



PRAIRIE RESEARCH INSTITUTE

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

Monthly Progress Report for November 2018

December 14, 2018

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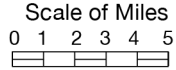
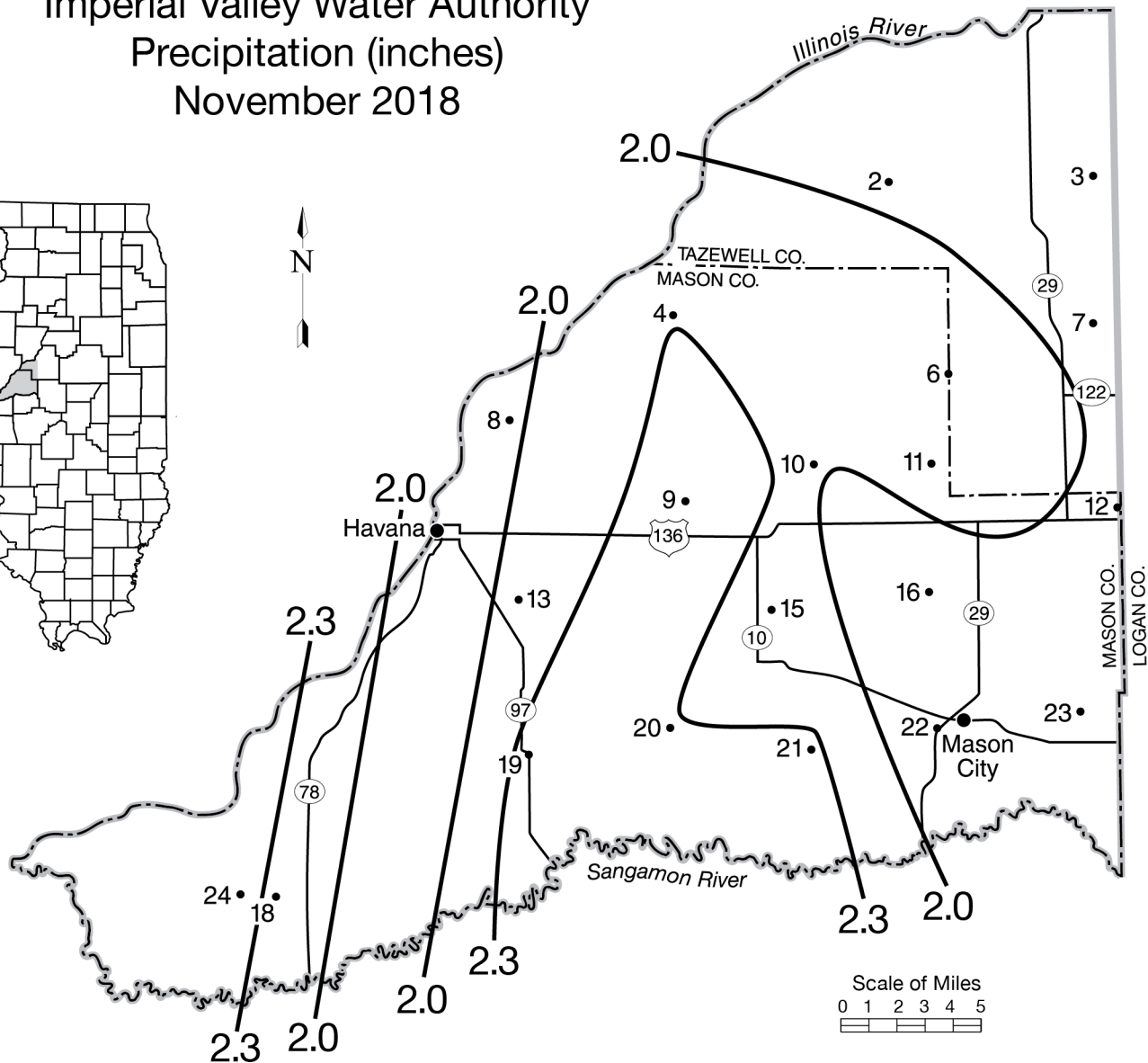
Raingage Network Operations

On November 29, Dana Grabowski serviced all gages and downloaded the digital data. All of the collections were weighed and the buckets were emptied and cleaned. Most collections were frozen. All gages were prepared for winter temperatures and snowfall.

Data Analysis

The average network precipitation for November 2018 was 2.09 inches, which is below the previous 26-year network average. The largest monthly gage precipitation totals were along the river in the northern part and in the southeastern corner of Mason County. The smallest gage total was in central Mason County, north of Kilbourne. Monthly gage totals varied 0.72 inches across the network, from 1.70 inches at site #7, east of Green Valley, to 2.45 inches at site #9, southwest of Topeka. The 1981–2010 30-year average precipitation amounts for November at Havana and Mason City are 3.24 and 3.11 inches, respectively. The November 2018 network average of 2.09 inches is 87 percent of the 26-year (1992–2017) IVWA November network average of 2.41 inches.

