

## **No Need for Sand and Gravel from the Sacred Lands of Juristac, aka Sargent Ranch**

### **REUSE & RECYCLING**

1. More and more use of recycled sand, from crushed concrete and from foundry sand used for mold making (reference: A Review of the Usage of Recycled Sand in the Construction Industry by P.M. Salim and B.S. Prasad, in Sandy Materials in Civil Engineering: Usage and Management (2020), Nemati and Tamoorian, editors)
2. Glass can be also recycled into sand used for construction and in cement (references: [Recycled Glass Pozzolan Replacing Cement in High-Performance Concrete](#) Urban Mining Industries, published July 6, 2015, <https://www.linkedin.com/pulse/recycled-glass-pozzolan-replacing-cement-concrete-louis-grasso> , accessed 8/15/2022; Performance of Recycled Waste Glass Sand as Partial Replacement of Sand in Concrete, in Construction and Building Materials, vol. 239, April 10, 2020 <https://www.sciencedirect.com/science/article/abs/pii/S095006181933257X>, accessed 8/15/2022)
3. More and more use of recycled concrete (references: Using Recycled Concrete Aggregate, Pennsylvania Aggregates and Concrete Association website, Specify Concrete blog post published Feb. 28, 2019, <https://www.specifyconcrete.org/blog/using-recycled-concrete-aggregate>, accessed 8/15/2022; California Construction and Industrial Materials Association website; <https://www.calcima.org/recycling>, accessed 8/15/2022 )
4. More and more production of cement with materials that have less of a carbon footprint (references: California Construction and Industrial Materials Association website, <https://www.calcima.org/sustainability>; accessed 8/15/2022; Portland Cement Association publication Roadmap to Carbon Neutrality (published October 2021), [https://www.cement.org/docs/default-source/roadmap/pca-roadmap-to-carbon-neutrality\\_10\\_10\\_21\\_final.pdf](https://www.cement.org/docs/default-source/roadmap/pca-roadmap-to-carbon-neutrality_10_10_21_final.pdf), accessed August 17, 2022)
5. Reasons for the reuse and recycling of materials include:
  - realization that it's harmful to mine
  - plans to reduce the emission of greenhouse gases
  - less use of fossil fuels to reuse and recycle aggregates
  - reuse and recycling saves landfill space
  - reuse and recycling saves businesses money because they can sell products instead of taking them to a landfill
  - government regulations requiring recycling and/or reuse of materials – Example: Palo Alto requires this (From Cal Recycle, California government website <https://calrecycle.ca.gov/ConDemo/Aggregate/> and Palo Alto City Code § 5.24.050. “Deconstruction and source separation of materials” Both accessed 8/14/2022)
  - government regulations requiring public projects to include reuse & recycling of aggregates- for example, Los Angeles has required the use of recycled concrete in road projects since 1995 (From Cal Recycle, California government website <https://calrecycle.ca.gov/ConDemo/Aggregate/> accessed 8/14/2022)

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6. Numerous businesses in or near Santa Clara County sell recycled materials &/or process aggregate for reuse
  - Examples include Graniterock operations in San Jose and Aromas
  - Examples include Stevens Creek Quarries, various locations

### **REPRESENTATIVE SAND & GRAVEL MINING IN THE REGION**

- A. R. Wilson Quarry, Graniterock, Aromas, CA- also has recycled aggregate
- Quail Hollow Quarry, Graniterock, Felton, CA
- Santa Cruz Sand Plant, Graniterock, Santa Cruz, CA
- Southside Sand and Gravel, Graniterock, Hollister, CA
- Olive Springs Quarry, family owned, Soquel, CA
- Stevens Creek Quarries, family owned, various locations in Santa Clara, San Benito and Alameda counties:
  - Cupertino quarry
  - Sunnyvale quarry
  - San Jose quarry
  - Sunol quarry
  - San Juan Bautista quarry
- Stevens Creek Quarries also provide “recycling products and services for concrete, asphalt and clean fill. SCQ takes in these materials and then reprocesses the material into recycled aggregate and soil products.” (From: <http://www.scqinc.com/> click on the + in recycling tab, accessed 8/14/2022)
- Pilarcitos Quarry, Vulcan Materials, Half Moon Bay

### **The 2018 California Aggregate Sustainability in California Report**

- The report is from Map Sheet 52 (updated 2018), Aggregate Sustainability in California, the California Geological Survey, Department of Conservation by John P. Clinkenbeard (PG# 4731) and Fred W. Gius (PG# 7788), available online: [https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS\\_052-California\\_Aggregates\\_Report\\_201807.pdf](https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS_052-California_Aggregates_Report_201807.pdf)
- Its purpose is to document in-ground supplies of aggregates used in construction in California.
- The report predicts that the South San Francisco Bay region, which includes Santa Clara County, has a 21-30 year supply of permitted aggregate reserves (see Table 1 of the report on pg. 5)- **this does not take into the use of recycled materials.**
- The report does not discuss use of recycled or reused aggregate materials to fulfill construction needs as it is from the Geological Survey- **however, as the use of recycled and reused materials goes up, the demand for mined materials will go down.**