



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 March 2018

April 12, 2018

Erin Bauer and Dana Grabowski

Phone: (866) 292-7305 (toll-free); E-mail: ebauer@illinois.edu; dgrabows@illinois.edu

Kevin Rennels and Steve Wilson

Phones: (217) 333-8466; 333-0956

Raingage Network Operations

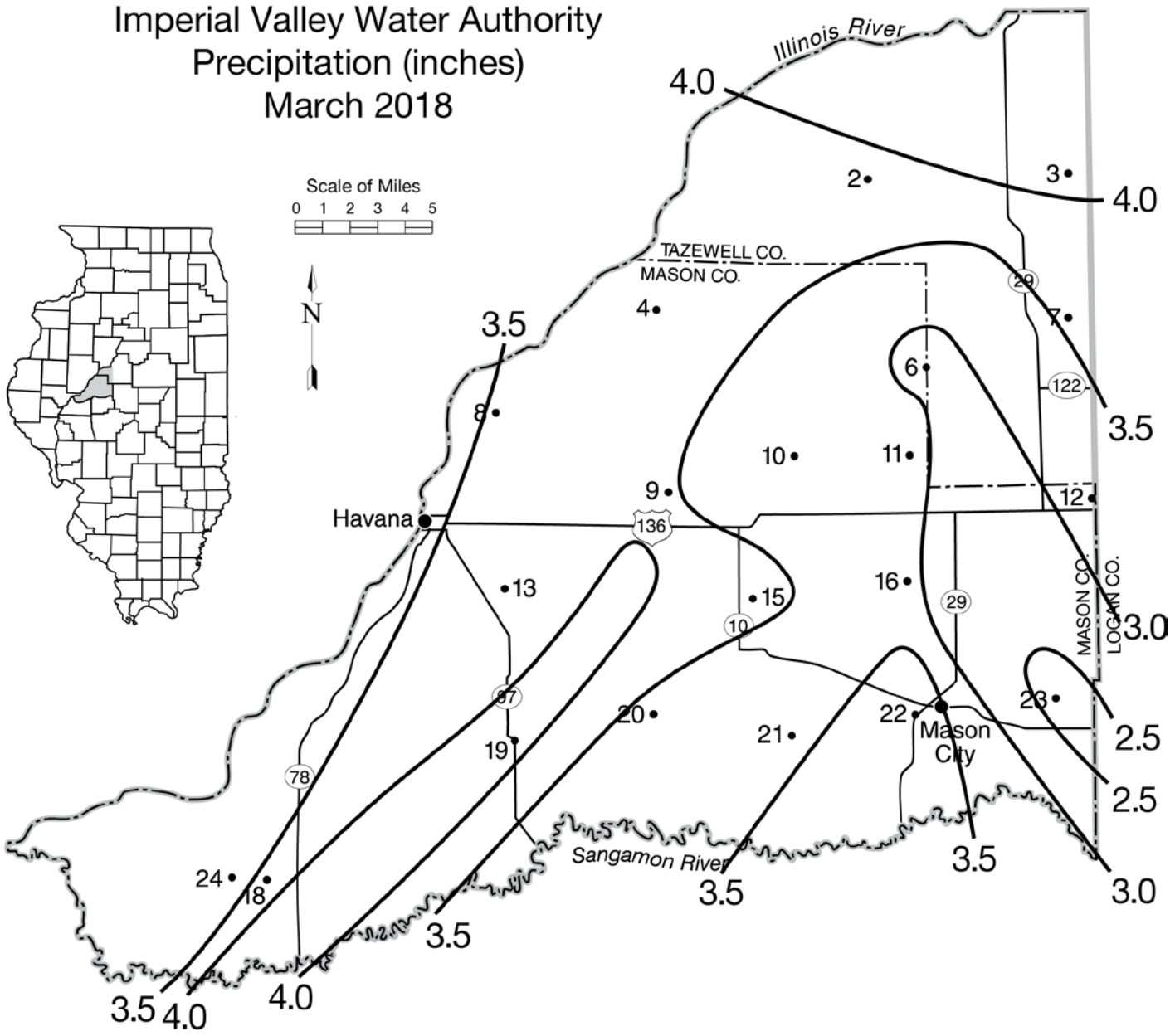
Dana Grabowski serviced all gages and downloaded the digital data on April 4, 2018. All of the collections were weighed, and the buckets were emptied and cleaned.