Imperial Valley Water Authority Precipitation (inches) November 2018



November 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 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2 | ---- | ---- | ---- | ---- | ---- | 0.11 | 0.10 | 0.04 | 0.02 | ---- | ---- | 0.11 | 0.02 | 0.01 | ---- | 0.34 | 0.23 | 0.07 | 0.02 | 0.03 |
| 3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4 | 0.31 | 0.33 | 0.27 | 0.24 | 0.21 | 0.29 | 0.27 | 0.23 | 0.31 | 0.16 | 0.26 | 0.29 | 0.27 | 0.29 | 0.33 | 0.22 | 0.17 | 0.27 | 0.09 | 0.30 |
| 5 | 0.20 | 0.15 | 0.16 | 0.12 | 0.16 | 0.12 | 0.14 | 0.12 | 0.10 | 0.21 | 0.10 | 0.10 | 0.16 | 0.06 | 0.10 | 0.08 | 0.10 | 0.12 | 0.10 | 0.08 |
| 6 | ---- | 0.05 | 0.03 | ---- | 0.01 | ---- | 0.01 | ---- | 0.01 | ---- | ---- | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.03 | ---- |
| 7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 0.09 |
| 9 | 0.10 | 0.08 | 0.11 | 0.12 | 0.04 | 0.04 | 0.13 | 0.08 | 0.11 | 0.05 | 0.12 | 0.09 | 0.04 | 0.05 | 0.15 | 0.11 | 0.05 | 0.06 | 0.07 | 0.07 |
| 10 | ---- | 0.03 | ---- | ---- | ---- | ---- | ---- | ---- | 0.01 | ---- | 0.01 | ---- | ---- | 0.01 | 0.01 | 0.01 | 0.01 | ---- | ---- | ---- |
| 11 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 12 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 0.03 |
| 13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 15 | 0.19 | 0.24 | 0.15 | 0.26 | 0.21 | 0.09 | 0.31 | 0.25 | 0.28 | 0.27 | 0.28 | 0.23 | 0.22 | 0.19 | 0.38 | 0.26 | 0.24 | 0.23 | 0.32 | 0.38 |
| 16 | ---- | 0.02 | 0.01 | 0.03 | ---- | ---- | ---- | ---- | 0.01 | 0.01 | 0.02 | ---- | 0.01 | 0.04 | 0.03 | 0.02 | 0.10 | 0.01 | 0.03 | 0.01 |
| 17 | 0.11 | 0.09 | 0.09 | 0.02 | 0.03 | 0.05 | 0.03 | 0.01 | ---- | ---- | ---- | ---- | 0.01 | ---- | ---- | ---- | 0.01 | 0.01 | 0.01 | ---- |
| 18 | 0.03 | 0.01 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | ---- | ---- | ---- | 0.01 | 0.02 | 0.01 | ---- | 0.02 | ---- |
| 19 | ---- | ---- | 0.02 | ---- | ---- | 0.02 | 0.01 | ---- | 0.02 | ---- | 0.02 | 0.01 | 0.01 | ---- | 0.01 | 0.01 | 0.02 | 0.01 | ---- | ---- |
| 20 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 21 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 22 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 23 | 0.42 | 0.47 | 0.31 | 0.42 | 0.36 | 0.35 | 0.39 | 0.34 | 0.45 | 0.47 | 0.34 | 0.37 | 0.35 | 0.28 | 0.37 | 0.30 | 0.31 | 0.39 | 0.36 | 0.37 |
| 24 | 0.02 | 0.05 | 0.02 | 0.01 | 0.03 | 0.03 | 0.03 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | ---- | 0.02 | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 | ---- |
| 25 | 0.55 | 0.71 | 1.05 | 0.95 | 0.64 | 0.82 | 0.99 | 0.92 | 0.84 | 0.70 | 0.90 | 0.98 | 0.65 | 0.79 | 0.72 | 0.88 | 1.01 | 0.65 | 0.59 | 1.06 |
| 26 | ---- | ---- | ---- | ---- | ---- | 0.01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 0.01 | 0.01 | ---- | ---- | 0.01 | ---- | ---- |
| 27 | 0.01 | ---- | ---- | ---- | ---- | 0.01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 0.01 | 0.12 | ---- | ---- | ---- | ---- | ---- |
| 28 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 29 | ---- | ---- | 0.05 | 0.05 | ---- | ---- | 0.03 | ---- | 0.01 | 0.01 | 0.03 | ---- | 0.01 | 0.01 | 0.04 | 0.02 | 0.02 | 0.01 | 0.13 | ---- |
| 30 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Monthly | 1.94 | 2.23 | 2.29 | 2.24 | 1.70 | 1.96 | 2.45 | 2.02 | 2.19 | 1.92 | 2.11 | 2.20 | 1.77 | 1.78 | 2.32 | 2.31 | 2.32 | 1.88 | 1.79 | 2.42 |

Network Average = 2.09 Imperial Valley Network