BEDROCK GEOLOGIC MAP OF NEW JERSEY

DESCRIPTION OF MAP UNITS

Sedimentary Rocks

CENOZOIC

- Holocene: beach and estuarine deposits
- Paleogene and Neogene: sand, silt, clay

MESOZOIC

- Cretaceous: sand, silt, clay
- Jurassic: siltstone, shale, sandstone, conglomerate
- Triassic: siltstone, shale, sandstone, conglomerate

PALEOZOIC

- Devonian: conglomerate, sandstone, shale, limestone
- Silurian: conglomerate, sandstone, shale, limestone
- Ordovician: shale, limestone
- Cambrian: limestone, sandstone

Igneous and Metamorphic Rocks

MESOZOIC

- Jurassic and Triassic: basalt
- Jurassic: diabase

PALEOZOIC

- Ordovician and Cambrian: schist, gneiss

MESOPROTEROZOIC

- marble
- gneiss, granite

DESCRIPTION OF MAP SYMBOLS

- limit of late Wisconsinan glaciation
- limit of Illinoian glaciation
- limit of pre-Illinoian glaciation

Department of Environmental Protection
NEW JERSEY GEOLOGICAL AND WATER SURVEY
2017
Aquifers in New Jersey can be ranked on their ability to yield groundwater to high-capacity wells. These wells include water-supply, irrigation, and industrial-supply wells sited and tested for maximum yield. Each aquifer or confining unit is assigned a rank based on its median yield. More than one ranking value indicates that well-yield data were analyzed for several lithologies within a map unit and well yields may vary considerably due to lithologic and structural influences.

### Bedrock Aquifers

<table>
<thead>
<tr>
<th>Yield Rank</th>
<th>Aquifer Lithology</th>
<th>Well Yield (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>&gt;500</td>
</tr>
<tr>
<td>B-A</td>
<td></td>
<td>&gt;250</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>251 to 500</td>
</tr>
<tr>
<td>C-B</td>
<td></td>
<td>101 to 500</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>101 to 251</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>25 to 100</td>
</tr>
<tr>
<td>E-B</td>
<td></td>
<td>&lt;25</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>&lt;25</td>
</tr>
</tbody>
</table>

### Surficial Aquifers

<table>
<thead>
<tr>
<th>Yield Rank</th>
<th>Aquifer Lithology</th>
<th>Well Yield (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>morainic deposits</td>
<td>251 to 500</td>
</tr>
<tr>
<td>D</td>
<td>morainic deposits</td>
<td>25 to 100</td>
</tr>
<tr>
<td>E</td>
<td>lake-bottom sediment</td>
<td>&lt;25</td>
</tr>
</tbody>
</table>

**Ranking Values:**
- **A** >500
- **B-A** >250
- **B** 251 to 500
- **C-B** 101 to 500
- **C** 101 to 251
- **D** 25 to 100
- **E-B** <25
- **E** <25
BOUGUER GRAVITY ANOMALIES MAP OF NEW JERSEY

DESCRIPTION OF MAP UNITS

Milligals
- 35 to 40
- 30 to 35
- 25 to 30
- 20 to 25
- 15 to 20
- 10 to 15
- 5 to 10
- 0 to 5
- -5 to 0
- -10 to -5
- -15 to -10
- -20 to -15
- -25 to -20
- -30 to -25
- -35 to -30
- -40 to -35
- -45 to -40
- -50 to -45
- -55 to -50
- -60 to -55

Contour interval 1 milligal

Department of Environmental Protection
NEW JERSEY GEOLOGICAL AND WATER SURVEY
2016

Scale 1:1,000,000
ABANDONED MINES OF NEW JERSEY

ABANDONED MINES
- Copper
- Graphite
- Hematite
- Limonite
- Magnetite
- Manganese
- Mica
- Sulfide
- Zinc

PHYSIOGRAPHIC PROVINCES
- Valley and Ridge
- Highlands
- Piedmont
- Coastal Plain

SOURCE: DGS03-2

Department of Environmental Protection
NEW JERSEY GEOLOGICAL AND WATER SURVEY
2016

Scale 1:1,000,000
MAP OF EARTHQUAKES EPICENTERED IN NEW JERSEY

EXPLANATION

DESCRIPTION OF MAP UNITS

Sedimentary Rocks

CENOZOIC
- Holocene: beach and estuarine deposits
- Paleogene and Neogene: sand, silt, clay

MESOZOIC
- Cretaceous: sand, silt, clay
- Jurassic: siltstone, shale, sandstone, conglomerate
- Triassic: siltstone, shale, sandstone, conglomerate

PALEOZOIC
- Devonian: conglomerate, sandstone, shale, limestone
- Silurian: conglomerate, sandstone, shale, limestone
- Ordovician: shale, limestone
- Cambrian: limestone, sandstone

Igneous and Metamorphic Rocks

MESOZOIC
- Jurassic and Triassic: basalt
- Jurassic: diabase

PALEOZOIC
- Ordovician and Cambrian: schist, gneiss

MESOPROTEROZOIC
- marble
- gneiss, granite

MAGNITUDE
- 0.0 - 0.3
- 0.4 - 1.3
- 1.4 - 2.3
- 2.4 - 3.3
- 3.4 - 4.3
- 4.4 - 5.3

Fault line

SOURCE: DGS04-1

Department of Environmental Protection
NEW JERSEY GEOLOGICAL AND WATER SURVEY
2017

scale 1:1,000,000
LANDSLIDES MAP OF NEW JERSEY

TYPE OF LANDSLIDE
- Debris flow
- Rock fall
- Rockslide
- Slump

DESCRIPTION OF MAP UNITS

Sedimentary Rocks

CENOZOIC
- Holocene: beach and estuarine deposits
- Paleogene and Neogene: sand, silt, clay

MESOZOIC
- Cretaceous: sand, silt, clay
- Jurassic: siltstone, shale, sandstone, conglomerate
- Triassic: siltstone, shale, sandstone, conglomerate

PALEOZOIC
- Devonian: conglomerate, sandstone, shale, limestone
- Silurian: conglomerate, sandstone, shale, limestone
- Ordovician: shale, limestone
- Cambrian: limestone, sandstone

Igneous and Metamorphic Rocks

MESOZOIC
- Jurassic and Triassic: basalt
- Jurassic: diabase

PALEOZOIC
- Ordovician and Cambrian: schist, gneiss

MESOPROTEROZOIC
- marble
- gneiss, granite

SOURCE: DGS06-3

Department of Environmental Protection
NEW JERSEY GEOLOGICAL AND WATER SURVEY
2016
QUARRIES, PITS AND BORROW AREAS OF NEW JERSEY

COMMODITY
- Crushed stone
- Fill dirt
- Gravel, clay
- Greensand
- Industrial sand
- Industrial sand, fill dirt
- Sand
- Sand, crushed stone
- Sand, fill dirt
- Sand, gravel
- Sand, gravel, crushed stone
- Sand, gravel, fill dirt
- Sand, gravel, fill dirt, crushed stone
- Sand, gravel, industrial sand
- Sand, gravel, industrial sand, fill dirt

PHYSIOGRAPHIC PROVINCES
- Valley and Ridge
- Highlands
- Piedmont
- Coastal Plain

SOURCE: DGS05-1