Data Analysis

The average network precipitation for March 2018 was 3.47 inches, which is well above the latest 25-year monthly network average of 1.72 inches. The largest monthly gage precipitation total was in the southwest. The smallest gage totals were in the southeast corner of the network. Monthly gage totals varied 1.77 inches across the network, from 2.33 inches at site #23, north of New Holland, to 4.10 inches at site #19, north of Kilbourne. The 1981–2010, 30-year average precipitation amounts for March at Havana and Mason City are 2.81 and 2.49 inches, respectively. The March 2018 network average of 3.47 inches is 162 percent of the 25-year (1993–2017) IVWA March network average of 2.14 inches.

March 2018 was the fifth wettest March since 1993. The wettest, March 2007, had 4.66 inches of precipitation; the second and third wettest Marches were in 1998 with 4.51 and 2009 with 4.50 inches, followed by March 1993 which had 3.86 inches.

Imperial Valley Water Authority Precipitation (inches) March 2018



March 2018 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	0.33	0.46	0.40	0.30	0.38	0.22	0.25	0.28	0.34	0.32	0.24	0.19	0.16	0.21	0.31	0.24	0.30	0.29	0.32	0.22
2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
5	0.61	0.55	0.61	0.30	0.42	0.55	0.50	0.43	0.42	0.27	0.67	0.48	0.31	0.68	0.62	0.40	0.39	0.45	0.15	0.45
6	0.02	0.02	----	0.01	0.01	0.01	0.02	0.03	----	0.01	0.01	----	----	0.04	0.01	0.01	----	0.05	----	0.04
7	----	----	----	0.01	----	----	----	----	----	----	----	----	----	----	0.01	----	----	----	----	----
8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
16	0.25	0.30	0.19	0.21	0.31	0.20	0.15	0.16	0.15	0.07	0.19	0.25	0.23	0.25	0.18	0.07	0.18	0.24	----	----
17	0.17	0.15	0.04	0.08	0.05	0.07	0.08	0.03	0.04	0.04	0.09	0.03	0.01	----	0.03	0.02	0.04	0.03	----	----
18	0.03	0.01	0.02	0.02	0.01	0.02	0.01	----	0.01	0.03	0.03	0.03	0.02	----	0.01	0.03	0.03	0.02	----	----
19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
22	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
23	0.18	0.21	0.18	0.08	0.16	0.25	0.07	0.11	----	0.04	0.10	0.14	0.15	0.24	0.15	0.07	0.10	0.19	----	----
24	1.40	1.48	1.39	0.71	1.19	1.26	1.45	1.39	1.35	1.54	1.54	1.54	1.39	1.24	1.49	1.32	1.15	1.31	0.93	1.10
25	----	----	----	----	----	----	----	----	----	----	0.02	0.01	----	----	0.02	0.01	0.03	0.05	----	0.04
26	0.66	0.60	0.69	0.81	0.75	0.70	0.76	0.64	0.61	0.73	0.73	0.75	0.71	1.13	1.02	0.92	0.76	0.95	0.70	1.02
27	0.17	0.23	0.20	0.18	0.16	0.16	0.15	0.12	0.10	0.12	0.12	0.13	0.09	0.11	0.16	0.11	0.17	0.18	0.17	0.11
28	0.04	0.01	0.01	0.03	0.02	0.01	0.01	0.01	0.02	0.02	----	0.02	0.02	0.07	0.02	0.01	0.01	0.04	----	0.04
29	0.05	0.06	0.05	0.06	0.07	0.09	0.09	0.06	0.07	0.07	0.07	0.07	0.04	0.05	0.07	0.06	0.08	0.03	0.06	0.04
30	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
31	0.01	----	0.01	0.02	0.01	----	----	----	----	----	----	----	----	0.02	----	----	----	0.02	----	----
Monthly	3.92	4.08	3.79	2.82	3.54	3.54	3.54	3.26	3.11	3.26	3.81	3.64	3.13	4.04	4.10	3.27	3.24	3.85	2.33	3.06
Network Average =	3.47		Imperial Valley Network																	