THE MINERAL INDUSTRY OF LOUISIANA

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Louisiana Geological Survey for collecting information on all nonfuel minerals.

In 1998, the preliminary estimated value¹ of nonfuel mineral production for Louisiana was \$379 million, according to the U.S. Geological Survey (USGS). This was about a 6% decrease from that of 1997,² following a 2.3% increase from 1996 to 1997. The State decreased in rank from 32d to 33d among the 50 States in 1998 in total nonfuel mineral production value, of which Louisiana accounted for about 1% of the U.S. total.

Louisiana's leading nonfuel mineral is salt, accounting for about 45% of the State's nonfuel mineral value in 1998. When included as part of Louisiana's mineral production, sulfur is the State's second-leading mineral commodity. All current sulfur production comes from a mine that is 27 kilometers offshore of Louisiana. Because of the mine's location, the State does not receive severance tax income or mineral production royalties; instead, they are collected by the Federal Government. Consequently, since 1991 the State and the Louisiana Geological Survey (LGS) do not consider the sulfur production cited in table 1 under "Combined value" as being part of Louisiana's nonfuel mineral production. The USGS attributes this offshore sulfur production to Louisiana because

¹The 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. Construction sand and gravel and crushed stone 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.

²Values, percentage calculations, and rankings for 1997 may vary from the *Minerals Yearbook, Area Reports: Domestic 1997, Volume II*, owing to the revision of preliminary 1997 to final 1997 data. Data for 1998 are preliminary and expected to change, while related rankings may also be subject to change.

it is the State nearest to the sulfur mine and Freeport-McMoRan Sulphur Inc., the company that operates the mine, is based in New Orleans.

In 1998, a significant decrease in the value of Frasch sulfur accounted for most of the State's drop in nonfuel mineral value. International cutbacks and two hurricanes that affected the area caused significant technical problems and led to lower production and a decrease in sulfur value. This decrease was partially mitigated by the increased value of construction sand and gravel (table 1). All other mineral commodity values increased except for crude gypsum and gemstones, which showed small decreases, and industrial sand and gravel, which remained the same.

In 1997, moderate decreases that occurred in the values of construction sand and gravel and salt (descending order of change) were more than balanced by increases in crushed stone (including crushed limestone under "Combined values" in table 1), common clay, lime, and Frasch sulfur.

Based on USGS estimates of the quantities produced in the 50 States during 1998, Louisiana remained the leading² State in the Nation in salt and sulfur production.

The LGS provided the following narrative information.³ On April 4, 1998, following years of controversy, especially related to charges of environmental racism, Louisiana Energy Services (LES), a multinational partnership, dropped its plans to build a uranium enrichment plant, owing to significant delays in the permit application process that prohibitively increased the cost of its licensing process. In 1991, LES applied for a permit to build an \$800 million uranium enrichment plant in rural Claiborne parish, which is in the northwestern part of the State, northeast of Shreveport (Shinkle, 1998).

Reference Cited

Shinkle, Peter, 1998, Uranium plant plan dropped: The Advocat, April 23, p. $^{4\Delta}$

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³Syed M. Haque, Research Geologist at the LGS, authored the text of Louisiana minerals industry information submitted by the LGS.

TABLE 1 NONFUEL RAW MINERAL PRODUCTION IN LOUISIANA 1/2/

(Thousand metric tons and thousand dollars unless otherwise specified)

	199	1996		1997		1998 p/	
Mineral	Ouantity	Value	Ouantity	Value	Quantity	Value	
Clavs: Common	382	548	556	9,060	567	9,240	
Gemstones	NA	136	NA	15	NA	7	
Salt	15,500	175,000	15,300	169,000	15,000	170,000	
Sand and gravel:	=' 						
Construction	11,500	53,200	10,400	46,600	12,600	58,300	
Industrial	706	12,100	644	11,200	644	11,200	
Stone: Crushed 3/	2,290	23,900	1,570	16,100	1,600	16,200	
Combined values of gypsum (crude), lime, stone [crushed limestone (1997-98), crushed miscellaneous (1996)],							
sulfur (Frasch)	XX	128,000	XX	150,000	XX	114,000	
Total	XX	393,000	XX	402,000	XX	379,000	

TABLE 2 LOUISIANA: CRUSHED STONE SOLD OR USED, BY KIND 1/

	1996				1997				
	Number of	Ouantity (thousand	Value	Unit	Number of	Ouantity (thousand	Value	Unit	
Kind	quarries	metric tons)	(thousands)	value	quarries	metric tons)	(thousands)	value	
Sandstone	13	2,290	\$23,900	\$10.44	9	1,570	\$16,100	\$10.30	
Limestone					4	(2/)	(2/)	(2/)	
Total	XX	2,290	23,900	10.44	XX	1,570	16,100	10.30	

XX Not applicable.

TABLE 3 LOUISIANA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1997, BY USE 1/2/

Use	Ouantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate, graded: Bituminous aggregate, coarse	W	W	\$1.10
Fine aggregate (-3/8): Stone sand, bituminous mix or seal	W	W	1.06
Unspecified: 3/	_		
Actual	1,410	15,500	11.05
Estimated	103	537	5.21
Total	1,570	16,100	10.30

W Withheld to avoid disclosing company proprietary data; included in "Total."

- 1/ Data are rounded to three significant digits, except unit value; may not add to totals shown.
- 2/ Includes sandstone; excludes limestone from State total to avoid disclosing company proprietary data.

3/ Includes reported and estimated production without a breakdown by end use.

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p/ Preliminary. NA Not available. 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/} Excludes certain stones; kind and value included with "Combined values" data.

^{1/} Data are rounded to three significant digits, except unit value.

^{2/} Excluded from State total to avoid disclosing company proprietary data.

TABLE 4 LOUISIANA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1997, BY USE AND DISTRICT 1/2/

(Thousand metric tons and thousand dollars)

	District 1		District 2		District 3		Unspecified districts	
Use	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction aggregates:								
Coarse aggregate, graded 3/					W	W		
Fine aggregate (-3/8 inch) 4/					W	W		
Unspecified: 5/	-							
Actual	263	2,910	595	6,580			548	6,060
Estimated					103	537		
Total	263	2,910	595	6,580	161	601	548	6,060

W Withheld to avoid disclosing company proprietary data; included in "Total."

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ Excludes limestone from State total to avoid disclosing company proprietary data.
- 3/ Includes bituminous aggregate (coarse).
- 4/ Includes stone sand (bituminous mix or seal).
- 5/ Includes reported and estimated production without a breakdown by end use.

TABLE 5 LOUISIANA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1997, BY MAJOR USE CATEGORY 1/ $2 \rm /$

Use	Quantity (thousand metric	Value (thousands)	Value per ton
Concrete aggregate (including concrete sand) 3/	3,650	\$15,400	\$4.23
Asphaltic concrete aggregates and other bituminous mixtures	472	2,170	4.59
Road base and coverings 4/	386	2,060	5.33
Other miscellaneous uses 5/	995	3,690	3.71
Unspecified: 6/			
Actual	3,280	16,500	5.03
Estimated	1,580	6,780	4.29
Total or average	10,400	46,600	4.50

- 1/To avoid disclosing company proprietary data, no district tables were produced for 1997.
- 2/ Data are rounded to three significant digits; may not add to totals shown.
- 3/ Includes plaster and gunite sands, and concrete products.
- 4/ Includes road and other stabilization (lime).
- 5/ Includes fill and roofing granules.
- 6/ Includes reported and estimated production without a breakdown by end use.

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