

OPERATION OF THE IMPERIAL VALLEY WATER AUTHORITY (IVWA) PRECIPITATION NETWORK

Monthly Progress Report for September 2017

October 11, 2017

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

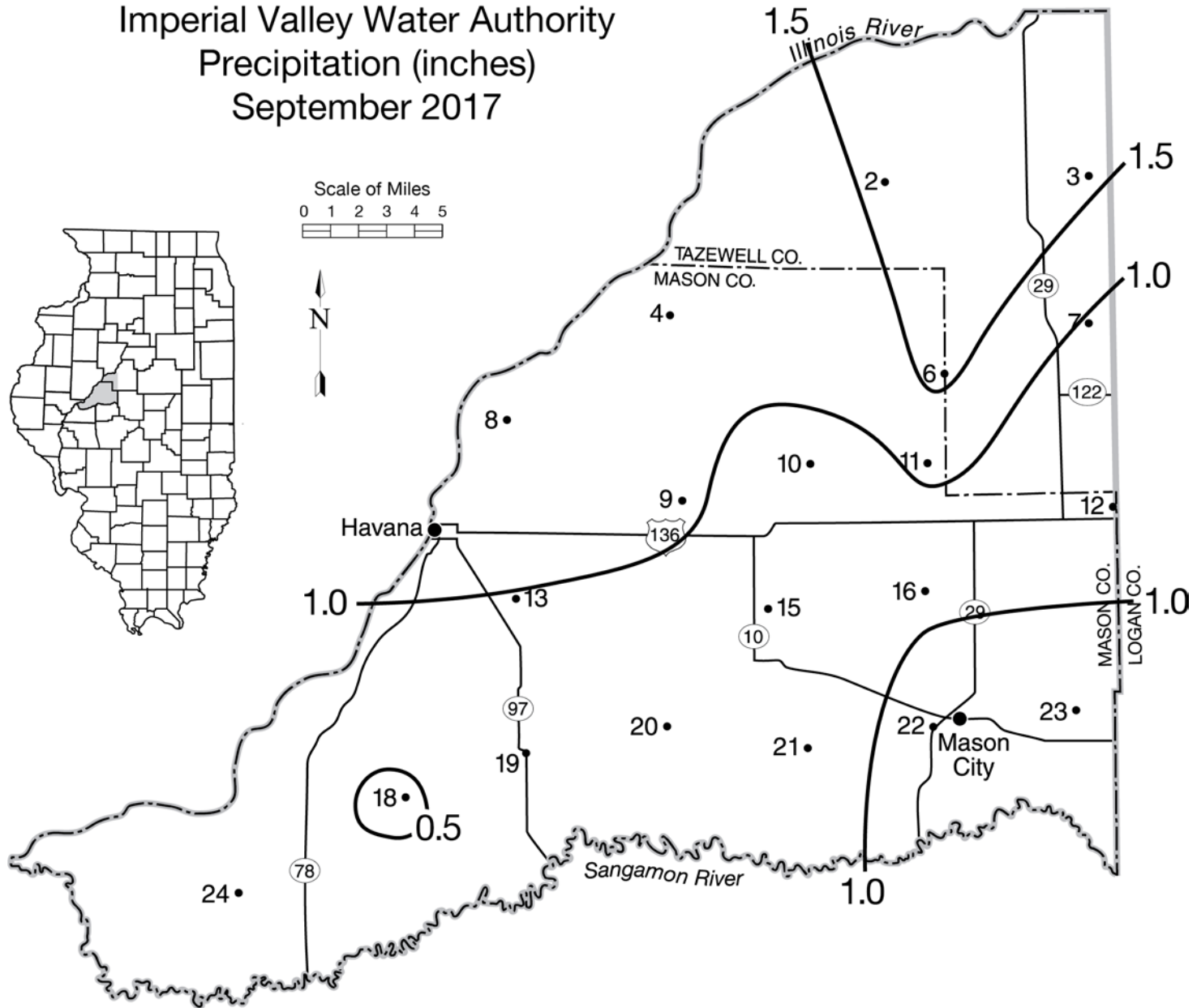
Dana Grabowski serviced all gages and downloaded the September 2017 digital data on October 2, 2017. During the site visits, Dana weighed collections and emptied and cleaned all of the buckets. The buckets at sites 10, 12, 15, 20, and 21 were dry.

Calibration checks were performed at sites 15, 21, 22, and 23. The correlation coefficients were 1.0000, 0.99999, 0.99999, and 0.99999, respectively.

Data Analysis

The average network precipitation for September 2017 was 1.01 inches, well below normal, and 2.02 inches below the 24-year average. The largest monthly gage precipitation totals were in the northern corner of Mason County and the central portion of Tazewell County. The smallest gage totals were in the southwest corner of Mason County. Monthly gage totals varied 1.20 inches across the network, from 0.44 inches (site #18) near Snicarte to 1.64 inches (site #3) near South Pekin. The significant storm on September 18-19 provided almost all of the network monthly rainfall within a three-hour period. Gage #2, east of Spring Lake, and gage #6, southwest of Green Valley, each received one-year recurrence interval precipitation in one hour on September 18. The 1981–2010, 30-year average precipitation amounts for September at Havana and Mason City are 3.15 and 3.04 inches, respectively. The September 2017 network average of 1.01 inches is about 33 percent of the 24-year (1993–2016) IVWA September network average of 3.03 inches.

Imperial Valley Water Authority Precipitation (inches) September 2017



September 2017 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	----	----	----	----	----	0.01	----	0.03	0.03	0.01	0.01	0.01	----	----	----	----	----	----	----	----
5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
13	0.07	0.22	0.04	0.26	0.15	0.02	0.05	0.14	0.23	0.02	0.02	0.23	0.08	0.03	0.06	0.18	0.08	0.04	0.01	----
14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
18	1.43	1.40	1.27	1.27	0.77	1.12	0.95	0.57	0.73	0.48	0.92	0.51	0.78	0.41	0.87	0.47	0.59	1.13	1.16	0.66
19	0.02	0.02	0.03	0.04	0.03	0.04	0.04	0.03	0.04	0.02	0.04	0.03	0.02	----	0.04	0.04	0.03	0.13	0.07	0.04
20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
22	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
24	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
25	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
27	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
28	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
29	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
30	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Monthly	1.52	1.64	1.34	1.57	0.95	1.19	1.04	0.77	1.03	0.53	0.99	0.78	0.88	0.44	0.97	0.69	0.70	1.30	1.24	0.70
Network Average =	1.01		Imperial Valley Network																	