

Memo



Date: July 9, 2015
To: Kevin Stewart
From: Markus Ritsch
Subject: June 2015 ALERT Data Analysis

I. ALERT Data Source

Raw ALERT data records extracted from the Urban Drainage and Flood Control District's NovaStar 5 base station were analyzed for the period June 1 through June 30, 2015.

II. General System Analysis Summary

In 2015 data will be received at the District through both the legacy ALERT channel and through the ALERT2 (concentrator plus A2 self-reports) channel. The following (Table 1) quantifies the data reports received through each telemetry channel.

Table 1. Reception of Data at Diamond Hill (Legacy, ALERT2 and Concentrator Reports)

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------|----------------|----------------|----------------|------------------|------------------|------------------|----------|----------|----------|----------|----------|----------|
| Legacy | 216,461 | 241,285 | 268,551 | 282,306 | 345,191 | 348,979 | | | | | | |
| Concentrator | 366,229 | 405,210 | 443,612 | 458,979 | 499,841 | 511,002 | | | | | | |
| ALERT2 | 172,927 | 233,617 | 286,836 | 295,399 | 319,764 | 302,746 | | | | | | |
| TOTAL | 755,617 | 880,112 | 998,999 | 1,036,684 | 1,164,796 | 1,162,727 | 0 | 0 | 0 | 0 | 0 | 0 |
| Conc+A2 | 539,156 | 638,827 | 730,448 | 754,378 | 819,605 | 813,748 | | | | | | |
| Conc/Leg | 1.69 | 1.68 | 1.65 | 1.63 | 1.45 | 1.46 | | | | | | |
| DataChron | 529,216 | 564,798 | 652,811 | 702,865 | 777,203 | 772,052 | | | | | | |

The District operates two redundant NovaStar5 base stations: the primary (ns5a) at Diamond Hill and a redundant base (ns5b) at Greenhouse Data. Additional analyses are conducted on the data received by these two base stations (Table 2). The data received by both base stations for the month are shown below.

Table 2. Comparison of Data Reception by ns5a and ns5b

| NS5A (Diamond Hill) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct |
|----------------------|---------------------------|---------|----------------|---------------------------|---------|---------|-----|-----|-----|-----|
| Legacy | 216,461 | 241,285 | 268,551 | 282,306 | 345,191 | 348,979 | | | | |
| Concentrator | 366,229 | 405,210 | 443,612 | 458,979 | 499,841 | 511,002 | | | | |
| ALERT2 | 172,927 | 233,617 | 286,836 | 295,399 | 319,764 | 302,746 | | | | |
| NS5B (Greenhouse) | | | | | | | | | | |
| Legacy | 244,232 | 241,143 | 268,417 | 262,549 | 341,926 | 341,600 | | | | |
| Concentrator | 409,951 | 405,875 | 444,660 | 430,407 | 499,657 | 502,908 | | | | |
| ALERT2 | 191,784 | 234,150 | 289,044 | 275,955 | 319,750 | 299,635 | | | | |
| Diff (NS5a-NS5b) | | | | | | | | | | |
| Legacy (Digi One) | -27,771 | 142 | 134 | 19,757 | 3,265 | 7,379 | | | | |
| Concentrator (B2010) | -43,722 | -665 | -1,048 | 28,572 | 184 | 8,094 | | | | |
| ALERT2 (B2010) | -18,857 | -533 | -2,208 | 19,444 | 14 | 3,111 | | | | |
| Comments | Failed hard drive on ns5a | | Tot A2 diff 1% | Outage on ns5b this month | | | | | | |

The total difference in reports received by Diamond Hill and Greenhouse is minimal. In general the Diamond Hill server received more reports than did Greenhouse by approximately 1.5 percent.

The number of total legacy, concentrator and ALERT2 reports received by ns5a and ns5b is fairly consistent. The daily ratio of total concentrator reports received versus total legacy ALERT reports received is shown (Figure 1).

