



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 April 2023
May 26, 2023**

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Raingage Network Operations

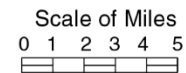
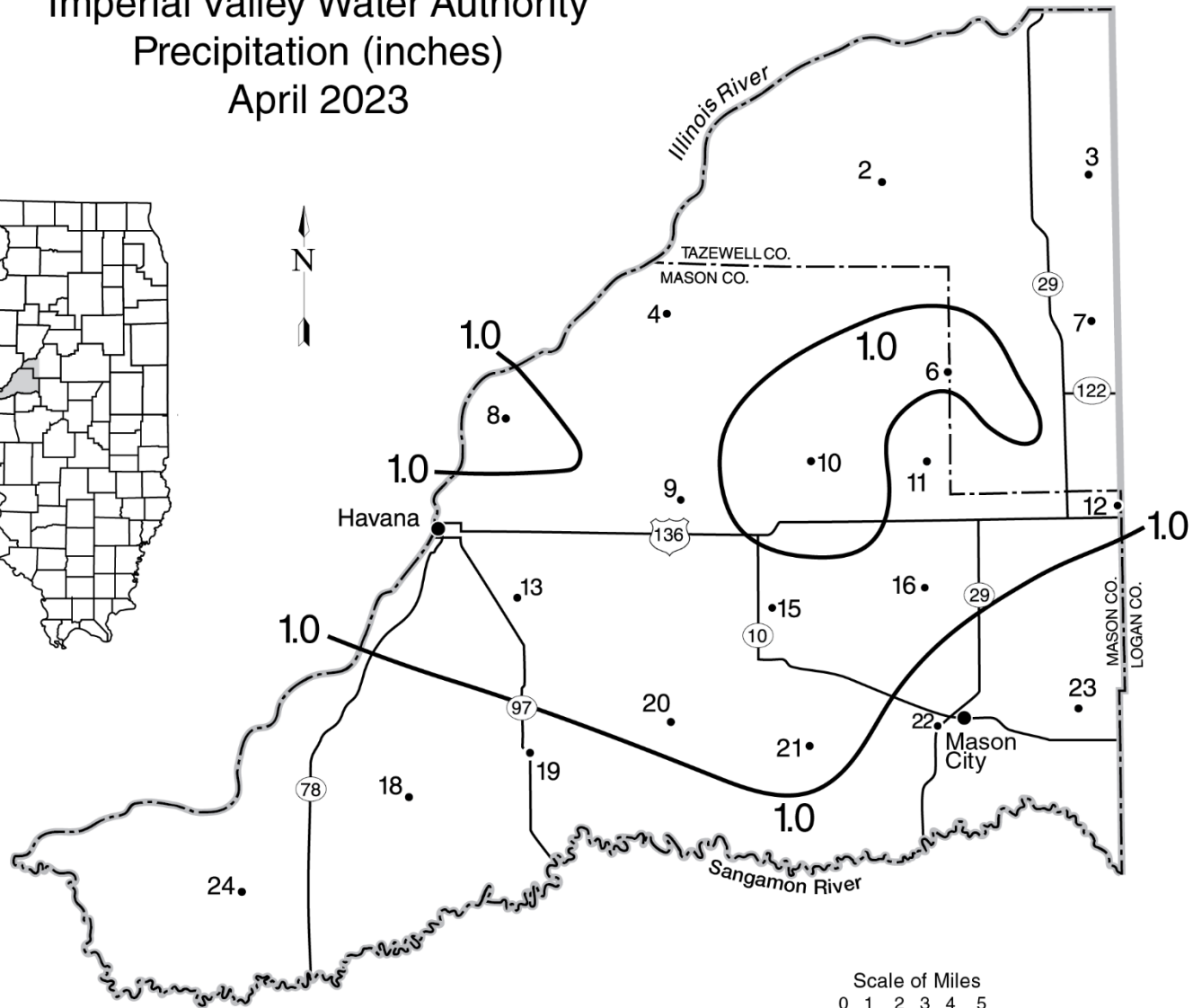
On May 2 and May 3, Emily Winfield and Erin Bauer downloaded the April precipitation data. The collections were weighed, and the buckets were emptied, cleaned, and tared. Precipitation data for gages #9 and #12 are downloaded by modem every hour to an Illinois State Water Survey server. Calibration was performed on each of the gages on May 2 or May 3 with the following correlation coefficients:

