



North American Weather Consultants, Inc.

Applied Meteorology, Meteorological Research, Weather Modification

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January 2, 2025

Chance Baxter
Bear River Water Conservancy District
102 West Forest Street
Brigham City, UT 84302

Dear Mr. Baxter:

This report covers seeding activities conducted for the Northern Utah Cloud Seeding Program during the month of December 2024.

Precipitation and snowpack started below normal at the beginning of December but trended up to near normal by December 31st as several wet systems moved across northern Utah around mid-month and again during the last week of the month. There were eight seeded storm events in December 2024, which are summarized in Table 1. So far, there have been 1033.5 site hours of seeding conducted so far this season from manually operated generators with remotely operated generators contributing another 495.25 site hours.

Table 1
Summary of Operations in Northern Utah Cloud Seeding Program, December 2024

Storm Number	Date	No. of Seeding Sites	No. of Manual Hours	No. of Remote Hours
8	December 13	8	25	23.25
9	December 14-15	18	165.75	105.75
10	December 16-17	11	42.75	26
11	December 23	1	0	0.25
12	December 25	2	0	9.5
13	December 26	13	70.75	22.5
14	December 27	9	24.75	19.5
15	December 29-30	17	172.75	59.25

December Total	---	---	501.75	266
Season to Date	---	---	1033.5	495.25

Table 2 contains current snow water content and water year precipitation information for stations in the Bear River Basin as of January 2, 2025. The Bear River Basin, as a whole, has about 109% of the median snow water content, and 99% of the mean precipitation total accumulated since October 1. Figure 2 is a graph of the SWE values for the Garden City Summit site so far this season. Figure 3 is a map of basin snow water equivalent (SWE) for the state of Utah as of January 1, 2025.

**Table 2
Snow Water Content and Water Year Precipitation as of January 2, 2025**

Measurement Site	Elevation (ft)	Snow Water Equivalent		Water Year Precipitation	
		Amount (in)	% of Median	Amount (in)	% of Median
Trial Lake	9992	8.3	99%	10.0	101
Hayden Fork	9212	5.7	102%	10.4	113%
Lily Lake	9156	5.4	108%	7.8	108%
Monte Cristo	8960	9.7	99%	10.1	89%
Tony Grove Lake	8474	14.6	115%	14.5	97%
Franklin Basin	8170	9.7	108%	13.0	100%
Bug Lake	7950	7.3	112%	7.9	98%
Temple Fork	7406	7.0	103%	7.0	84%
Little Bear	6544	5.3	120%	8.2	91%
Bear River Basin	---	---	109%	---	99%

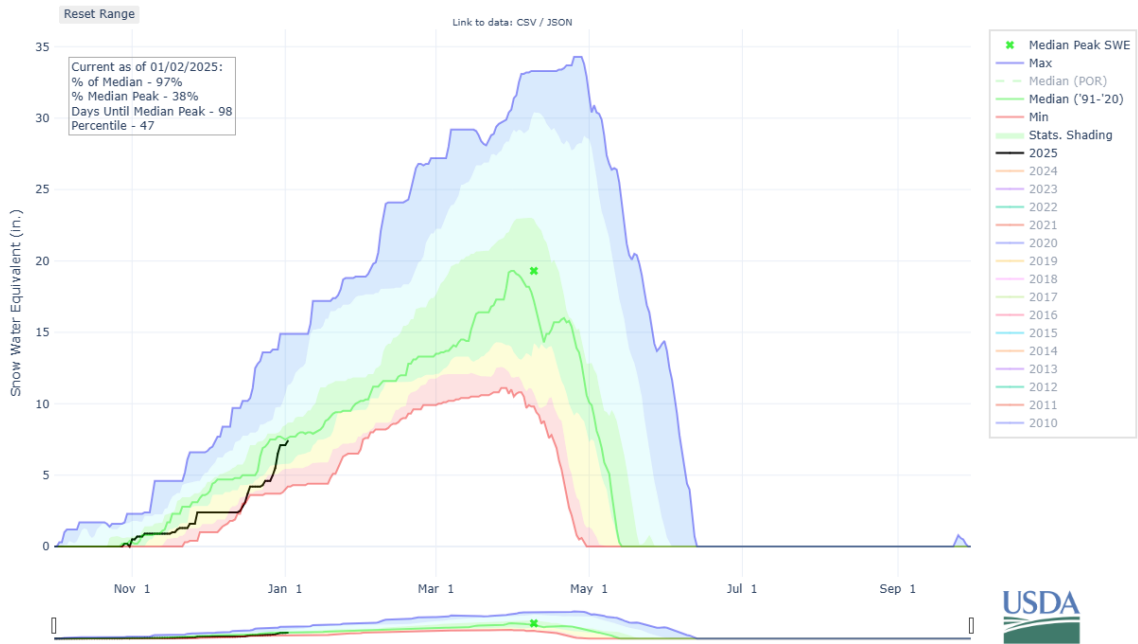


Figure 2. Time series of the Garden City Summit SNOTEL water year precipitation to date (black line) in comparison to climatological maxima (purple), minima (red) and median values (green line). Data are current as of January 2, 2025.