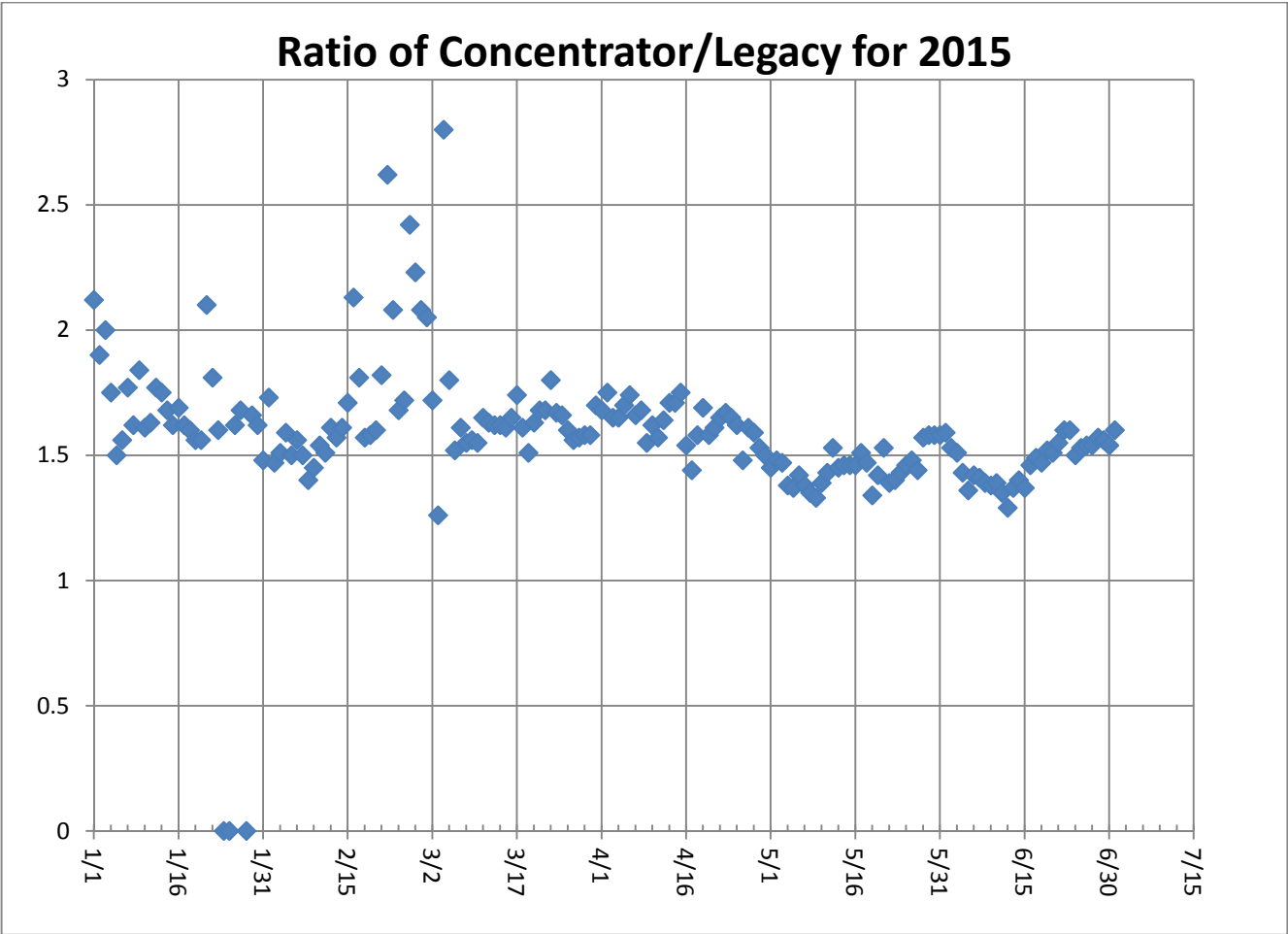


Figure 1. Daily Ratio of Concentrator Reports to Legacy Reports

The ratio is very consistent throughout the month. The ratio seems to fluctuate around 1.5.

A. Continuous Operation of Base Receiver/Decoder

The ns5 base stations were NOT in continuous operation for the entire month. Network issues were evident in the late evening of June 7th and the morning of June 8th. The District also experienced outages with their phone system the morning of June 8th. It was determined that the network used by ns5 at the District is on a tier 3 switch along with the District phone system. On June 9th WET wrote the following email:

“I think we need to move the NovaStar5 VM server, ALERT (digi) and ALERT2 (B2010) to your tier 1 network. The current tier 3 switch is causing us problems as we have seen over the past several weeks with our network communications between ns5a (diamond hill) and ns5b (greenhouse). The tier 3 switch may also be the cause of the ALERT2 data outages being investigated by OneRain /Blue Water.”

It is recommended that the network utilized by the ns5 computers and associated decoding equipment be moved to the District’s tier 1 switch.

B. Specific Issues Identified this Month

Performance of the following sensors (Table 3) was questionable this month.

