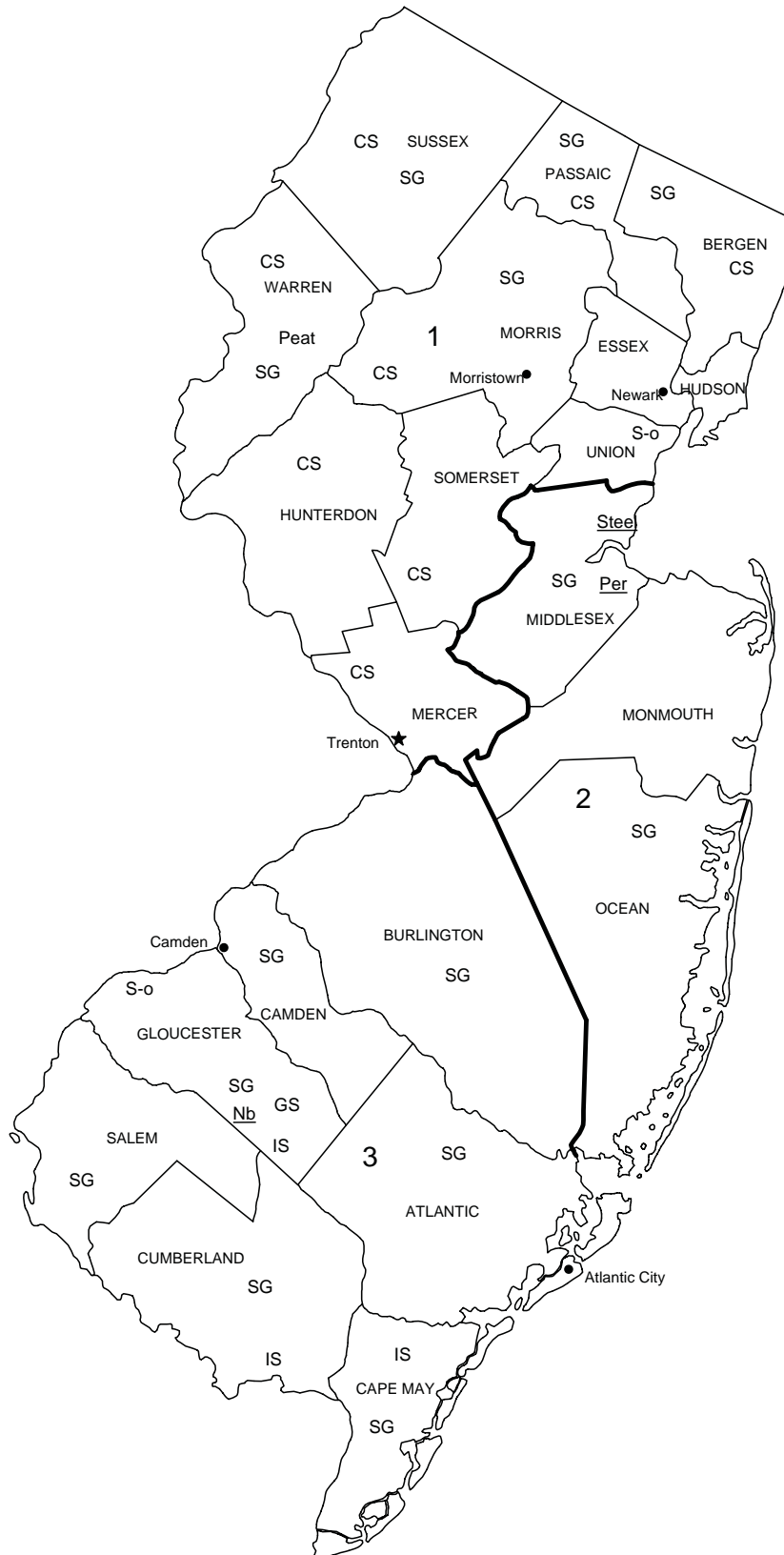




2005 Minerals Yearbook

NEW JERSEY

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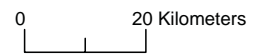


