



## **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 April 2024  
May 22, 2024

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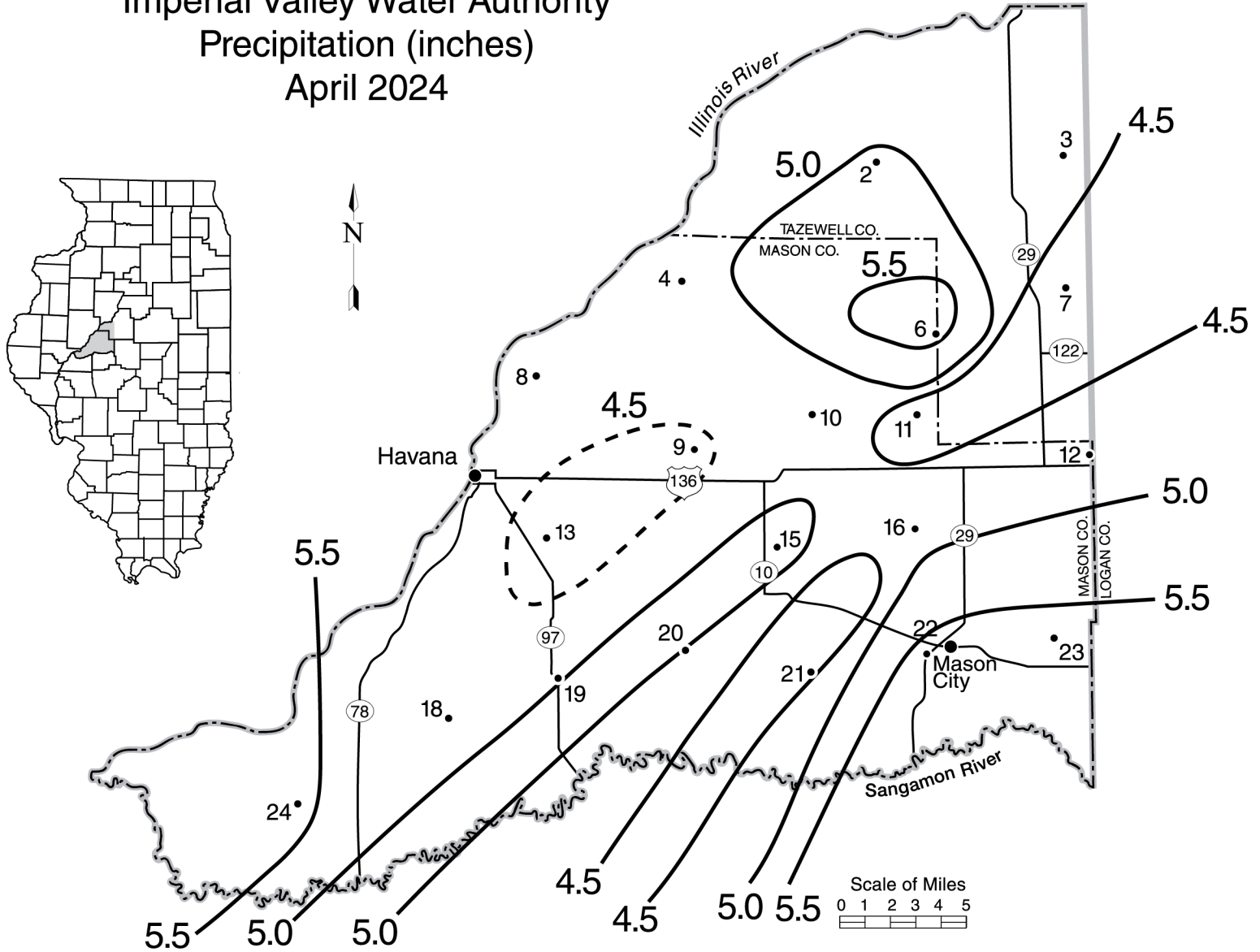
### Raingage Network Operations

On May 6, Emily Winfield downloaded the April precipitation data. The collections were weighed. 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 April 2024 was 4.90 inches, which is below the previous 31-year network average. Monthly gage totals varied 1.75 inches across the network, from 4.08 inches at site #13, southeast of Havana to 5.82 inches at sites #6, east of Forest City and #10, south-southeast of Forest City. The 30-year (1991–2020) average precipitation amounts for the month of April at Havana and Mason City are 4.22 and 3.73 inches, respectively. The April 2024 network average of 4.90 inches is 139 percent of the 31-year (1993–2023) IVWA April network average of 3.47 inches.