Table 3. Sensors with Poor Performance Characteristics

| Sensor ID | Description | Comments |
|---------------------|--------------------|---|
| 2330 | Morrison | Poor timer performance and poor event performance |
| 430 | Utah Park | Poor timer performance and poor event performance |
| 1570 | Wx-Brighton Ditch | Under reporting rain, lowest rain total three months in a row |
| 1100 | Louisville Rec Ctr | Under reporting |
| 1060 | Heritage Square | Under reporting |
| 2360 | Indian Hills | Poor timer performance and poor event performance |
| 2271, 2272, 2274 | Unknown IDs | Cub Creek below Blue (2270) |
| 4130 | Swiss Peaks | Reported no rain for the entire month |

C. Performance of New A2 Sites

This section of the report will look at specific reporting characteristics of the new A2 sites by analyzing their APDUID (Application PDU Identifier). The APDUID is a cyclical, incrementing counter from 0 to 6. Tracking skipped values and restarts of the application control byte counter provides useful insight into site performance and general network health. The performance of the cyclical counter is quantified for each A2 self-reporting site and repeater path (Table 4).

Table 4. APDUID Performance of A2 Sites by Source Address

| Description | ID | W. Creek (6001) | Smoky Hill (6502) | Blue Mt. (6503) | Lee Hill (6505) | Gold Hill (6506) |
|-----------------------------|--------|--------------------|----------------------|--------------------|--------------------|---------------------|
| Carr Street (10012) | 100 | | 0.96 | 0.94 | 0.93 | 0.76 |
| Murphy Creek (10019) | 870 | | 0.98 | 0.96 | 0.98 | 0.97 |
| Maple Grove (10013) | 1000 | | 0.97 | 0.98 | 0.98 | 0.98 |
| Lena @ Nolte Pond (10025) | 1020 | | 0.92 | 0.91 | 0.95 | 0.89 |
| Newlin Gulch | 3070 | | 0.82 | 0.30 | 0.76 | 0.38 |
| Heritage Regional Park | 3090 | | 0.81 | 0.56 | 0.75 | 0.79 |
| Lower Left Hand (10018) | 4453 | | 0.99 | -- | 0.99 | -- |
| Magnolia | 6602 | | 0.99 | 0.95 | 0.99 | 0.96 |
| Blackstone** | 100100 | | 0.13 | 0.10 | 0.14 | 0.14 |
| ETG @ Hampden** | 100110 | | 0.14 | 0.12 | 0.14 | 0.13 |
| Upper Sellers | 100140 | 0.94 | | | | |
| Haystack Road | 100150 | 0.95 | | | | |
| Sand Cr at Colfax | 100160 | | 0.96 | 0.63 | 0.97 | 0.90 |
| James Creek | 100177 | | 0.22 | -- | 0.99 | 0.89 |
| S. St. Vrain at Berry Ridge | 100210 | | -- | -- | 0.89 | 0.06 |
| Arvada/Blunn Reservoir | 100227 | | 0.96 | 0.83 | 0.96 | 0.74 |
| Havana Pond | 100237 | | 0.97 | 0.94 | 0.97 | 0.96 |
| Westerly Creek Dam | 100247 | | 0.96 | 0.94 | 0.97 | 0.95 |
| Trumbull (Hayman) | 100260 | 0.84 | -- | -- | -- | -- |
| West Creek (Hayman) | 100270 | 0.89 | -- | -- | -- | -- |

** -the APDUID is disabled for these sites.....these are original HSE A2 transmitters and may not support the APDUID

D. ALERT2 Repeater Loading

The ALERT2 architecture utilizes 5 repeaters with a single transmit frequency (170.300 MHz) to Diamond Hill. The repeaters utilize a 20 second frame where each repeater is allocated a slot of specific size and an offset within the frame. The slot allocated to each repeater is sized appropriately to accommodate the total number of existing and future remote sites routed through that repeater. Each repeater is shown along with its designated slot (Table 5). Currently there is no pass-listing for the ALERT2 repeaters. Any remote ALERT2 site can be received by all repeaters and re-broadcast to the base except for West Creek which has an input frequency unique to Douglas County.

