Streamflow and Groundwater Conditions in Massachusetts

October 6, 2021

Gardner Bent
U.S. Geological Survey
New England Water Science Center
Average Streamflow Conditions – April-June 2021
Average Streamflow Conditions – July-Sept. 2021
Average Streamflow Conditions – September 2021

Explanation - Percentile classes

<table>
<thead>
<tr>
<th>Low</th>
<th>&lt;10</th>
<th>10-24</th>
<th>25-75</th>
<th>76-90</th>
<th>&gt;90</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Much below normal</td>
<td>Below normal</td>
<td>Normal</td>
<td>Above normal</td>
<td>Much above normal</td>
<td></td>
</tr>
</tbody>
</table>

[Map showing streamflow conditions across a region with various percentile classes indicated by different colors.]
7-Day Avg. – Ipswich River – Northeastern MA

USGS 01102000 IPSWICH RIVER NEAR IPSWICH, MA
(Drainage area: 125 square miles, length of record: 90 - 91 years)
7-Day Avg. – Taunton River – Southeastern MA
7-Day Avg. – Quaboag River – Central MA

USGS 01176000 QUABOAG RIVER AT WEST BRIMFIELD, MA
(Drainage area: 150 square miles, length of record: 108 - 109 years)

7-day average discharge, in cubic feet per second

2017 2018 2019 2020 2021

Explanation - Percentile classes

Flow

<table>
<thead>
<tr>
<th>Percentile classes</th>
<th>Flow</th>
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<tbody>
<tr>
<td>lowest-10th percentile</td>
<td>5</td>
</tr>
<tr>
<td>10-24</td>
<td></td>
</tr>
<tr>
<td>25-75</td>
<td></td>
</tr>
<tr>
<td>76-90</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td></td>
</tr>
<tr>
<td>90th percentile -highest</td>
<td></td>
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</table>

Much below Normal
Below normal
Normal
Above normal
Much above normal
7-Day Avg. – Housatonic River – Western MA

USGS 01197500 HOUSATONIC RIVER NEAR GREAT BARRINGTON, MA
(Drainage area: 282 square miles, length of record: 107 - 108 years)

7-day average discharge, in cubic feet per second

2017 2018 2019 2020 2021

Explanation - Percentile classes

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7-Day Avg.
Herring and Quashnet River – Cape Cod
7-Day Streamflow Conditions
Jan. 1 - Sept. 30, 2021
Avg. Groundwater Conditions – September 2021

Data for Sep 2021
Map generated on 2021-10-05

Individual Well Percentiles
- ≥0 to ≤2
- >2 to ≤10
- >10 to ≤20
- >20 to ≤30
- >30 to ≤70
- >70 to ≤80
- >80 to ≤90
- >90 to ≤98
- >98 to ≤100
- No Measurement
Groundwater Conditions – October 4, 2021

Explanation - Percentile classes (symbol color based on most recent measurement)

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<tr>
<th>Low</th>
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</table>
Period of Record

All data
July 1959 – present

Continuous data
Oct. 1984 - present
Period of Record

All data
Dec. 1964 – present

Continuous data
Aug. 2001 - present
Period of Record

All data
Jan. 1984 – present

Continuous data
May 2012 - present
Period of Record

All data
Aug. 1963 – present

Continuous data
Oct. 1984 - present
Daily GW
Nov. 2020 – Oct. 2021

Period of Record
All data
Nov. 1962 – present
Continuous data
Nov. 2012 - present

Period of Record
All data
Nov. 1962 – present
Continuous data
Dec. 2001 - present

Period of Record
All data
Nov. 1962 – present
Continuous data
May 2012 - present
Period of Record
All data
Nov. 1962 – present

Continuous data
May 2012 - present

Period of Record
All data
Nov. 1962 – present

Continuous data
Dec. 2001 - present

Period of Record
All data
Nov. 1962 – present

Continuous data
May 2012 - present