

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

Monthly Progress Report for December 2017

January 19, 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

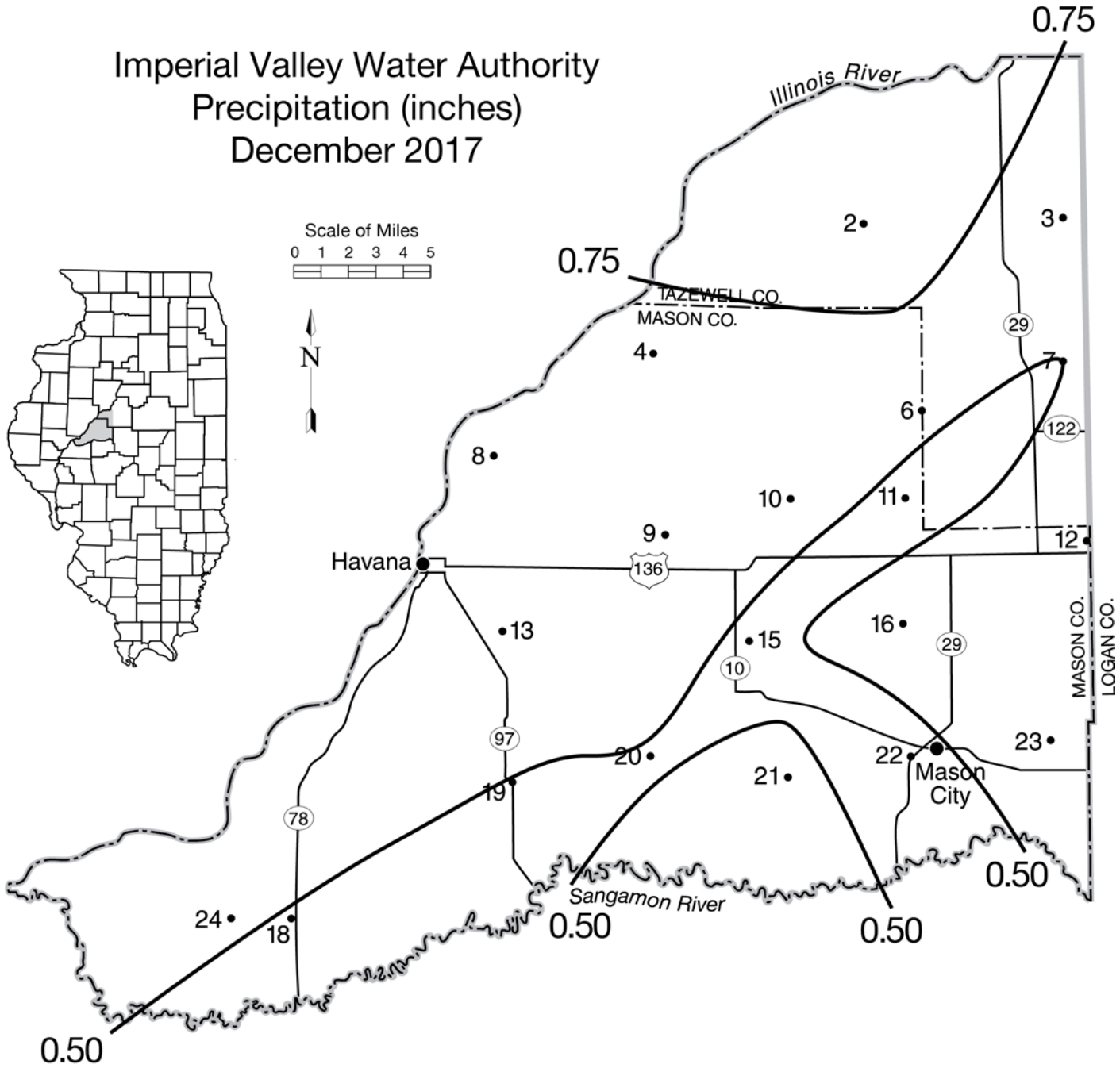
Dana Grabowski serviced all gages and downloaded the digital data on January 9, 2018. During the site visits, a new bucket tier weight was recorded. The buckets were not emptied in order to retain the antifreeze throughout the winter.

