



## **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 February 2023  
April 27, 2023

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

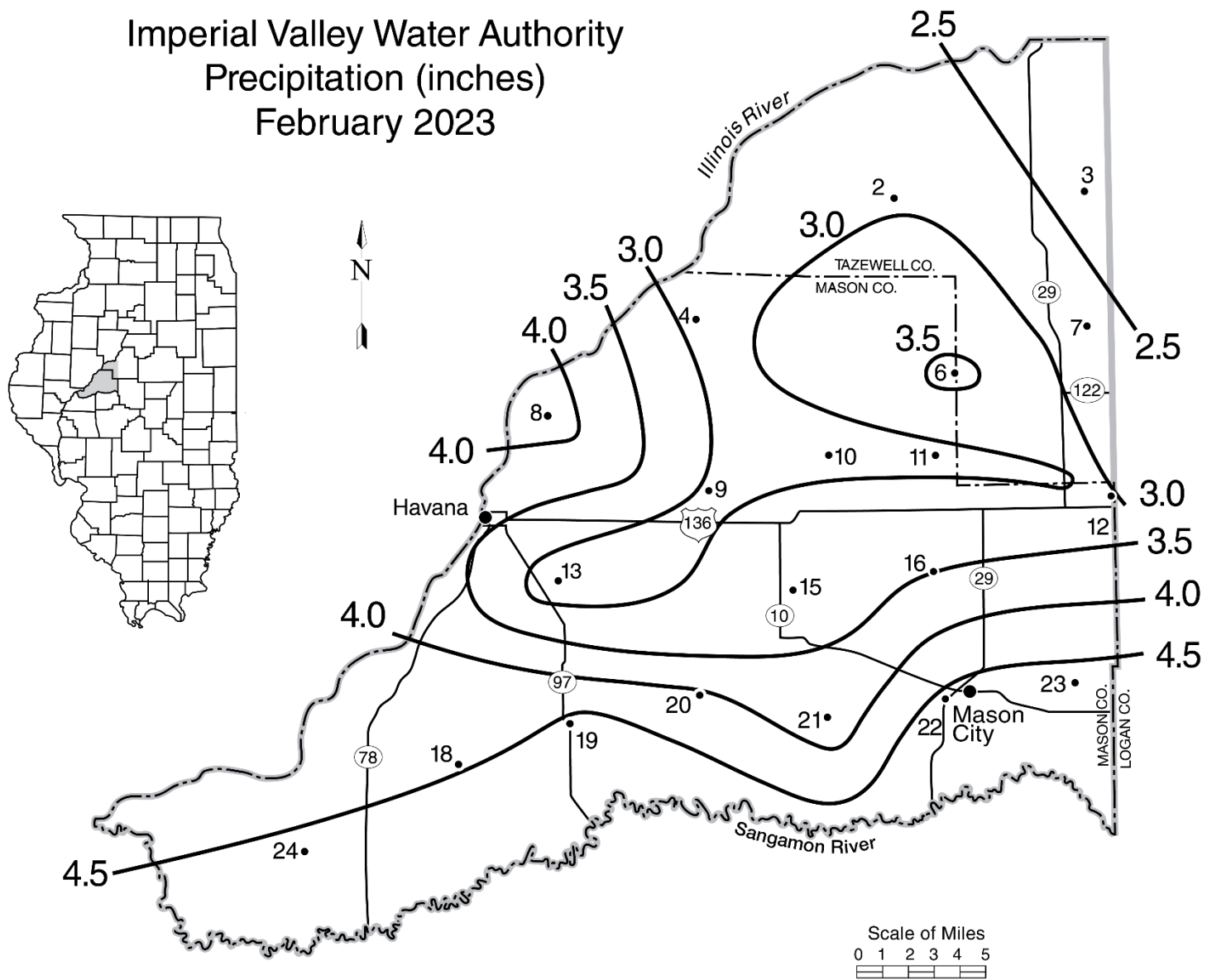
### Raingage Network Operations

On April 6, Emily Winfield downloaded the February and March 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.

### Data Analysis

The average network precipitation for February 2023 was 3.53 inches, which is well above (double) the previous 30-year network average. Monthly gage totals varied 2.34 inches across the network, from 2.35 inches at site #3, southeast of South Pekin, to 4.81 inches at site #24, southeast of Snicarte. Almost two-thirds of the monthly total precipitation occurred on February 22<sup>nd</sup>. The 30-year (1991–2020) average precipitation amounts for the month of February at Havana and Mason City are 2.18 and 1.96 inches, respectively. The February 2023 network average of 3.53 inches is 206 percent of the 30-year (1993–2022) IVWA February network average of 1.72 inches. This was the second wettest February since 1993, behind 1997, when the network monthly average was 3.86 inches.

# Imperial Valley Water Authority Precipitation (inches) February 2023



**February 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	0.02	-	0.01	-	-	0.00	0.03	-	-	-	-	-	0.01	-	-	0.01	0.02	0.01	0.02	0.02
9	0.66	0.47	0.65	0.72	0.51	0.65	0.62	0.57	0.59	0.50	0.55	0.56	0.57	0.76	0.64	0.60	0.38	0.54	0.65	0.73
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	0.15	0.12	0.12	0.17	0.05	0.20	-	0.08	0.02	-	0.01	0.05	0.03	0.11	0.04	0.08	0.01	0.05	0.04	0.15
15	0.01	0.00	0.01	0.03	0.03	0.01	0.01	0.05	0.01	0.02	-	0.01	0.02	-	0.04	-	-	0.00	-	-
16	0.17	0.04	0.11	0.09	0.08	0.12	0.12	0.05	0.05	0.02	0.02	0.05	0.05	0.06	0.08	0.11	0.05	0.04	0.14	0.07
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1.34	1.25	1.43	1.97	1.56	1.98	1.46	1.80	1.82	2.13	1.79	2.33	2.47	3.11	3.12	2.92	2.74	3.35	3.44	3.35
23	0.01	0.06	0.02	0.03	0.02	0.02	0.01	0.02	0.03	0.06	0.03	0.02	0.00	0.01	0.03	0.01	0.08	0.04	0.03	-
24	0.02	-	-	-	-	0.01	-	0.01	-	-	-	-	-	-	0.00	-	-	-	-	-
25	-	-	-	-	-	0.01	-	-	-	-	-	-	-	0.00	0.01	-	-	-	-	0.02
26	-	-	-	0.00	0.03	0.85	-	0.02	-	-	0.02	-	-	0.01	0.01	0.01	0.08	0.01	0.01	-
27	0.60	0.40	0.51	0.55	0.40	0.45	0.67	0.34	0.36	0.31	0.28	0.26	0.34	0.39	0.67	0.32	0.31	0.40	0.37	0.48
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Monthly</b>	<b>2.96</b>	<b>2.35</b>	<b>2.84</b>	<b>3.56</b>	<b>2.67</b>	<b>4.28</b>	<b>2.92</b>	<b>2.92</b>	<b>2.88</b>	<b>3.04</b>	<b>2.70</b>	<b>3.29</b>	<b>3.48</b>	<b>4.46</b>	<b>4.64</b>	<b>4.05</b>	<b>3.67</b>	<b>4.44</b>	<b>4.69</b>	<b>4.81</b>

**Network Average = 3.53 Imperial Valley Network**

The February 2023 network average is 206% of the 30-year (1993-2022) IVWA February network average of 1.72 inches; the second wettest February since 1997. Approximately two-thirds of the monthly total precipitation occurred on February 22<sup>nd</sup>.