February Recap & Northeast DEWS Discussion

By: Samantha Borisoff, Climatologist
Northeast Regional Climate Center
February Temperatures

From near normal to more than 8°F above normal
February Temperatures
February Precipitation

From less than 25% of normal to 150% of normal
February Precipitation

Record or near-record dry for most of the month, but...

some much-needed precipitation at month’s end.
February Snowfall

From more than 24” below normal to 6” above normal
Winter Temperatures

From 2°F to more than 8°F above normal
Winter Temperatures
Winter Precipitation

From 75% of normal to 200% of normal
Winter Precipitation
Winter Snowfall

From more than 48” below normal to 12” above normal – note different scale for winter map!
Drought Monitor

U.S. Drought Monitor
Northeast

January 30, 2024
(Released Thursday, Feb. 1, 2024)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

<table>
<thead>
<tr>
<th></th>
<th>Dry</th>
<th>Abnormally Dry</th>
<th>Severe Drought</th>
<th>Extreme Drought</th>
<th>Exceptional Drought</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>95.85</td>
<td>2.85</td>
<td>0.19</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>Last Week</td>
<td>100.00</td>
<td>3.65</td>
<td>0.17</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>3 Months Ago -2022</td>
<td>82.74</td>
<td>10.21</td>
<td>1.75</td>
<td>0.27</td>
<td>0.00</td>
</tr>
<tr>
<td>Start of Calendar Year -2022</td>
<td>67.25</td>
<td>10.30</td>
<td>1.60</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>Start of Water Year -2022</td>
<td>68.48</td>
<td>10.90</td>
<td>1.35</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td>One Year Ago -1921</td>
<td>95.63</td>
<td>2.97</td>
<td>0.21</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/about.aspx

Author:
Brian Fuchs
National Drought Mitigation Center

droughtmonitor.unl.edu

U.S. Drought Monitor
Northeast

February 27, 2024
(Released Thursday, Feb. 29, 2024)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

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<tr>
<th></th>
<th>Dry</th>
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<th>Severe Drought</th>
<th>Extreme Drought</th>
<th>Exceptional Drought</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>97.37</td>
<td>2.72</td>
<td>0.21</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Last Week</td>
<td>100.00</td>
<td>3.65</td>
<td>0.17</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>3 Months Ago -2022</td>
<td>74.36</td>
<td>19.18</td>
<td>4.76</td>
<td>0.71</td>
<td>0.00</td>
</tr>
<tr>
<td>Start of Calendar Year -2022</td>
<td>67.25</td>
<td>10.80</td>
<td>1.65</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>Start of Water Year -2022</td>
<td>68.48</td>
<td>10.90</td>
<td>1.35</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td>One Year Ago -1921</td>
<td>94.21</td>
<td>5.13</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
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Author:
Richard Heim
NCEI / NOAA

droughtmonitor.unl.edu
Precipitation

Percent of Normal Precipitation
January 29 - February 27, 2024

Percent of Normal Precipitation
December 30, 2023 - February 27, 2024

Percent of Normal Precipitation
November 30, 2023 - February 27, 2024

Percent of Normal Precipitation
August 28, 2023 - February 27, 2024
Standardized Precipitation Index
Precipitation

Accumulated Precipitation Departure from Normal

Green/black diamonds represent subsequent/missing values

- Erie Area, PA (ThreadEx): Precip Dprt
- SILVER SPRINGS 3N, NY: Precip Dprt
- Rochester Area, NY (ThreadEx): Precip Dprt
- VINEYARD HAVEN MARTHAS VINEYARD AP, MA: Precip Dprt
- Caribou Area, ME (ThreadEx): Precip Dprt

(Click to hide/show lines)

NRCC
Note different dates for map and graphs!

Graphs courtesy of Maine Geological Survey
Soil Moisture

SPoRT-LIS 0–100 cm Soil Moisture percentile valid 29 Feb 2024

Courtesy of NASA
Streamflow

28-Day Streamflow

<table>
<thead>
<tr>
<th>Explanation - Percentile Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Much below normal</td>
</tr>
<tr>
<td>Below normal</td>
</tr>
<tr>
<td>Normal</td>
</tr>
<tr>
<td>Above normal</td>
</tr>
<tr>
<td>Much above normal</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>

- Low
  - Much below normal: <10%
  - Below normal: 10-24%
  - Normal: 25-75%
  - Above normal: 76-90%
  - Much above normal: >90%

Data provided by [USGS WaterWatch - Streamflow](https://waterdata.usgs.gov); updated 2024-02-28.
Precipitation Forecast

7 Day QPF
Valid: 12Z 02/29/24 - 12Z 03/07/24

Explanation - Forecast precipitation (inches)

Data provided by DOC/NOAA/NWS/NCEP/WPC.
Short-term Outlooks

6-10 Day Precipitation Outlook
2024-03-05 to 2024-03-09

6-10 Day Temperature Outlook
2024-03-05 to 2024-03-09

8-14 Day Precipitation Outlook
2024-03-07 to 2024-03-13

8-14 Day Temperature Outlook
2024-03-07 to 2024-03-13
Monthly & 3-Month Outlooks

Monthly Precipitation Outlook
Mar 2024

Monthly Temperature Outlook
Mar 2024

3-Month Precipitation Outlook
MAM 2024

3-Month Temperature Outlook
MAM 2024

Data provided by NCCN/NOAA/NCEP/PC

Help
Summary

**February-to-date conditions:**
- Above-normal temperatures for the region
- Below-normal precipitation and snowfall for most areas

**Winter-to-date conditions:**
- Warmer than normal for entire region
- Wetter than normal for many areas but below-normal snowfall for most

**Drought:**
- Minor improvements in southeastern Massachusetts as groundwater levels continued to recover
- Dry February - status quo for western New York and northwestern Pennsylvania
- Keeping an eye on dry weather and lack of snow as spring approaches

**Outlooks:**
- Short-term: above-normal precipitation and above-normal temperatures
- Mar: above-normal precipitation for some coastal areas and above-normal temperatures for all
- Spring: above-normal precipitation for southern areas and above-normal temperatures for all
Contact Information

nrcc@cornell.edu

Upcoming Webinars

• Thursday, March 28 at 9:30am EDT
  • Spring Flood Outlook

• Tuesday, April 30 at 9:30am EDT
  • Marine Storms

• Thursday, May 30 at 9:30am EDT
  • National Water Model & Flood Inundation Mapping

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