LEGEND

- County boundary
- ★ Capital
- City
- 1** — Crushed stone/sand and gravel districts

MINERAL SYMBOLS (Major producing areas)

- Clay Common clay
- CS Crushed stone
- GS Greensand
- IS Industrial sand
- Nb Columbium (niobium) plant
- Peat Peat
- Per Perlite plant
- S-o Sulfur (oil)
- SG Construction sand and gravel
- Steel Steel plant



THE MINERAL INDUSTRY OF NEW JERSEY

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

In 2005, New Jersey's nonfuel raw mineral production was valued¹ at \$344 million, based upon annual U.S. Geological Survey (USGS) data. This was a marginal decrease compared with that of 2004, which was up 7.5% from 2003. Crushed stone and construction sand and gravel, by value, were New Jersey's leading nonfuel mineral commodities, followed by industrial sand and gravel and greensand marl.

In 2005, a 5.4% increase in construction sand and gravel production resulted in a \$25 million increase in the commodity's value, an increase in unit value of 15%. But this increase was slightly more than balanced out by decreases in the values of crushed stone and industrial sand and gravel. A 10.6% decrease in crushed stone production accounted for a \$25 million decrease in its overall value; although this represented an only 3% decrease in unit value. In industrial sand and gravel, although a nearly 10% decrease in production resulted in a \$1.7 million drop in its value, the commodity's unit value rose by 5.7%. Relatively small decreases also took place in the production and value of greensand marl (table 1).

New Jersey continued to be the only State to produce greensand marl and it decreased to fifth from fourth in the quantity of industrial sand produced. Greensand marl was used directly as an organic conditioner and fertilizer for soils and as a water filtration medium to remove soluble iron and manganese from well water. Additionally, the State's aggregate operations produced significant quantities of crushed stone and construction sand and gravel.

The following narrative information was provided by the New Jersey Geological Survey² (NJGS). Overall, the economy in the State eased slightly during the year. The demand for office space and the pace of housing construction dropped, and previously increasing and higher prices for raw materials leveled off owing to less demand for the State's construction mineral resources.

The number of operating surface mines (mainly crushed stone quarries and construction sand and gravel pits) remained steady. No new mining properties have opened during the past 20 or more years. However, some mineral extraction did take place at various construction sites around the State, but these were of short term duration and limited in scope. Also, no subsurface mining activity took place, nor was any anticipated in the foreseeable future.

¹The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the 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 2005 USGS mineral production data published in this chapter are those available as of December 2006. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals>.

²Lloyd Mullikin, Supervising Geologist, authored the text of the State mineral industry information provided by the New Jersey Geological Survey.

Commodity Review

Industrial Minerals

Construction Sand and Gravel.—Amboy Aggregates, the only sand and gravel dredging operation in the State's offshore waters, faced redevelopment pressure from the South Amboy City Council. The council approved a resolution allowing the city to begin acquiring 34 hectares (ha) of land along the Raritan Bay waterfront, of which Amboy Aggregates is one of five companies that are property owners. The city of South Amboy blighted the property, raising the possibility of it being taken by eminent domain. (A blighted property is one that is officially/legally declared rundown, has environmental problems, or is otherwise in "need of redevelopment.") At its port facility in South Amboy, the company unloads the sand that it mines in the nearby bay and processes it into fine aggregate that goes into concrete, asphalt products, and building products in general, for use in northern New Jersey, the five boroughs of New York, and the eastern shore of the State of Connecticut. In northern New Jersey, significantly more stone resources exist than do sand and gravel. The company, which employed 65 people, had been operating for the past 20 years, and prior to that, another 20 years under another owner. The company's current business is uniquely suited to this type of mining and its land operation, which economically and practicably needs to be nearby on the Bay, would be difficult to duplicate elsewhere (Journal Publications, Inc., 2005³).

