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Subsectors Designated</th>
<th>Acres</th>
<th>Designated Resources (million tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>B-1, B-2a, B-2b, B-2c, B-2d, B-4d, B-4e</td>
<td>1964</td>
<td>184.9</td>
</tr>
<tr>
<td>D</td>
<td>D-1, D-2a</td>
<td>286</td>
<td>23.4</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>31</td>
<td>P</td>
</tr>
<tr>
<td>G</td>
<td>G-1, G-2, G-3</td>
<td>643</td>
<td>P</td>
</tr>
<tr>
<td>H</td>
<td></td>
<td>1181</td>
<td>626</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>145</td>
<td>P</td>
</tr>
<tr>
<td>K</td>
<td>K-1, K-2</td>
<td>127</td>
<td>33</td>
</tr>
<tr>
<td>Sector</td>
<td>Subsectors Designated</td>
<td>Acres</td>
<td>Designated Resources (million tons)</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------</td>
<td>-------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>L</td>
<td></td>
<td>15</td>
<td>P</td>
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<td>M</td>
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<tr>
<td>U</td>
<td></td>
<td>9</td>
<td>P*</td>
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<tr>
<td>V</td>
<td>V-1a</td>
<td>74</td>
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<td>W</td>
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<td>X</td>
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<td>Y</td>
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<td>27</td>
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<td>JJ</td>
<td></td>
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<td><strong>Total</strong></td>
<td></td>
<td><strong>10,455</strong></td>
<td><strong>2,333</strong></td>
</tr>
</tbody>
</table>

P – Proprietary
* – These resources are too far from the major urban areas of the P-C region and are not included in the available resource total.
**ADDITIONAL INFORMATION**

Questions about this designation report, the classification-designation program, or the requirements of SMARA, should be directed to the Executive Officer of the SMGB, at 801 K Street, Suite 2015, Sacramento, California 95814, telephone (916) 322-1082.


**REFERENCES**

APPENDIX A

Pertinent Statutory and Regulatory Authority
APPENDIX A

Pertinent Statutory and Regulatory Authority

PRC Section 2711 recognizes that the state’s mineral resources are vital, finite, and important, and the responsible protection and development of these mineral resources is vital to a sustainable California, and states:

“(a) The Legislature hereby finds and declares that the extraction of minerals is essential to the continued economic well-being of the state and to the needs of the society, and that the reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety.

(b) The Legislature further finds that the reclamation of mined lands as provided in this chapter will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land.

(c) The Legislature further finds that surface mining takes place in diverse areas where the geologic, topographic, climatic, biological, and social conditions are significantly different and that reclamation operations and the specifications therefor may vary accordingly.

(d) The Legislature further finds that the production and development of local mineral resources that help maintain a strong economy and that are necessary to build the state’s infrastructure are vital to reducing transportation emissions that result from the distribution of hundreds of millions of tons of construction aggregates that are used annually in building and maintaining the state.

(e) The Legislature further finds and recognizes the need of the state to provide local governments, metropolitan planning organizations, and other relevant planning agencies with the information necessary to identify and protect mineral resources within general plans.

(f) The Legislature further finds that the state’s mineral resources are vital, finite, and important natural resources and the responsible protection and development of these mineral resources is vital to a sustainable California.”

PRC Section 2761 requires the SMGB to transmit mineral resource information on the classified areas described above, or on other designated areas, to a lead agency or a metropolitan planning organization within 30 days of receiving a request for the information and states:

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

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

(2) Other areas as may be requested by the board.
(b) In accordance with a time schedule, and based upon guidelines adopted by the board, the State Geologist shall classify, on the basis solely of geologic factors, and without regard to existing land use and land ownership, the areas identified by the Office of Planning and Research, any area for which classification has been requested by a petition that has been accepted by the board, or any other areas as may be specified by the board, as one of the following:

1. An area that contains mineral deposits and is not of regional or statewide significance.
2. An area that contains mineral deposits and is of regional or statewide significance.
3. An area that contains mineral deposits, the significance of which requires further evaluation.

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

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

(e) The board shall transmit mineral resource information on areas classified by the State Geologist pursuant to paragraph (2) of subdivision (b), or on applicable areas designated by the board pursuant to Section 2790, or both, to a lead agency or a metropolitan planning organization within 30 days of receiving a request for the mineral resource information identified within the jurisdiction of the lead agency or the metropolitan planning organization.”

PRC Section 2762 requires lead agencies to establish mineral resource management policies to be incorporated into their general plan and states:

“(a) Within 12 months of receiving the mineral information described in Section 2761, and also within 12 months of the designation of an area of statewide or regional significance within its jurisdiction, a lead agency shall, in accordance with state policy, establish mineral resource management policies to be incorporated in its general plan that will:

1. Recognize mineral information classified by the State Geologist and transmitted by the board.
2. Assist in the management of land use that affects access to areas of statewide and regional significance.
3. Emphasize the conservation and development of identified mineral deposits.

(b) A lead agency shall submit proposed mineral resource management policies to the board for review and comment prior to adoption.

(c) A subsequent amendment of the mineral resource management policy previously reviewed by the board shall also require review and comment by the board.

(d) (1) If an area is classified by the State Geologist as an area described in paragraph (2) of subdivision (b) of Section 2761 and the lead agency either has designated that area in its general plan as having important minerals to be protected pursuant to subdivision (a), or otherwise has not yet acted pursuant to subdivision (a), then prior to permitting a use that would threaten the potential to extract minerals in that area, the lead agency shall prepare, in conjunction with preparing, if required, an environmental document required by Division 13 (commencing with Section 21000), or
if, a statement specifying its reasons for permitting the proposed use, and shall forward a copy to the State Geologist and the board for review.

(2) If the proposed use is subject to the requirements of Division 13 (commencing with Section 21000), the lead agency shall comply with the public review requirements of that division. Otherwise, the lead agency shall provide public notice of the availability of its statement by all of the following:

(A) Publishing the notice at least one time in a newspaper of general circulation in the area affected by the proposed use.

(B) Directly mailing the notice to owners of property within one-half mile of the parcel or parcels on which the proposed use is located as those owners are shown on the latest equalized assessment role.

(3) The public review period shall not be less than 60 days from the date of the notice and shall include at least one public hearing. The lead agency shall evaluate comments received and shall prepare a written response. The written response shall describe the disposition of the major issues raised. In particular, if the lead agency’s position on the proposed use is at variance with recommendations and objections raised in the comments, the written response shall address in detail why specific comments and suggestions were not accepted.

(e) Prior to permitting a use that would threaten the potential to extract minerals in an area classified by the State Geologist as an area described in paragraph (3) of subdivision (b) of Section 2761, the lead agency may cause to be prepared an evaluation of the area in order to ascertain the significance of the mineral deposit located in the area. The results of the evaluation shall be transmitted to the State Geologist and the board.”

**PRC Section 2763** requires lead agencies to prepare a statement specifying reasons for permitting a proposed use involving areas designated as being of statewide significance and states:

“(a) If an area is designated by the board as an area of regional significance, and the lead agency either has designated that area in its general plan as having important minerals to be protected pursuant to subdivision (a) of Section 2762, or otherwise has not yet acted pursuant to subdivision (a) of Section 2762, then prior to permitting a use which would threaten the potential to extract minerals in that area, the lead agency shall prepare a statement specifying its reasons for permitting the proposed use, in accordance with the requirements set forth in subdivision (d) of Section 2762. Lead agency land use decisions involving areas designated as being of regional significance shall be in accordance with the lead agency’s mineral resource management policies and shall also, in balancing mineral values against alternative land uses, consider the importance of these minerals to their market region as a whole and not just their importance to the lead agency’s area of jurisdiction.

(b) If an area is designated by the board as an area of statewide significance, and the lead agency either has designated that area in its general plan as having important minerals to be protected pursuant to subdivision (a) of Section 2762, or otherwise has not yet acted pursuant to subdivision (a) of Section 2762, then prior to permitting a use which would threaten the potential to extract minerals in that area, the lead agency shall prepare
a statement specifying its reasons for permitting the proposed use, in accordance with the requirements set forth in subdivision (d) of Section 2762. Lead agency land use decisions involving areas designated as being of statewide significance shall be in accordance with the lead agency’s mineral resource management policies and shall also, in balancing mineral values against alternative land uses, consider the importance of the mineral resources to the state and nation as a whole.”

PRC Section 2764 addresses amendments to, and adoption of, general plans and states:

“(a) Upon the request of an operator or other interested person and payment by the requesting person of the estimated cost of processing the request, the lead agency having jurisdiction shall amend its general plan, or prepare a new specific plan or amend any applicable specific plan, that shall, with respect to the continuation of the existing surface mining operation for which the request is made, plan for future land uses in the vicinity of, and access routes serving, the surface mining operation in light of the importance of the minerals to their market region as a whole, and not just their importance to the lead agency’s area of jurisdiction.

(b) In adopting amendments to the general plan, or adopting or amending a specific plan, the lead agency shall make written legislative findings as to whether the future land uses and particular access routes will be compatible or incompatible with the continuation of the surface mining operation, and if they are found to be incompatible, the findings shall include a statement of the reasons why they are to be provided for, notwithstanding the importance of the minerals to their market region as a whole or their previous designation by the board, as the case may be.

(c) Any evaluation of a mineral deposit prepared by a lead agency for the purpose of carrying out this section shall be transmitted to the State Geologist and the board.

(d) The procedure provided for in this section shall not be undertaken in any area that has been designated pursuant to Article 6 (commencing with Section 2790) if mineral resource management policies have been established and incorporated in the lead agency’s general plan in conformance with Article 4 (commencing with Section 2755).”

PRC Section 2790 provides the SMGB authority to consider areas of statewide significance for designation which states:

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

PRC Section 2793 provides statutory authority which allows the SMGB to terminate, in whole or in part, an area previously designated, and states:
“The board may, by regulation adopted after a public hearing, terminate, partially or wholly, the designation of any area of statewide or regional significance on a finding that the direct involvement of the board is no longer required.”

**CCR Section 3675** provides definition of compatible and incompatible land use, and states:

“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, recreational, 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.”

**CCR Section 3676.** This section provides a summary of information to be provided as part of MRMP and states:


Lead agency mineral resource management policies adopted pursuant to the provisions of PRC Section 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 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.”
APPENDIX B

ADMINISTRATIVE PROCESS LEADING TO DESIGNATION, AND TERMINATION OF DESIGNATION WITHIN THE NORTH SAN FRANCISCO BAY P-C REGION
APPENDIX B


- March 13, 2014 – The Board accepted the State Geologist’s recommendations for designation of select mineral resource lands in the North San Francisco Bay P-C Region. A 60-day comment period commenced on April 4, 2014 and ended on June 4, 2104, with a public hearing to receive comments held in the City of Napa on May 14, 2014.

- August 14, 2014 – The Board approved the proposed regulatory language.

- December 26, 2014 – The approved proposed regulatory language was published in the California Regulatory Notice Register No. 52-Z, and was available for public comment from December 26, 2014 through February 5, 2015.

- March 12, 2015 – The Board adopted proposed regulatory language.


- August 13, 2015 – The Board adopted the final regulatory language.

- February 9, 2016 – OAL approved the rulemaking package with an effective date of April 1, 2016.
APPENDIX C

North San Francisco Bay Production-Consumption Region Designation Regulations
APPENDIX C

North San Francisco Bay Production-Consumption Region Designation Regulations

§ 3550.11 Construction Aggregate Resources, North San Francisco Bay Production-Consumption Region.

The areas for changes in designation, and termination of designation, are shown on three plates: Plate 1 (July 2015), Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California - Northern Part; Plate 2 (July 2015), Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California - Central Part; and Plate 3 (July 2015), Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California - Northwestern and Southeastern Part.

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

Sector A - Channel and floodplain alluvium deposits located in Alexander Valley of Sonoma County; extends from approximately the City of Cloverdale downstream to a point 3.25 miles southeast of the community of Jimtown.

Sector B except for the subsectors referenced below that have had their designation terminated - Alluvial deposits of the middle reach of the Russian River and a small portion of Dry Creek 0.5 miles west of Healdsburg. The sector extends from the City of Healdsburg down the Russian River to a point near the Wohler Road Bridge.

Sectors D-1 and D-2a - Consists of Novato Conglomerate deposits located near Black Point in eastern Marin County.

Sector F - A small aggregate deposit located west of the City of Cotati on Stony Point Road in Sonoma County.

Sector G - Three contiguous parcels consisting of metamorphosed graywacke and greenstone deposits located east of the City of Vallejo at the southern end of Sulphur Springs Mountain.

Sector H - Aggregate deposit located southeast of the City of Napa in Napa County.

Sector I - Metamorphosed sandstone deposit located on Point San Pedro in eastern Marin County.
Sector K-1 - Area east of Dunbar Union School and northeast of the community of Glen Ellen in Sonoma County.

Sector K-2 - Area east of Dunbar Union School and northeast of the community of Glen Ellen in Sonoma County.

Sector L - Small greenstone and pillow lavas deposits located in Millerton Gulch approximately 3.5 miles north of the community of Point Reyes Station in Marin County.

Sector M - A small serpentinite deposit located in upper Bowman Canyon on Burdell Mountain approximately three miles northwest of Novato in Marin County.

Section N - A small siltstone deposit located approximately one mile west of the community of Forestville and south of Highway 116.

Sector O - A small siltstone deposit located approximately one mile west of the community of Forestville and north of Highway 116.

Sector P - Located along the west side of Green Valley approximately three miles southwest of Forestville in Sonoma County.

Sector R - Located approximately 2.5 miles southeast of the City of Petaluma in Sonoma County.

Sector S - Located approximately five miles west of Petaluma on Petaluma Creek Road in Sonoma County.

Sector T - Sandstone deposits located 1.5 miles north of Duncan Mills on Austin Creek in western Sonoma County.

Sector U - Located at the confluence of the South Fork and Wheatfield Fork of the Gualala River in northwestern Sonoma County.

Sector V-1a - Consists of andesite located on Burdell Mountain approximately two miles north of the City of Novato in Marin County.

Sector W - Located on Porter Creek Road approximately four miles east of the community of Mark West Springs in eastern Sonoma County.

Sector X-1a - Consists of sandstone and andesite located along Highway 121 approximately 2.5 miles north of Sears Point in southeastern Sonoma County.

Sector Y - Shale deposit located approximately 2.5 miles west of Healdsburg in Sonoma County.
Sector AA - Includes subsectors AA-1, AA-2, and AA-3, and comprised of alluvial deposits along the Gualala River in northwestern Sonoma County.

Sector DD - Includes subsectors DD-1 and DD-2, and is located on Porter Creek Road approximately four miles east of the community of Mark West Springs in Sonoma County.

Sector EE - Located approximately one mile west of the community of Forestville and south of Highway 16.

Sector FF - Located approximately one mile west of the community of Forestville and north of Highway 16.

Sector GG - Located approximately 1.5 miles north of Duncan Mills on Austin Creek in western Sonoma County.

Sector HH - Located approximately 1.5 miles north of Duncan Mills on Austin Creek in western Sonoma County.

Sector II - Located approximately 1.5 miles north of Duncan Mills on Austin Creek in western Sonoma County.

Sector JJ - Located west of the City of Cotati on Stony Point Road in Sonoma County.

Sector KK - An area south of Roblar Road approximately five and a quarter miles west of the City of Cotati in Sonoma County.

Sector LL - An area south of Roblar Road approximately four and a half miles west of the City of Cotati in Sonoma County.

Sector MM - Located southeast of the City of Napa in Napa County.

The following areas have had their designation terminated:

Sector B incorporating parts of Sectors B-2a, B-2b, B-2c, B-2d, B-4d and B-4e - Located along the Middle Reach of the Russian River from Healdsburg south to its confluence with Mark West Creek: There are five areas terminated in Sector B-2a; two areas terminated in Sector B-2b; four areas terminated in Sector B-2c; two areas terminated in Sector B-2d; three areas terminated in Sector B-4d; and one area terminated in Sector B-4e. Also, including surrounding areas to all portions of both Sectors B-2 and B-4e, south of Dry Creek and west of the Russian River, corresponding to a conservation easement area.

Sectors C-2a and C-3 - Sector C-2a along Sonoma Creek, north of the City of Sonoma and Sector C-3 on the northwestern edge of the City of Sonoma. These two areas have been terminated.
Sector D-2b - This sector at the southern end of a prominent ridge in the easternmost part of the City of Novato has been terminated.

Sector E - This Sector is at the northern end of Petaluma Hill and is mostly within the City of Petaluma. Sector E has been terminated.

Sector J - This Sector is at the eastern end of Burdell Mountain. This Sector has been terminated.

Sector Q - This Sector is north of Highway 1, about 2.5 miles east of the community of Bodega Bay. The Sector has been terminated.

Sector V (partial) - This Sector (V-1b) is on Burdell Mountain. Six acres of the Sector have been terminated.

Sector X (partial) - This Sector (X-1b) is on the east side of Highway 121, about seven miles south of Sonoma. The northern portion of the Sector has been terminated.


**HISTORY**
1. New section filed 12-3-86, effective thirtieth day thereafter (Register 86, No. 49).
2. Amendment of section and Note filed 2-9-2016; operative 4-1-2016 (Register 2016, No. 7).
STATE MINING AND GEOLOGY BOARD

Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California - Northern Part

PREPARED IN COMPLIANCE WITH THE SURFACE MINING AND RECLAMATION ACT OF 1977, ARTICLE 4, SECTION 2790

2015
Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California - Central Part

PREPARED IN COMPLIANCE WITH THE SURFACE MINING AND RECLAMATION ACT OF 1977, ARTICLE 4, SECTIONS 2790

LEGEND:
- Districts designated by the State Mining and Geology Board (SMGB) as containing arguably significant PCs (culpable resources)
- Region where known or likely to contain significant concentrations of PCs, with mining
- New Districts
- Geologic Framework

Location of North Bay P.C. Region and Index Map of 1:50,000 Topographic Quadrangles.

Scale: 1:4,800
Projected: Albers Equal
Datum: NAD 27

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Scale error noted by California Department of Conservation
The California Department of Conservation makes no warranties, express or implied, including the warranty of merchantability.
Updated Designation in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma and Southwestern Solano Counties, California - Northwestern and Southeastern Part

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

2015