



PRAIRIE RESEARCH INSTITUTE

Illinois State Water Survey
2204 Griffith Drive
Champaign, IL 61820

OPERATION OF THE IMPERIAL VALLEY WATER AUTHORITY (IVWA) PRECIPITATION NETWORK

Monthly Progress Report for January 2024
February 20, 2024

Erin Bauer, Emily Winfield, Mike Krasowski, and Kevin Rennels
Phone: (217) 300-3471; (866) 292-7305 (toll-free); (217) 244-3166; (217) 333-8466
E-mail: ebauer@illinois.edu

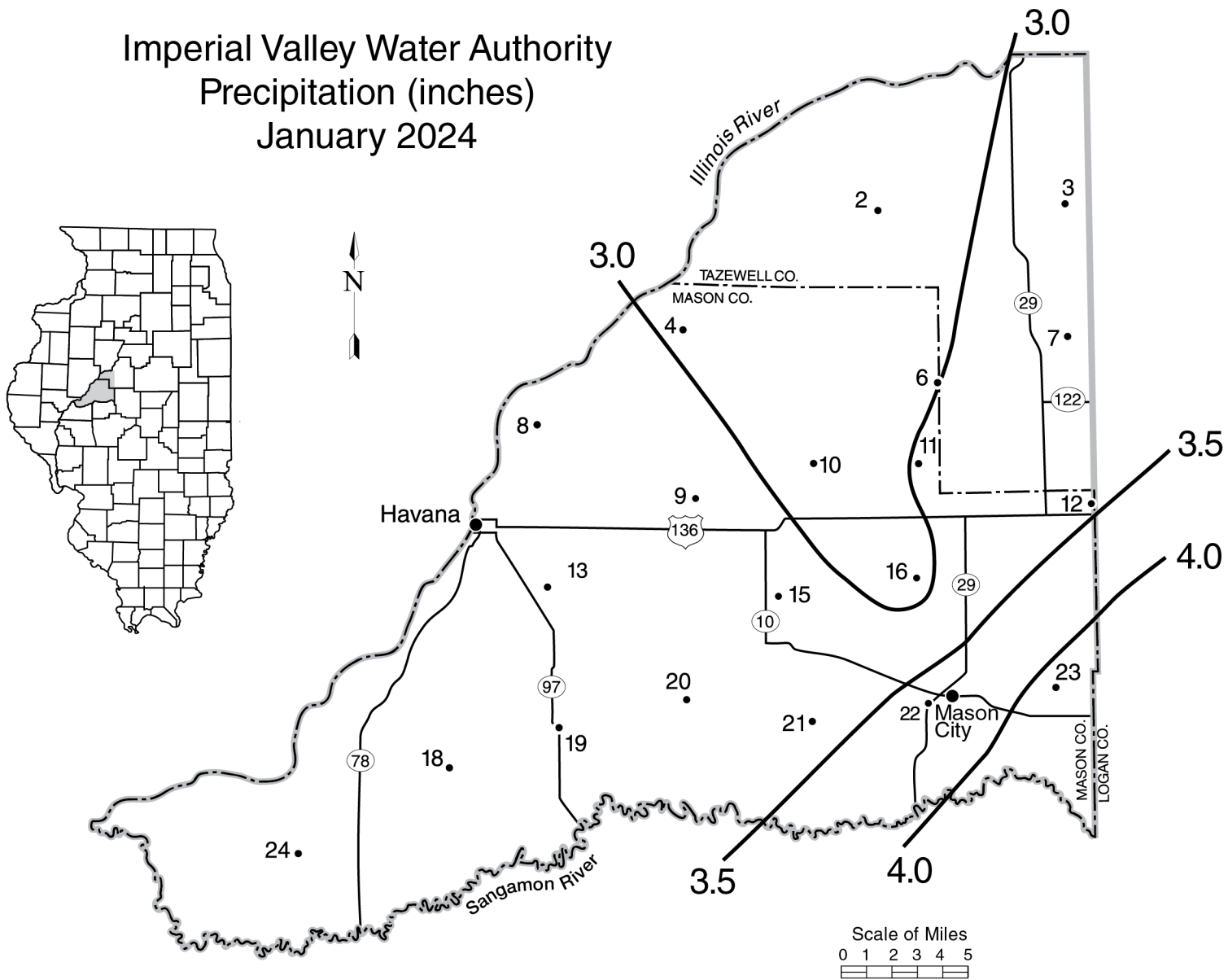
Raingage Network Operations

On February 6, Emily Winfield downloaded the January precipitation data. The collections were weighed. Data are missing due to low batteries at Sites #6. The logger battery was replaced on January 18. Hourly data were estimated for the month. Precipitation data for gages #9 and #12 are downloaded by modem every hour to an Illinois State Water Survey server.

