



## **PRAIRIE RESEARCH INSTITUTE**

Illinois State Water Survey  
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# OPERATION OF THE IMPERIAL VALLEY WATER AUTHORITY (IVWA) PRECIPITATION NETWORK

## Monthly Progress Report for May 2020 June 22, 2020

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### Raingage Network Operations

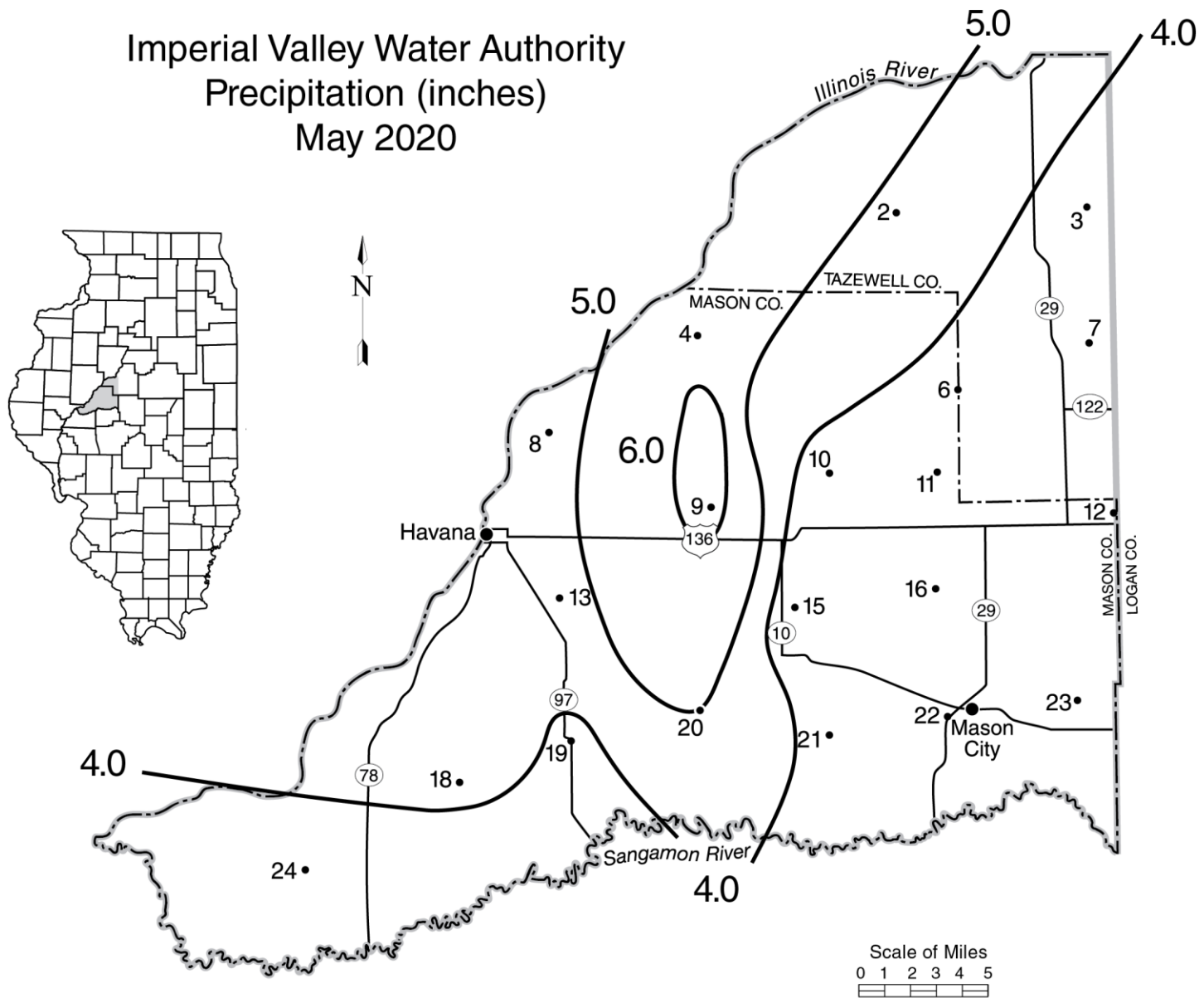
On June 4, Erin visited and downloaded the precipitation data of 17 of the 19 raingages. All gages operated properly. Collections were weighed and emptied at all sites. A new tare weight was recorded for each bucket. Calibrations were performed at sites #8 and #18 with a correlation coefficient of 1.00000 for both gages. Precipitation data for gages #9 and #12 are downloaded by modem every hour.

On June 10, gage #8 was moved south-southwest about 0.55 miles to a better location away from tall trees. This gage was calibrated at the new location with a calibration coefficient of 1.00000.