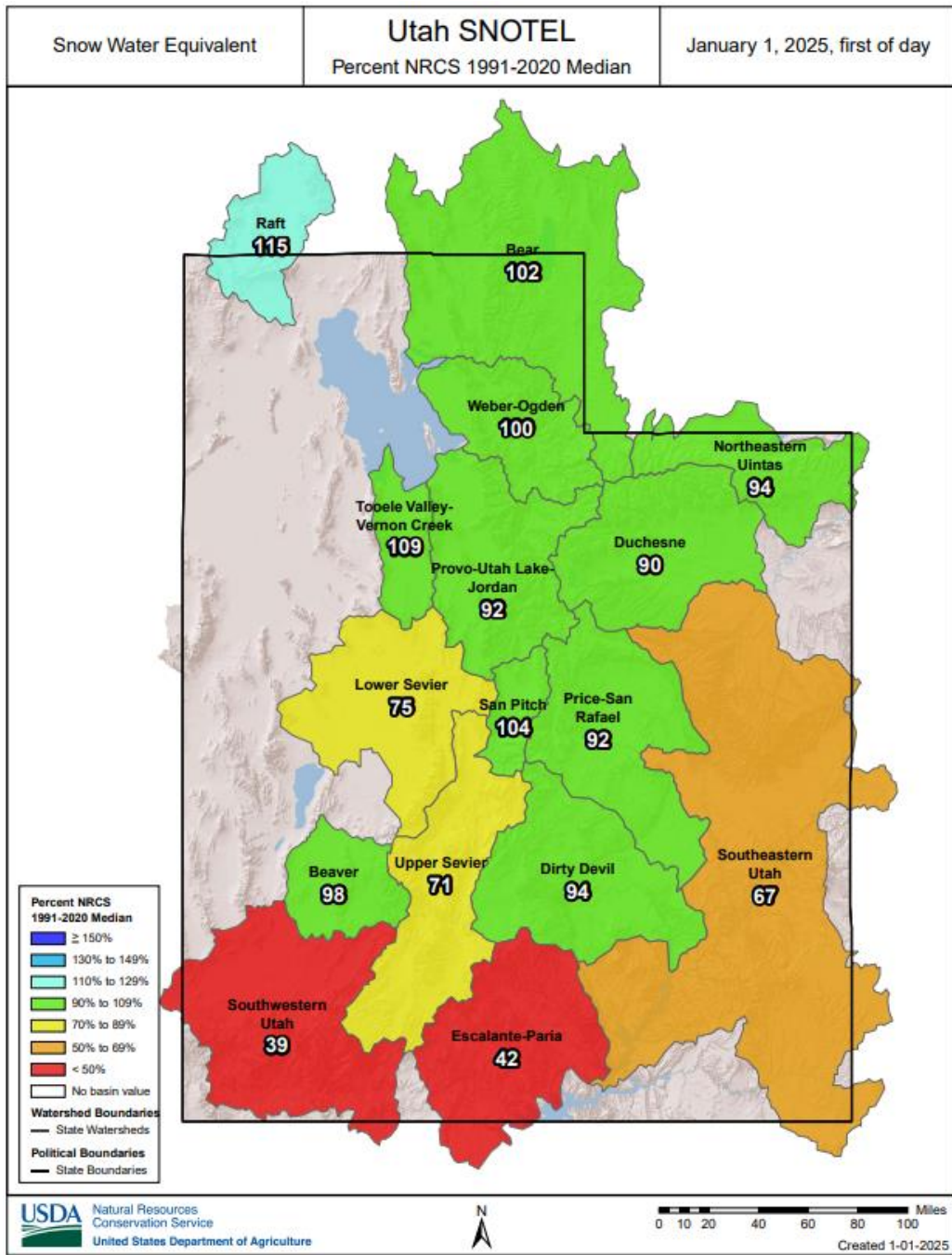


Figure 3. Snow water equivalent (as a percentage of median values) across Utah basins as of January 1, 2025

The Northern Utah Seeding Program is scheduled to continue through April 30, 2025, as specified in the contract. Please contact us if you have any questions or comments.

Sincerely,

Cole Osborne, CCM
Meteorologist, North American Weather Consultants

cc: Nathan Daug, Cache County Water District
Jonathan Jennings, Division of Water Resources