Data Analysis

The average network precipitation for January 2024 was 3.21 inches, which is slightly above the previous 31-year network average. Monthly gage totals varied 1.28 inches across the network, from 2.78 inches at site #10, southeast of Forest City, to 4.06 inches at site #23, east of Mason City. The 30-year (1991–2020) average precipitation amounts for the month of January at Havana and Mason City are 2.20 and 2.34 inches, respectively. The January 2024 network average of 3.21 inches is 173 percent of the 31-year (1993–2023) IVWA January network average of 1.86 inches.

Imperial Valley Water Authority Precipitation (inches) January 2024



January 2024 Daily and Monthly Precipitation Amounts (inches), Imperial Valley Network

DAY	G 2	G 3	G 4	G 6	G 7	G 8	G 9	G 10	G 11	G 12	G 13	G 15	G 16	G 18	G 19	G 20	G 21	G 22	G 23	G 24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	< 0.01	< 0.01	< 0.01	0.01	0.03	-	< 0.01	< 0.01	-	< 0.01	-	0.01	0.02	0.02	0.01	< 0.01	-	0.01	0.03
6	0.08	0.09	0.03	0.04	0.07	0.08	0.10	0.03	0.03	0.02	0.02	0.04	0.03	0.05	0.03	0.03	0.01	0.06	0.06	0.05
7	0.03	0.01	0.02	0.02	0.02	0.04	0.03	0.01	0.02	-	0.02	0.03	0.02	0.02	0.05	0.02	-	0.04	0.03	0.02
8	0.26	0.40	0.20	0.30	0.34	0.25	0.29	0.24	0.33	0.24	0.30	0.37	0.22	0.36	0.31	0.38	0.15	0.33	0.26	0.38
9	0.69	0.68	0.84	0.68	0.62	0.87	0.81	0.75	0.66	0.66	0.74	0.69	0.62	0.68	0.71	0.60	0.59	0.68	0.70	0.63
10	0.01	0.02	0.02	0.01	-	0.01	0.02	-	0.01	0.04	0.01	-	-	< 0.01	-	0.01	0.02	-	-	-
11	-	0.01	-	0.01	-	0.01	-	-	0.01	-	-	-	-	-	-	-	0.01	-	-	< 0.01
12	0.42	0.45	0.53	0.44	0.55	0.50	0.46	0.33	0.45	0.65	0.57	0.41	0.37	0.49	0.50	0.42	0.44	0.52	0.70	0.42
13	0.01	-	0.01	-	-	-	0.01	-	-	0.01	-	-	-	-	0.01	-	0.02	0.01	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	< 0.01	< 0.01	-	-	-	0.01	-	-	-	0.01	-	-	-	0.01	-	< 0.01	-	-	0.01	< 0.01
16	< 0.01	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	< 0.01	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-
18	0.05	-	0.02	< 0.01	-	0.01	0.02	-	< 0.01	-	< 0.01	-	-	-	0.02	< 0.01	0.02	0.01	0.03	0.02
19	0.01	0.01	0.01	< 0.01	-	< 0.01	-	0.02	-	0.02	-	-	-	0.01	0.05	-	-	-	0.06	< 0.01
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	0.01	0.01	-	-	< 0.01	-	-	-	-	-	0.01	-	-	< 0.01	-	-	-	-	-
22	0.19	0.22	0.11	0.19	0.24	0.18	0.22	0.15	0.19	0.13	0.12	0.16	0.15	0.16	0.14	0.15	0.20	0.26	0.20	0.18
23	0.34	0.36	0.36	0.44	0.44	0.44	0.41	0.42	0.44	0.59	0.43	0.51	0.36	0.45	0.50	0.44	0.45	0.56	0.52	0.45
24	0.26	0.24	0.23	0.26	0.27	0.23	0.24	0.24	0.29	0.25	0.25	0.24	0.25	0.27	0.26	0.26	0.29	0.33	0.36	0.26
25	0.55	0.51	0.57	0.55	0.53	0.58	0.62	0.58	0.54	0.63	0.62	0.71	0.60	0.78	0.75	0.81	0.88	0.68	0.81	0.76
26	0.01	0.01	-	0.01	-	0.01	0.01	< 0.01	0.01	0.01	0.01	-	0.02	0.01	0.01	0.01	-	0.01	0.02	0.01
27	0.01	0.04	0.01	0.03	0.05	0.01	0.02	0.01	0.04	0.07	0.01	0.03	0.10	0.01	0.02	0.05	0.05	0.09	0.15	0.01
28	-	< 0.01	-	0.02	0.03	-	0.01	0.01	0.02	0.09	0.01	0.01	0.05	0.01	0.03	0.01	0.02	0.10	0.09	< 0.01
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-
30	0.01	0.02	-	< 0.01	0.01	-	0.01	-	-	0.01	-	-	0.02	0.01	< 0.01	-	-	0.04	0.04	0.03
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.92	3.07	2.95	2.99	3.16	3.26	3.28	2.78	3.03	3.43	3.10	3.22	2.83	3.34	3.40	3.23	3.14	3.74	4.06	3.25

Imperial Valley Network Average = 3.21 inches

The January 2024 network average is 173 percent of the 31-year (1993–2023) IVWA January network average of 1.86 inches.