The State of Data-Center Water Risk

An independent ranking of the major U.S. data-center markets on the three factors that now decide a build — **water**, **power**, and **natural-hazard risk**. Built from authoritative public data and updated automatically.

Data current as of October 27, 2026.

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Key findings

- **The flagship market is not the strongest.** Northern Virginia (Ashburn) — the largest existing data-center cluster — ranks **#15 of 25**, with power availability of 42.0/100 weighing against it.
- **The hottest growth markets have the least water.** The lowest water-headroom markets on the index are Abilene, TX (19.8), Las Vegas, NV (20.0), Salt Lake City, UT (21.6), Los Lunas, NM (24.0), Phoenix, AZ (25.0).
- **Water and power are the same problem.** Most of a data center's water footprint is upstream at the power plants that supply it, so the power-constrained markets are frequently water-constrained too — the risks compound.
- **The strongest markets are quieter and wetter:** Chicago, IL, Mount Pleasant, WI, Columbus, OH lead on water headroom.

National ranking

Suitability is a 0–100 composite (higher is better), weighting power 40%, water 35%, and hazard 25%.

#	Market	Suitability	Grade	Water	Power	Hazard
1	Mount Pleasant, WI	70.6	Strong	84.0	58.0	72.0
2	Quincy, WA	70.5	Strong	70.4	66.0	78.0
3	Omaha, NE	67.7	Strong	75.0	66.0	60.0

#	Market	Suitability	Grade	Water	Power	Hazard
4	Des Moines, IA	64.9	Viable	72.0	58.0	66.0
5	Council Bluffs, IA	64.8	Viable	76.0	58.0	60.0
6	Columbus, OH	63.9	Viable	81.0	42.0	75.0
7	Hillsboro, OR	63.3	Viable	60.9	66.0	62.5
8	Umatilla, OR	62.9	Viable	54.2	66.0	70.0
9	Chicago, IL	61.0	Viable	85.0	42.0	58.0
10	Dallas–Fort Worth, TX	60.0	Viable	44.3	78.0	53.3
11	Austin, TX	57.6	Viable	36.1	78.0	55.0
12	San Antonio, TX	56.6	Viable	32.5	78.0	56.0
13	Nashville, TN	56.3	Viable	47.0	64.0	57.0
14	Atlanta, GA	56.2	Viable	45.9	62.0	61.5
15	Northern Virginia (Ashburn)	55.3	Viable	58.2	42.0	72.5
16	Richland Parish, LA	53.7	Viable	51.5	58.0	50.0
17	Abilene, TX	51.9	Viable	19.8	78.0	55.0
18	Denver, CO	51.2	Viable	31.9	60.0	64.0
19	Memphis, TN	51.2	Viable	36.0	64.0	52.0
20	Los Lunas, NM	48.9	Marginal	24.0	60.0	66.0
21	Reno, NV	47.4	Marginal	26.4	60.0	56.5
22	Phoenix, AZ	47.1	Marginal	25.0	60.0	57.5
23	Salt Lake City, UT	45.8	Marginal	21.6	60.0	57.0
24	Las Vegas, NV	45.5	Marginal	20.0	60.0	58.0
25	Santa Clara, CA	42.5	Marginal	38.0	48.0	40.0

The water story

Isolating water headroom — a market's capacity to supply a large new cooling load without straining its basin — sharpens the concern. The markets absorbing the most growth are, in several cases, the ones with the least room.

Most water headroom	Score	Least water headroom	Score
Chicago, IL	85.0	Abilene, TX	19.8
Mount Pleasant, WI	84.0	Las Vegas, NV	20.0
Columbus, OH	81.0	Salt Lake City, UT	21.6
Council Bluffs, IA	76.0	Los Lunas, NM	24.0
Omaha, NE	75.0	Phoenix, AZ	25.0

Methodology

Nemo's suitability score is a transparent composite of three 0–100 favorability legs. **Power availability** reflects ISO/RTO interconnection-queue backlog and time-to-energize (LBNL & ISO annual data). **Water headroom** is a structural basin-capacity baseline discounted by the current U.S. Drought Monitor reading, refreshed live. **Hazard safety** is Nemo's physical-hazard model; FEMA's National Risk Index rating is shown as authoritative context in the detailed reports but is not used to compute the hazard leg (its composite is expected-annual-loss weighted and scales with population, unsuited to siting a single asset). Scores are relative rankings across candidate markets for shortlisting; confirm with site-specific utility and water-rights diligence. This product uses FEMA's National Risk Index but is not endorsed by FEMA.

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Built from public USGS, U.S. Drought Monitor, and U.S. Census data. Scores are indicative and provided for risk-planning purposes. © Nemo Water Risk.