



## **PRAIRIE RESEARCH INSTITUTE**

Illinois State Water Survey  
2204 Griffith Drive  
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# OPERATION OF THE IMPERIAL VALLEY WATER AUTHORITY (IVWA) PRECIPITATION NETWORK

Monthly Progress Report for October 2021  
December 20, 2021

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### Raingage Network Operations

On November 5, Hayden Wennerdahl downloaded the data and weighed and tared the precipitation collections for all gages, except gages #9 and #12.

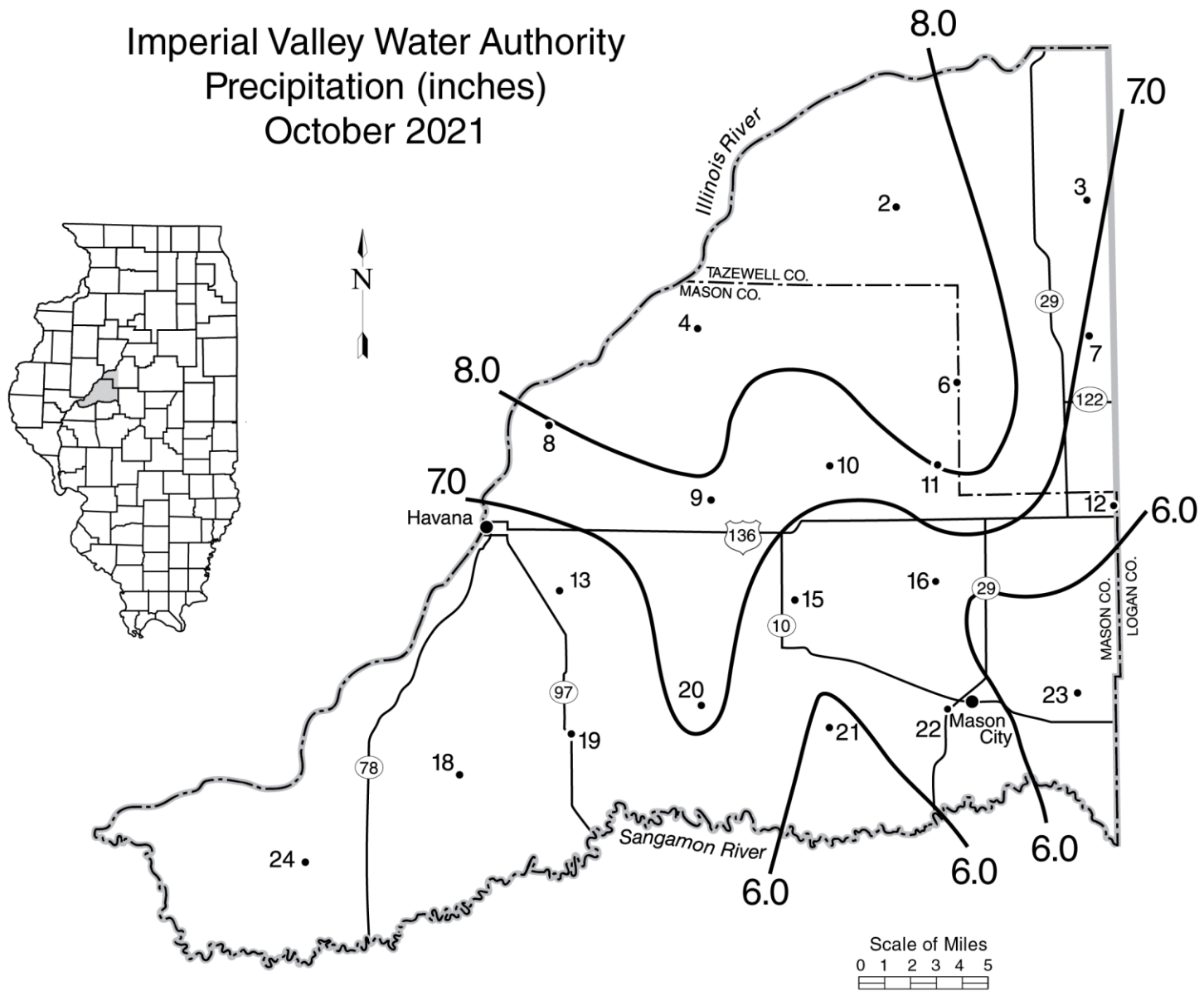
An addition to October activity: on October 5, gages #1 - #5 were calibrated with correlation coefficients of 0.99997, 0.99994, 0.99998, 1.00000, and 1.00000, respectively.