Site #18, which was near Kilbourne, was moved to the west in November 2016 to a location near Snicarte. This site is operated by the Illinois Climate Network. The map in this report reflects this change.

### Data Analysis

The average network precipitation for December 2017 was 0.56 inches, well below the latest 25-year monthly network average of 2.04 inches. The largest monthly gage precipitation totals were in the northwest corner of the network. The smallest gage totals were in the southern central portion of the network. Monthly gage totals varied 0.56 inches across the network, from 0.41 inches at site #18, north of Easton, to 0.97 inches at site #2, east of South Pekin. The 1981–2010, 30-year average precipitation amounts for December at Havana and Mason City are 2.76 and 2.33 inches, respectively. The December 2017 network average of 0.56 inches is 27 percent of the 25-year (1993–2016) IVWA December network average of 2.04 inches.

# Imperial Valley Water Authority Precipitation (inches) December 2017



December 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                 | 0.27 | 0.14 | 0.24                    | 0.17 | 0.10 | 0.24 | 0.21 | 0.12 | 0.08 | 0.14 | 0.22 | 0.09 | 0.21 | 0.11 | 0.10 | 0.15 | 0.11 | 0.12 | 0.15 | 0.29 |
| 5                 | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 6                 | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 7                 | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 8                 | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 9                 | 0.02 | 0.01 | ----                    | 0.01 | 0.02 | ---- | ---- | 0.01 | 0.03 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 10                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 11                | 0.03 | 0.03 | 0.04                    | 0.03 | 0.05 | 0.03 | 0.03 | 0.03 | 0.06 | 0.05 | 0.03 | 0.02 | ---- | 0.01 | ---- | ---- | 0.05 | 0.02 | ---- | ---- |
| 12                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 13                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 14                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 15                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 17                | 0.02 | 0.01 | 0.04                    | 0.06 | 0.02 | 0.07 | 0.10 | 0.08 | 0.04 | 0.08 | 0.11 | 0.08 | 0.19 | 0.03 | 0.06 | 0.13 | 0.06 | 0.07 | 0.11 | ---- |
| 18                | 0.04 | 0.09 | 0.03                    | 0.04 | 0.04 | 0.02 | 0.04 | 0.06 | 0.05 | 0.03 | 0.04 | 0.06 | 0.03 | 0.01 | 0.02 | 0.02 | 0.05 | 0.04 | 0.08 | 0.13 |
| 19                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 21                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 22                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 23                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 24                | 0.38 | 0.17 | 0.20                    | 0.17 | 0.19 | 0.14 | 0.26 | 0.22 | 0.21 | 0.20 | 0.26 | 0.15 | 0.14 | 0.24 | 0.29 | 0.19 | 0.23 | 0.16 | 0.23 | 0.21 |
| 25                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 0.01 | ---- | ---- | ---- | ---- | ---- | ---- | 0.01 |
| 26                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 27                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 28                | ---- | ---- | 0.02                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 0.03 | ---- | ---- | 0.02 | ---- | ---- | 0.01 | ---- | ---- |
| 29                | 0.11 | 0.12 | 0.02                    | 0.02 | 0.08 | 0.02 | 0.01 | ---- | 0.01 | 0.03 | 0.01 | 0.01 | 0.02 | ---- | 0.01 | ---- | 0.01 | 0.01 | ---- | ---- |
| 30                | 0.09 | 0.01 | ----                    | 0.01 | ---- | 0.01 | 0.01 | 0.02 | ---- | 0.01 | 0.01 | 0.01 | ---- | ---- | ---- | ---- | 0.01 | ---- | 0.08 | 0.01 |
| 31                | ---- | ---- | ----                    | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 0.01 | ---- | ---- | 0.01 | ---- | ---- | ---- |
| Monthly           | 0.96 | 0.58 | 0.59                    | 0.51 | 0.50 | 0.53 | 0.66 | 0.54 | 0.48 | 0.54 | 0.68 | 0.45 | 0.60 | 0.41 | 0.50 | 0.49 | 0.53 | 0.43 | 0.65 | 0.65 |
| Network Average = | 0.56 |      | Imperial Valley Network |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |