



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 July 2021
August 18, 2021

Erin Bauer, Daniel Abrams, Steve Wilson, and Kevin Rennels
Phone: (217) 300-3471; (866) 292-7305 (toll-free); (217) 333-8466; (217) 333-0956
E-mail: ebauer@illinois.edu

Raingage Network Operations

On August 2, Erin downloaded the data, weighed the precipitation collections, and emptied, cleaned, and tared the buckets for all gages.

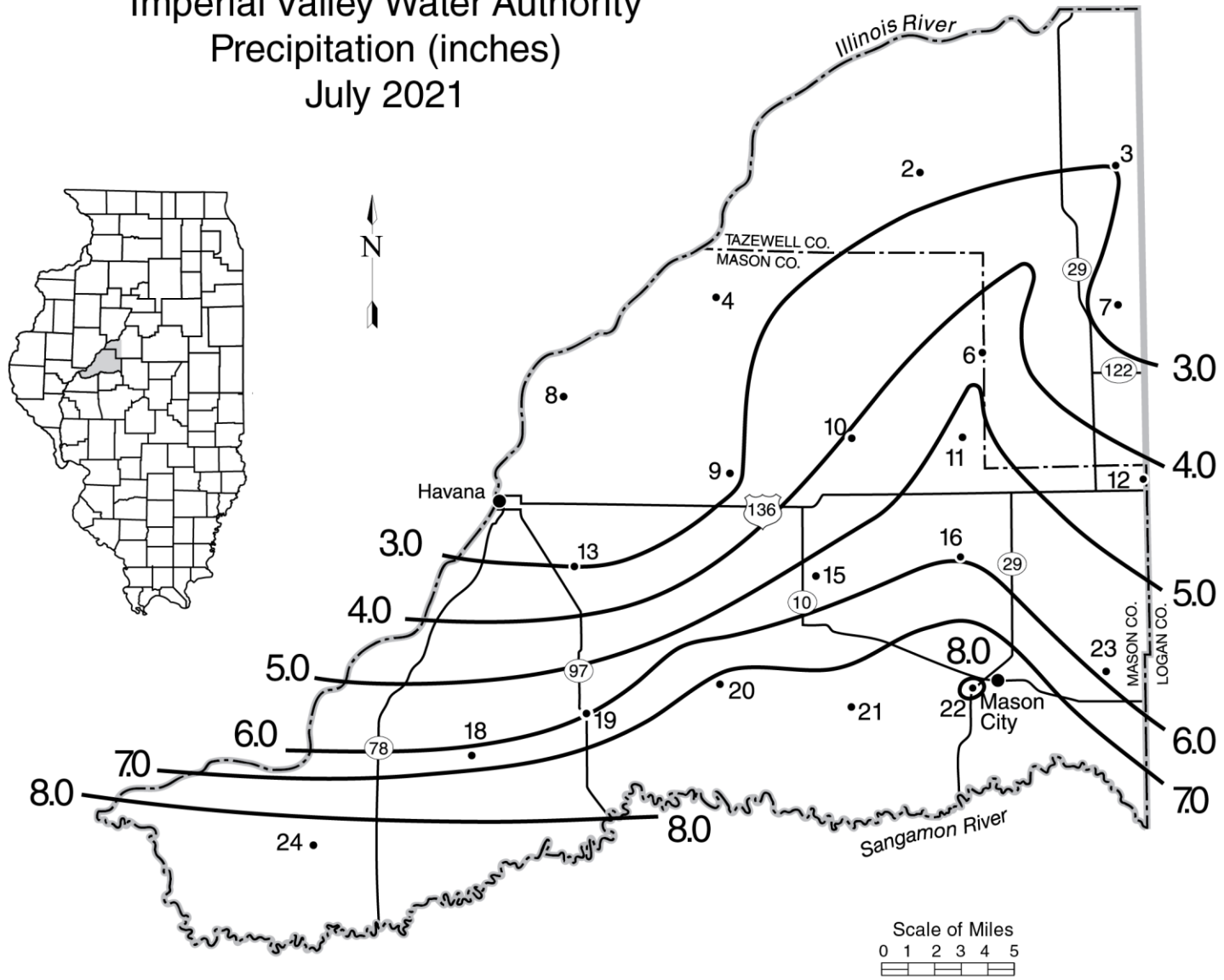
Precipitation data for gages #9 and #12 are downloaded by modem every hour to an Illinois State Water Survey server.

Data Analysis

The average network precipitation for July 2021 was 4.69 inches, which is above the previous 28-year network average. Monthly gage totals varied 5.96 inches across the network, from 2.49 inches at site #7, east of Green Valley, to 8.45 inches at site #24, southeast of Snicarte. The National Centers for Environmental Information (NCEI) issued the 30-year (1991-2020) average precipitation amounts in July 2021. The 30-year (1991-2020) average precipitation amounts for the month of July at Havana and Mason City are 4.18 and 4.60 inches, respectively. The July 2021 network average of 4.70 inches is 124 percent of the 28-year (1993–2020) IVWA July network average of 3.79 inches. This was the ninth wettest July in the past 29 years.

Storm totals between stations varied greatly due to isolated storms that affected only a few of the stations. During some storms, a few stations received more than 2 inches, while most received less than half an inch.

Imperial Valley Water Authority Precipitation (inches) July 2021



July 2021 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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
7	----	----	----	----	----	----	----	----	----	0.11	----	----	0.05	0.01	0.01	----	----	0.72	0.63	----
8	0.03	----	----	0.01	----	----	----	0.01	0.06	----	0.02	----	0.01	0.01	0.01	----	0.02	0.01	----	----
9	0.06	0.11	0.08	0.14	0.10	1.03	0.32	0.07	0.11	0.22	0.34	0.48	0.13	0.92	0.37	1.33	0.91	0.38	0.10	0.59
10	1.00	0.99	0.88	1.62	0.54	0.46	1.44	1.54	1.87	0.47	0.92	0.81	0.54	0.65	0.85	0.75	0.74	1.02	1.35	0.46
11	----	0.05	----	0.01	0.02	0.01	0.12	0.11	0.08	0.14	0.43	0.26	0.19	0.68	0.53	0.78	0.50	1.53	0.47	1.10
12	0.63	0.32	0.49	1.61	0.76	0.38	0.31	1.40	1.63	0.50	0.37	0.57	1.96	0.21	0.23	0.54	2.65	1.71	0.81	0.25
13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
15	0.16	0.12	0.11	0.19	0.11	0.18	0.27	0.27	0.30	0.53	0.37	0.77	1.21	1.74	2.17	2.00	1.78	1.48	1.57	1.46
16	0.01	0.10	0.01	0.06	0.04	0.01	0.28	0.45	0.42	1.96	0.38	2.32	1.65	1.99	1.49	1.63	0.85	1.06	0.74	3.58
17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
22	----	----	----	----	----	----	----	----	----	0.30	----	----	----	----	----	----	0.02	----	----	----
23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
24	0.51	0.78	0.85	0.46	0.62	0.55	0.01	0.29	0.35	----	----	0.06	0.02	0.23	----	----	----	0.02	0.01	0.58
25	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
27	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
28	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
29	0.12	0.02	0.15	0.16	0.02	0.09	0.01	0.06	0.27	0.01	0.01	0.01	0.04	0.02	0.01	----	----	0.01	0.02	0.01
30	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
31	0.18	0.49	0.08	0.18	0.28	0.11	0.09	0.05	0.07	----	0.08	0.15	0.12	0.22	0.19	0.13	0.15	0.14	0.13	0.42
Monthly	2.70	2.98	2.65	4.44	2.49	2.82	2.85	4.25	5.16	4.24	2.92	5.43	5.92	6.68	5.86	7.16	7.62	8.08	5.83	8.45
Network Average =	4.69	Imperial Valley Network																		