Only one active property changed hands in 2005. Clayton Companies of Lakewood in northern Ocean County purchased Loizeaux Building Supply Co., a producer of concrete products in Elizabeth in eastern Union County. Clayton Companies is New Jersey's leading sand and gravel and concrete producer, as well as, a major producer of concrete block in the State.

Government Programs and Activities

The New Jersey Department of Environmental Protection (NJDEP), through its "Green Acres" land preservation program, which began in 1961, obtained from the U.S. Silica Co. several parcels of property that previously had been mined or was surplus land adjacent to such property, in the Townships of Commercial, Downe, and Maurice River in Cumberland County. The program, under the umbrella of the NJDEP, also provides funding to local governments to develop parks. In May, through the Green Acres program, the NJDEP purchased the 91-ha Sahara Sand Mine property in Monroe Township, Gloucester County, for \$1.2 million from Sahara Sand Co., a subsidiary of Silvi Group Companies. The purpose of the purchase was to potentially turn the property into a park for all-

³References that include a section mark (§) are included in the Internet References Cited section.

terrain vehicles (ATV). Controversies arose over this use of the State-purchased property; the Green Acre program has a dual purpose of providing both for protecting the natural environment and for recreational purposes. State officials acknowledged that a public hearing would precede any final decision on the ATV park and that there would also be a review process by the State's Pinelands Commission, as well as possible other approval processes. As of the end of November, the Green Acres Program had acquired more than 238,000 ha of open space, with more than 12,100 ha in 2005 alone (Buena Vista Township Local News Clips, 2005§).

During 2005, the NJDEP, Division of Water Quality, in order to streamline processing time for specific classes of waste water discharge, developed a number of general permits. In issuing general permits by category, permit processing time is greatly

reduced because rather than issuing tailored permits for each individual discharge, a standard set of conditions specific to a type of discharge were developed and issued. The general permits that were developed included ones for storm water discharges from asphalt producers, mining pits and quarries, and concrete producers.

Internet References Cited

Buena Vista Township Local News Clips, 2005 (November), ATV park funding draws ire, accessed July 12, 2007, at URL http://www.buonavistatownship.org/Media_Links_2005/Local%20News%20Clips/nov_2005.htm.
Journal Publications, Inc., 2005 (May 23), A question of power, NJBIZ—All business all New Jersey, accessed July 11, 2007, at URL <http://carlinandwardpc.lawoffice.com/NJBIZ052305.pdf>.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN NEW JERSEY^{1,2}

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2003		2004		2005	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common	W	W	W	122	W	W
Gemstones	NA	1	NA	1	NA	1
Sand and gravel:						
Construction	18,200	105,000	20,100	120,000	21,200	145,000
Industrial	1,570	32,700	2,020	35,800	1,820	34,100
Stone, crushed	24,800	179,000	25,400 ^{r,3}	185,000 ^{r,3}	22,700	160,000
Combined values of greensand marl, peat, stone (crushed miscellaneous [2004]), and values indicated by symbol W	XX	4,190	XX	4,400 ^r	XX	4,110
Total	XX	321,000	XX	345,000 ^r	XX	344,000

^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data. Withheld values included in "Combined value" data. XX Not applicable.

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

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Excludes certain stones; kind and value included with "Combined values" data.

TABLE 2
NEW JERSEY: CRUSHED STONE SOLD OR USED, BY KIND¹

Kind	2004			2005		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone	--	--	--	2	(2)	(2)
Granite	7	8,620	\$61,600	8	8,110	\$57,900
Traprock	15	16,800	124,000	15	14,500	102,000
Miscellaneous stone	(3)	W	W	(3)	(2)	(2)
Total	XX	25,400 ^r	185,000 ^r	XX	22,700	160,000

^rRevised. W Withheld to avoid disclosing company proprietary data. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Withheld to avoid disclosing company proprietary data; included in "Total."