### Data Analysis

The average network precipitation for May 2020 was 4.09 inches, which is slightly below the previous 27-year network average. Monthly gage totals varied 2.99 inches across the network, from 3.27 inches at site #10, southeast of Forest City, to 6.27 inches at site #9, southeast of Topeka. The 1981–2010 30-year average precipitation amounts for May at Havana and Mason City are 4.79 and 4.07 inches, respectively. The May 2020 network average of 4.09 inches is 96 percent of the 27-year (1993–2019) IVWA May network average of 4.27 inches.

# Imperial Valley Water Authority Precipitation (inches) May 2020



May 2020 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	----	----	----	----	----	----	----	----	----	0.02	----	0.06	0.01	0.09	0.06	----	0.06	0.06	----	0.17	
3	0.06	0.06	0.03	0.03	0.03	0.04	0.02	----	0.01	0.03	----	0.01	0.01	0.01	----	----	0.01	0.03	----	0.16	
4	0.16	0.14	0.13	0.17	0.14	0.10	0.10	0.07	0.06	0.03	0.07	0.08	0.01	0.07	0.09	0.04	0.04	----	0.02	0.11	
5	0.28	0.22	0.39	0.38	0.20	0.24	0.38	0.42	0.35	0.25	0.26	0.32	0.20	0.26	0.26	0.31	0.27	0.34	0.30	0.22	
6	0.03	0.02	0.03	0.03	0.01	0.03	0.02	0.02	0.03	0.02	0.03	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	----	
7	0.01	----	----	0.01	----	0.01	0.01	----	0.01	0.01	----	0.01	----	0.02	0.04	----	----	0.01	----	0.05	
8	----	----	0.01	0.05	----	0.02	----	0.03	0.01	0.01	0.01	0.05	0.02	0.05	0.08	0.03	0.02	0.05	0.01	0.08	
9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
12	----	----	0.02	0.01	0.01	0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
13	----	----	----	----	----	----	----	----	----	----	0.01	----	----	----	----	----	----	----	----	----	
14	0.52	0.27	0.13	0.08	0.08	0.07	0.37	0.30	0.81	0.36	0.18	0.12	0.25	0.22	0.17	0.17	0.32	0.51	0.16	0.40	
15	0.64	0.51	0.62	0.52	0.46	0.70	0.83	0.57	0.52	0.47	0.82	0.45	0.35	0.41	0.50	0.36	0.27	0.33	0.33	0.58	
16	0.76	0.24	0.83	0.21	0.19	0.70	1.32	0.69	0.20	0.23	0.85	0.52	0.20	0.72	0.35	0.76	0.35	0.30	0.29	0.81	
17	1.11	1.67	0.96	1.47	1.54	1.04	0.99	0.74	1.18	1.54	1.07	0.91	1.73	1.48	1.06	0.75	1.36	1.78	1.47	0.93	
18	0.16	0.15	0.12	0.09	0.32	0.08	0.13	0.05	0.08	0.06	0.06	0.07	0.05	0.08	0.07	0.04	0.01	0.06	0.06	0.12	
19	----	----	----	----	0.01	----	0.01	----	0.01	0.01	----	----	----	0.01	----	----	----	0.01	0.02	----	
20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
22	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
23	0.03	----	0.19	----	----	0.70	----	----	0.02	----	0.01	0.01	0.01	----	0.06	0.06	----	0.01	----	0.02	
24	----	----	----	----	----	----	0.01	0.01	----	----	----	----	0.01	----	----	0.01	----	----	----	----	
25	0.65	0.32	0.82	0.38	0.29	0.59	0.25	0.06	0.19	0.22	0.20	0.01	0.16	0.02	0.37	0.15	0.01	0.05	0.56	0.01	
26	0.01	----	0.19	0.01	----	----	0.11	0.23	----	----	----	0.29	0.01	----	0.04	0.02	0.34	0.04	----	----	
27	----	0.01	----	----	----	----	0.03	0.03	----	0.01	0.01	----	0.01	0.07	----	0.01	----	0.01	0.02	----	
28	0.27	0.04	1.40	0.10	----	0.28	1.68	0.04	0.03	0.03	1.08	0.68	0.55	0.81	0.67	2.25	0.68	0.15	----	0.15	
29	0.01	0.01	0.02	0.02	----	----	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.02	----	
30	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
31	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
Monthly	4.70	3.66	5.89	3.56	3.28	4.62	6.27	3.27	3.52	3.31	4.68	3.61	3.61	4.35	3.85	5.00	3.77	3.77	3.28	3.81	
Network Average =	4.09		Imperial Valley Network																		