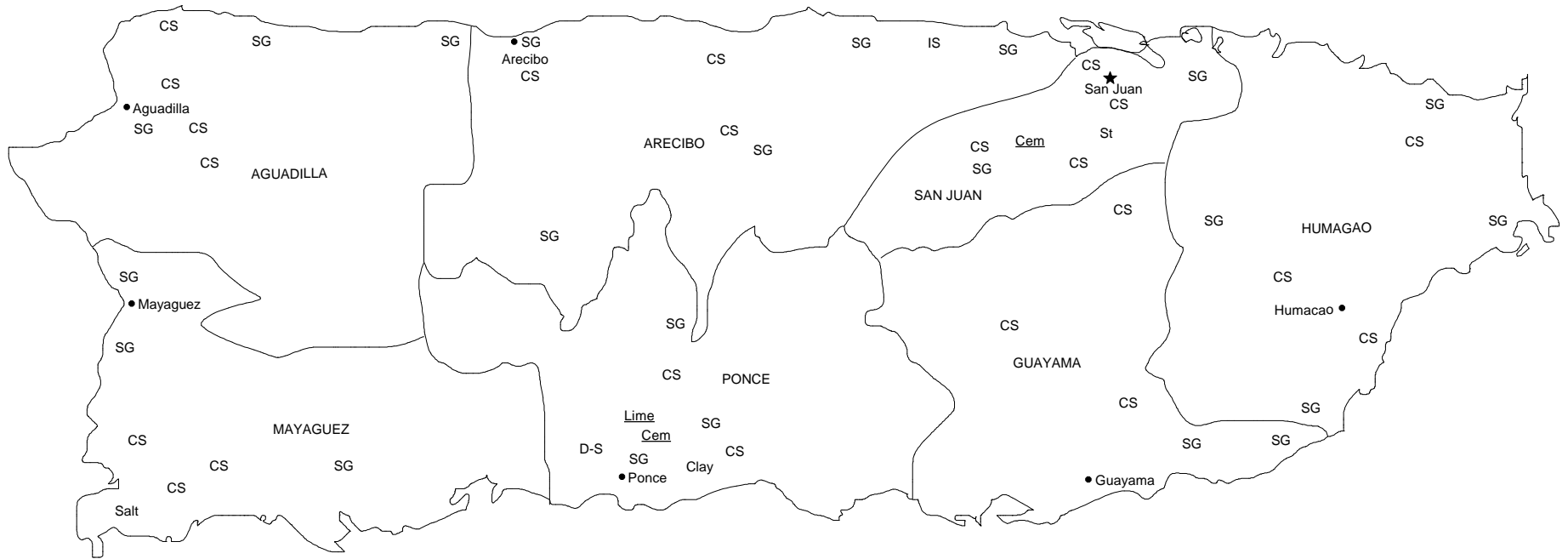


# PUERTO RICO



LEGEND		MINERAL SYMBOLS	
	State boundary	<u>Cem</u>	Cement plant
	District boundary	<u>Lime</u>	Lime plant
	Capital	Salt	Salt
	City	CS	Crushed stone
		D-S	Dimension stone
		IS	Industrial sand
		Clay	Clay
		SG	Sand and gravel
		St	Stone



Source: Department of Natural Resources, Commonwealth of Puerto Rico/U.S. Geological Survey

# THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

**This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Department of Natural Resources, Bureau of Geology, for collecting information on all nonfuel minerals.**

In 1998, the preliminary estimated value<sup>1</sup> of nonfuel mineral production for Puerto Rico<sup>2</sup> was \$252 million, according to the U.S. Geological Survey (USGS). If ranked in comparison with the 50 States, Puerto Rico would rank 39th in total nonfuel mineral production value. Portland cement and crushed stone, by value, were the Commonwealth's leading nonfuel mineral commodities. Of the U.S. Administered Islands, Guam is the only one from which nonfuel mineral production has recently been reported to the USGS; reported production has been limited to that from crushed stone companies (table 1).

In 1998, portland cement accounted for the largest share of Puerto Rico's increase in nonfuel mineral value; all other nonfuel minerals increased in value except industrial sand and

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<sup>1</sup>The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 1998 USGS mineral production data published in this chapter are preliminary estimates as of February 1999 and are expected to change. Crushed stone and portland cement estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. A telephone listing for the specialists may be retrieved over the Internet at <http://minerals.usgs.gov/minerals/contacts/comdir.html>; by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists); or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at <http://minerals.usgs.gov/minerals>; facsimile copies may be obtained from MINES FaxBack.

<sup>2</sup>While a memorandum of understanding (MOU) was officially made between the U.S. Geological Survey (USGS) and the Commonwealth of Puerto Rico, MOU's were not established with the Commonwealth of the Northern Mariana Islands, U.S. Caribbean and Pacific Island Possessions, or the U.S. Trust Territory of the Pacific Islands. Nevertheless, data on nonfuel mineral production were reported to the USGS for the island of Guam of the Pacific Island Possessions. These data appear in table 1.

gravel and salt, which were unchanged. No dimension marble was produced in Puerto Rico in 1997, but production resumed in 1998. The data for dimension stone, as well as for industrial sand and gravel, are withheld to protect company proprietary data. In 1997, crushed stone followed by portland cement accounted for most of the increase in the Commonwealth's nonfuel mineral value.

Construction sand and gravel is produced in Puerto Rico, but production data do not appear in table 1. The collection and compilation of production data for construction sand and gravel mined in the Commonwealth were discontinued in 1973 by the U.S. Bureau of Mines (the Federal Government agency then responsible for the collection of domestic raw nonfuel mineral production data). This data collection ceased because of low rate of response by the industry (Sikich and Alonso, 1993, p. 469).

Metals have not been mined in Puerto Rico since the Juncos iron mine closed in 1953; prospects for resuming metal mining in the near future do not appear to be likely. However, as noted in a publication of the former U.S. Bureau of Mines, metal occurrences are common on the island and the possibility of developing a metal deposit should not be completely discounted (Sikich and Alonso, 1993).

The U.S. Geological Survey will release Open File Report 98-38 on CD-ROM in 2000. The publication is entitled *Geology, Geochemistry, Geophysics, Mineral Occurrences and Mineral Resource Assessment for the Commonwealth of Puerto Rico*. The data were compiled by W.J. Bawiec (U.S. Geological Survey, oral commun., 2000).

## Reference Cited

- Sikich, S.W., and Alonso, R.M., 1993, The mineral industries of Puerto Rico, Northern Marianas, Island Possessions, and Trust Territory, in U.S. Bureau of Mines Minerals Yearbook 1992, v. 2, p. 467-470.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED  
BY THE UNITED STATE 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1996		1997		1998 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Puerto Rico:</b>						
Cement: Portland	1,550 (3/)	W	W	W	1,730	W
Clays: Common	W	W	W	363	W	W
Lime	38	5,050	32	4,580	34	4,600
Salt	45	1,500	45	1,500	45	1,500
Stone: Crushed	13,200	52,500	14,000	71,300	14,500	72,000
Combined values of other industrial minerals	XX	153,000	XX	(4/)	XX	174,000
Total	XX	212,000	XX	77,700 5/	XX	252,000
Administered Islands, Guam: Stone: Crushed	1,660	13,800	1,760	10,500	1,800	11,000

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; value included with "Combined values" data. XX Not applicable.

1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Unit of measure changed to thousand tons on December 7, 2004.

4/ Withheld to avoid disclosing company proprietary data.

5/ Total does not include values of items withheld.