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 October 2021 was 7.04 inches, which is well above the previous 28-year network average. Monthly gage totals varied 3.49 inches across the network, from 5.46 inches at site #23, near east of Mason City, to 8.95 inches at site #6, southwest of Green Valley. The 30-year (1991–2020) average precipitation amounts for the month of October at Havana and Mason City are 3.37 and 3.33 inches, respectively. The October 2021 network average of 7.04 inches is 256 percent of the 29-year (1993–2020) IVWA October network average of 2.75 inches. October 2021 was the second wettest October in the past 30 years, behind October 2009, which had 8.08 inches of precipitation.

# Imperial Valley Water Authority Precipitation (inches) October 2021



**October 2021 Daily and Monthly Precipitation Amounts (inches), Imperial Valley Network**

	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
<b>DAY</b>																				
1	0.02	0.02	0.06	0.03	0.01	0.32	-	0.01	0.09	-	0.01	0.01	0.14	0.02	0.01	0.01	0.00	0.12	0.01	0.07
2	0.93	0.05	1.53	0.18	0.07	0.59	1.11	0.33	0.33	0.01	0.62	0.29	0.02	0.15	0.05	0.04	0.07	0.08	0.02	-
3	0.41	0.46	0.18	1.35	0.76	0.17	0.23	0.55	1.44	0.27	0.25	0.24	0.17	0.28	0.20	0.33	0.16	0.28	0.22	0.38
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
6	0.01	0.01	0.05	-	-	0.14	0.07	0.04	0.02	0.04	0.02	0.16	0.10	0.00	0.01	0.12	-	0.09	0.12	0.04
7	0.49	0.26	0.36	0.30	0.14	0.60	0.80	0.32	0.27	0.78	0.27	0.26	0.70	0.13	0.75	0.99	0.36	0.43	0.21	0.41
8	0.02	0.01	0.02	0.03	0.02	0.01	-	0.02	-	0.01	0.01	0.01	0.01	0.02	0.01	-	0.12	0.01	0.01	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	0.88	1.10	0.73	0.86	1.01	0.97	0.73	1.01	0.82	1.10	0.98	0.79	1.01	1.13	0.93	1.11	0.47	1.19	1.18	1.13
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	0.59	0.42	0.41	0.67	0.32	0.38	0.21	0.26	0.61	0.13	0.15	0.55	0.10	0.29	0.07	0.40	0.24	0.18	0.03	0.35
14	0.34	0.29	0.30	0.23	0.16	0.36	0.32	0.28	0.15	0.10	0.33	0.23	0.15	0.39	0.37	0.20	0.21	0.14	0.13	0.35
15	0.05	0.13	0.03	0.05	0.01	0.04	0.02	0.00	0.03	0.06	-	0.01	0.07	0.03	0.04	0.06	0.13	0.12	0.12	0.08
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	0.01	0.01	-	0.01	0.07	0.01	0.01	0.01	-	-	-	0.04	-	0.02	0.02	0.01	0.01	0.02	0.01	0.02
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	0.01	0.00	-	-	-	-	-	-	0.01	-	-	-	-	-	0.01	0.00	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	3.27	3.45	3.49	3.62	3.29	3.14	3.04	3.22	2.80	2.86	2.45	2.49	2.61	2.52	2.45	2.49	2.43	2.44	2.30	2.36
25	0.16	0.09	0.02	0.13	0.09	0.04	0.07	0.07	0.06	0.03	0.03	-	0.02	0.02	0.03	0.01	0.15	0.05	0.02	0.01
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	0.44	0.39	0.49	0.67	0.33	0.52	0.59	0.54	0.61	0.34	0.46	0.66	0.45	0.80	0.70	0.69	0.76	0.77	0.59	0.66
29	0.82	0.73	0.92	0.84	0.66	0.68	0.72	0.69	0.77	0.52	0.71	0.70	0.59	0.66	0.69	0.67	0.57	0.52	0.52	0.51
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17	-	-	-
<b>Monthly</b>	<b>8.45</b>	<b>7.41</b>	<b>8.57</b>	<b>8.95</b>	<b>6.93</b>	<b>7.97</b>	<b>7.92</b>	<b>7.33</b>	<b>7.99</b>	<b>6.25</b>	<b>6.28</b>	<b>6.42</b>	<b>6.13</b>	<b>6.46</b>	<b>6.34</b>	<b>7.13</b>	<b>5.84</b>	<b>6.43</b>	<b>5.46</b>	<b>6.42</b>

**Network Average = 7.04 Imperial Valley Network**

**Note:** The October 2021 network average of 7.04 inches is 256 percent of the 29-year (1993-2020) IVWA October network average of 2.75 inches. October 2021 was the second wettest October in the past 30 years, behind October 2009 which had 8.08 inches of precipitation.