³Sales/distribution yards.

TABLE 3
NEW JERSEY: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2005, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Riprap and jetty stone	W	W
Filter stone	W	W
Other coarse aggregates	81	710
Coarse aggregate, graded:		
Concrete aggregate, coarse	W	W
Bituminous aggregate coarse	W	W
Railroad ballast	W	W
Other graded coarse aggregates	1,100	8,590
Fine aggregate (-¾ inch):		
Stone sand, concrete	W	W
Stone sand, bituminous mix or seal	W	W
Screening, undesignated	884	5,180
Other fine aggregates	359	2,900
Coarse and fine aggregates:		
Graded road base or subbase	W	W
Unpaved road surfacing	W	W
Crusher run or fill or waste	W	W
Other coarse and fine aggregates	3,940	27,100
Other miscellaneous uses and specified uses not listed	414	3,670
Unspecified:²		
Reported	9,730	68,500
Estimated	4,700	33,000
Total	14,500	102,000
Grand total	22,700	160,000

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

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Reported and estimated production without a breakdown by end use.

TABLE 4
NEW JERSEY: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2005, BY USE AND DISTRICT^{1,2}

(Thousand metric tons and thousand dollars)

Use	District 1		District 3	
	Quantity	Value	Quantity	Value
Construction:				
Coarse aggregate (+1½ inch) ³	W	W	--	--
Coarse aggregate, graded ⁴	W	W	--	--
Fine aggregate (-¾ inch) ⁵	W	W	--	--
Coarse and fine aggregate ⁶	W	W	--	--
Other miscellaneous uses	414	3,670	--	--
Unspecified: ⁷				
Reported	9,730	68,500	--	--
Estimated	4,600	33,000	86	603
Total	22,700	160,000	86	603

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

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²No crushed stone produced for District 2.

³Includes filter stone, riprap and jetty stone, and other coarse aggregates.

⁴Includes bituminous aggregate (coarse), concrete aggregate (coarse), railroad ballast, and other graded coarse aggregates.

⁵Includes screening (undesignated), stone sand (bituminous mix or seal), stone sand (concrete), and other fine aggregates.

⁶Includes crusher run or fill or waste, graded road base or subbase, unpaved road surfacing, and other coarse and fine aggregates.

⁷Reported and estimated production without a breakdown by end use.

TABLE 5
NEW JERSEY: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2005,
BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	4,810	\$35,700	\$7.42
Plaster and gunit sands	200	1,700	8.52
Concrete products (blocks, bricks, pipe, decorative, etc.)	100	1,390	13.89
Asphaltic concrete aggregates and other bituminous mixtures	3,820	25,200	6.60
Road base and coverings	569	3,500	6.15
Fill	1,060	4,600	4.34
Snow and ice control	72	464	6.44
Other miscellaneous uses ²	198	2,450	12.39
Unspecified: ³			
Reported	3,480	23,900	6.87
Estimated	6,900	46,400	6.72
Total or average	21,200	145,000	6.85

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Includes filtration.

³Reported and estimated production without a breakdown by end use.

TABLE 6
NEW JERSEY: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2005, BY USE AND DISTRICT¹

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products ²	1,520	14,600	1,620	14,500	1,960	9,690
Asphaltic concrete aggregates and road base materials	W	W	2,510	18,700	W	W
Fill	527	2,510	304	1,380	229	712
Other miscellaneous uses ³	477	4,040	48	375	1,620	8,530
Unspecified: ⁴						
Reported	--	--	2,080	13,900	1,400	10,000
Estimated	900	5,700	1,700	11,500	4,300	29,200
Total	3,380	26,900	8,280	60,300	9,550	58,100

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes plaster and gunite sands.

³Includes filtration, roofing granules, and snow and ice control.

⁴Reported and estimated production without a breakdown by end use.