Gage	Correlation Coefficient	Gage	Correlation Coefficient
2	0.99999	13	0.99998
3	0.99999	15	1.00000
4	1.00000	16	0.99999
6	1.00000	18	1.00000
7	1.00000	19	1.00000
8	1.00000	20	0.99999
9	0.99997	21	0.99996
10	1.00000	22	0.99999
11	0.99999	23	0.99999
12	0.99999		

Data Analysis

The average network precipitation for April 2023 was 0.97 inches, which is well below the previous 30-year network average. Monthly gage totals varied 0.89 inches across the network, from 0.56 inches at site #11, west-northwest of San Jose, to 1.45 inches at site #23, east of Mason City. The 30-year (1991–2020) average precipitation amounts for the month of April at Havana and Mason City are 4.22 and 3.73 inches, respectively. The April 2023 network average of 0.97 inches is 27 percent of the 30-year (1993–2022) IVWA April network average of 3.55 inches. This was the driest April recorded since data collection began in 1993.

Imperial Valley Water Authority Precipitation (inches) April 2023



April 2023 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	0.01	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	0.01	-	-	-	-	-	-	-	-	0.01	-	-	0.01	-	-	0.01	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	0.03	0.01	0.01	0.02	0.01	0.02	-	0.02	0.01	0.02	-	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01
5	0.09	0.10	0.05	0.14	0.09	0.21	0.09	0.07	0.03	0.11	0.05	0.11	0.09	0.12	0.09	0.07	0.06	0.19	0.18	0.27
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	0.16	0.10	0.22	0.25	0.24	0.17	0.21	0.21	0.15	0.28	0.05	0.18	0.16	0.22	0.23	0.26	0.18	0.42	0.67	0.27
16	0.37	0.31	0.28	0.32	0.14	0.45	0.45	0.31	0.21	0.28	0.41	0.24	0.23	0.65	0.41	0.35	0.29	0.23	0.27	0.48
17	0.01	0.06	-	0.01	0.06	0.02	0.02	0.01	0.01	0.02	0.01	-	0.02	-	-	-	0.01	0.01	0.01	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01
20	0.02	0.05	0.03	0.16	0.07	0.02	0.01	0.42	0.12	0.02	0.02	0.02	-	0.01	0.01	-	0.01	0.04	0.01	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	0.01	0.02	-	-	0.01	-	0.01	-	0.02	-	-	0.01	0.02	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	0.01	-	0.01	-	-	0.01	-	-	-	0.01	-	0.02	0.01	-
25	0.07	0.06	0.01	0.02	0.04	0.01	-	0.01	0.01	0.01	0.01	-	0.01	0.02	-	0.01	-	0.01	0.01	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	0.04	0.04	0.07	0.11	0.17	0.17	0.01	0.17	0.01	0.10	0.21	0.27	0.26	0.23	0.30	0.18	0.13	0.32	0.26	0.28
30	0.03	0.04	0.02	0.05	0.01	0.01	0.07	0.02	0.01	0.06	0.02	0.02	0.04	0.02	0.03	0.02	0.06	0.04	0.02	-
Monthly	0.84	0.80	0.68	1.09	0.83	1.09	0.88	1.23	0.56	0.91	0.77	0.86	0.84	1.28	1.09	0.92	0.74	1.30	1.45	1.31

Network Average = 0.97 Imperial Valley Network

The April 2023 network average is 27% of the 30-year (1993–2022) IVWA April network average of 3.55 inches. This was the driest April recorded since data collection began in 1993.