# Imperial Valley Water Authority Precipitation (inches) April 2024



### April 2024 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            | 0.64        | 0.58        | 0.87        | 0.74        | 0.61        | 0.76        | 0.76        | 0.70        | 0.65        | 0.61        | 0.68        | 0.64        | 0.65        | 0.91        | 0.65        | 0.69        | 0.65        | 1.02        | 0.95        | 1.07        |
| 2            | 0.13        | 0.13        | 0.20        | 0.17        | 0.16        | 0.24        | 0.20        | 0.15        | 0.30        | 0.38        | 0.20        | 0.15        | 0.25        | 0.23        | 0.34        | 0.20        | 0.63        | 0.24        | 0.38        | 0.13        |
| 3            | 0.14        | 0.06        | 0.05        | 0.14        | 0.07        | 0.08        | 0.15        | 0.05        | 0.06        | 0.06        | 0.10        | 0.07        | 0.09        | 0.13        | 0.08        | 0.11        | 0.02        | 0.13        | 0.41        | 0.18        |
| 4            | 0.01        | 0.01        | -           | -           | -           | -           | -           | -           | < 0.01      | 0.01        | -           | -           | -           | -           | 0.03        | 0.03        | 0.15        | 0.03        | -           | -           |
| 5            | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 6            | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 7            | 0.26        | 0.21        | 0.23        | 0.39        | 0.21        | 0.31        | 0.11        | 0.08        | 0.20        | 0.09        | 0.04        | 0.17        | 0.11        | 0.15        | 0.04        | 0.07        | 0.03        | 0.18        | 0.17        | 0.25        |
| 8            | -           | < 0.01      | < 0.01      | < 0.01      | < 0.01      | -           | 0.01        | -           | -           | -           | 0.01        | -           | -           | -           | 0.01        | -           | < 0.01      | 0.01        | -           | -           |
| 9            | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 10           | -           | 0.01        | -           | 0.01        | -           | -           | 0.01        | 0.01        | 0.01        | 0.01        | -           | 0.01        | -           | -           | -           | < 0.01      | -           | < 0.01      | -           | -           |
| 11           | < 0.01      | < 0.01      | -           | -           | -           | -           | 0.02        | -           | 0.01        | -           | < 0.01      | -           | 0.01        | -           | 0.01        | 0.01        | 0.01        | -           | 0.01        | 0.02        |
| 12           | 0.13        | 0.29        | 0.04        | 0.17        | 0.17        | 0.03        | -           | 0.01        | 0.02        | 0.01        | 0.01        | 0.07        | 0.04        | -           | 0.01        | 0.02        | -           | 0.05        | 0.03        | -           |
| 13           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 14           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 15           | -           | -           | -           | -           | -           | -           | -           | -           | -           | 0.02        | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 16           | -           | -           | -           | 0.01        | -           | -           | -           | 0.01        | -           | 0.02        | -           | -           | < 0.01      | -           | -           | -           | 0.02        | -           | -           | -           |
| 17           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 18           | 0.82        | 0.47        | 0.77        | 0.57        | 0.32        | 0.71        | 0.45        | 0.46        | 0.32        | 0.30        | 0.55        | 0.52        | 0.53        | 0.62        | 0.70        | 0.58        | 0.39        | 0.68        | 0.47        | 0.56        |
| 19           | -           | -           | -           | -           | 0.01        | -           | -           | -           | -           | -           | -           | -           | 0.01        | -           | < 0.01      | -           | -           | -           | -           | -           |
| 20           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 21           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 22           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | < 0.01      | -           | -           | -           | -           | -           | -           | < 0.01      | -           | -           |
| 23           | 0.39        | 0.49        | 0.30        | 0.43        | 0.34        | 0.36        | -           | 0.35        | 0.31        | 0.36        | 0.39        | 0.50        | 0.47        | 0.52        | 0.48        | 0.51        | 0.44        | 0.56        | 0.52        | 0.65        |
| 24           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 25           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| 26           | 1.04        | 0.89        | 1.02        | 1.27        | 0.82        | 1.07        | 1.00        | 1.29        | 0.88        | 0.68        | 0.91        | 1.09        | 0.70        | 1.07        | 1.00        | 0.93        | 0.35        | 0.73        | 0.67        | 1.20        |
| 27           | 0.03        | 0.21        | 0.01        | 0.14        | 0.09        | -           | 0.07        | -           | 0.04        | 0.02        | -           | 0.07        | 0.03        | 0.08        | -           | 0.16        | 0.01        | 0.14        | 0.21        | 0.02        |
| 28           | 0.99        | 0.93        | 0.83        | 0.93        | 0.77        | 0.94        | 1.02        | 1.06        | 0.76        | 0.82        | 0.68        | 1.13        | 0.82        | 0.94        | 0.80        | 0.98        | 0.42        | 0.87        | 0.54        | 0.98        |
| 29           | 0.43        | 0.64        | 0.42        | 0.86        | 0.78        | 0.37        | 0.64        | 0.65        | 0.79        | 1.18        | 0.49        | 0.74        | 0.94        | 0.58        | 0.84        | 0.70        | 0.94        | 1.16        | 1.18        | 0.53        |
| 30           | -           | -           | -           | -           | -           | -           | -           | -           | 0.01        | 0.02        | 0.01        | -           | 0.01        | -           | -           | 0.02        | < 0.01      | -           | 0.01        | -           |
| <b>Total</b> | <b>5.02</b> | <b>4.92</b> | <b>4.75</b> | <b>5.82</b> | <b>4.34</b> | <b>4.88</b> | <b>4.44</b> | <b>4.82</b> | <b>4.37</b> | <b>4.59</b> | <b>4.08</b> | <b>5.16</b> | <b>4.65</b> | <b>5.23</b> | <b>4.99</b> | <b>5.00</b> | <b>4.06</b> | <b>5.79</b> | <b>5.55</b> | <b>5.60</b> |

**Imperial Valley Network Average = 4.90 inches**

The April 2024 network average is 139 percent of the 31-year (1993–2023) IVWA April network average of 3.47 inches.