Table 5. ALERT2 Repeater Architecture

| Repeater | Slot Size (sec) | Slot Offset (sec) | Source Address | ALERT2 Input Frequency (MHz) | ALERT2 Output Frequency (MHz) – received at Diamond Hill |
|------------|-----------------|-------------------|----------------|------------------------------|--|
| West Creek | 2 | 0 | 6001 | 169.425 | 170.300 |
| Smoky | 3 | 2 | 6502 | 169.525 | 170.300 |
| Blue Mt. | 4 | 5 | 6503 | 169.525 | 170.300 |
| Lee Hill | 3 | 9 | 6505 | 169.525 | 170.300 |
| Gold Hill | 3 | 12 | 6506 | 169.525 | 170.300 |
| Magnolia | 5 | 15 | 6507 | | 170.300 |
| Frame Size | 20 | | | | |

The following tables summarize the total number of reports received through each repeater (Table 6) and the distribution of reports by time slot (Table 7). This quantifies repeater loading for the ALERT2 backbone.

Table 6. ALERT2 Reports Received through Each Repeater

| Month | West Creek (6001) | Smoky (6502) | Blue Mt. (6503) | Lee Hill (6505) | Gold Hill (6506) | TOTAL |
|-------|-------------------|--------------|-----------------|-----------------|------------------|---------|
| Jan | 0 | 44,501 | 44,636 | 44,783 | 39,007 | 172,927 |
| Feb | 0 | 58,543 | 56,150 | 61,160 | 57,764 | 233,617 |
| Mar | 346 | 73,198 | 69,604 | 77,968 | 65,323 | 286,439 |
| Apr | 595 | 73,711 | 69,568 | 79,215 | 72,310 | 295,399 |
| May | 5,259 | 78,694 | 72,340 | 86,297 | 77,174 | 319,764 |
| June | 11,987 | 72,449 | 65,742 | 82,998 | 69,570 | 302,746 |

Table 7. Messages Received by Time Slot (Concentrator and A2 Self Reports)

| | West Cr. (6001) | | Smoky (6502) | | | Blue Mt. (6503) | | | | Lee Hill (6505) | | | Gold Hill (6506) | | | Magnolia (6507) | | | | |
|---------|-----------------|--------|--------------|--------|-------|-----------------|--------|-------|-------|-----------------|-------|-----|------------------|-------|-------|-----------------|-----|-----|-----|-----|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| Tot | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| Jun | 49595 | 6212 | 84581 | 14335 | 1658 | 103277 | 7522 | 1322 | 683 | 22211 | 2986 | 270 | 40884 | 786 | 238 | 164 | 84 | 65 | 42 | 43 |
| | 57748 | 1702 | 28640 | 3431 | 185 | 17384 | 414 | 104 | 55 | 31211 | 796 | 139 | 32663 | 360 | 171 | 73 | 54 | 61 | 35 | 37 |
| | 52172 | 2112 | 31371 | 1867 | 301 | 55241 | 2844 | 382 | 288 | 61171 | 2736 | 468 | 86430 | 2182 | 646 | 441 | 232 | 191 | 224 | 228 |
| 813,748 | 159,515 | 10,026 | 144,592 | 19,633 | 2,144 | 175,902 | 10,780 | 1,808 | 1,026 | 114,593 | 6,518 | 877 | 159,977 | 3,328 | 1,055 | 678 | 370 | 317 | 301 | 308 |

The following tables summarize the system-wide latency of ALERT2 self-reports (Table 8 and Table 9). The latency is computed as the difference in seconds between the reception time of an ALERT2 self-report at the base station and the report time stamp issued by the transmitter.

Table 8. System-Wide Latency of ALERT2 Self-Reports (seconds)

| Statistical Parameter | Value | Comments |
|-----------------------|-------|--|
| Mean | 34 | The average time it took a report from the field to reach the base |
| Minimum | 3 | The minimum time it took for a report to go from the field to the base |
| Maximum | 245 | The maximum time it took for a report to go from the field to the base |

Table 9. Summary of ALERT2 System-Wide Latency (seconds)

| Statistical Parameter | Feb | Mar* | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----------------------|--------|-------|--------|-------|-------|-----|-----|-----|-----|-----|-----|
| Mean | 340 | 35.7 | 44.04 | 38.14 | 34.23 | | | | | | |
| Minimum | 5 | 3 | 3 | 3 | 3 | | | | | | |
| Maximum | 35,209 | 3,706 | 43,089 | 205 | 245 | | | | | | |

The large latency (245 seconds) was observed from Westerly Creek Dam going through the Smoky (6502), Blue Mt. (6503) and Lee Hill (6505) repeaters on June 8th.

E. Rain Sensor Timer Reporting Summary

The following analysis assumes that each legacy rain sensor has a 12-hour timer-reporting interval and each A2 rain sensor has a 1-hour timer-reporting interval. The worst performing rain sensors for the month are summarized (Table 10).

Table 10. Monthly Summary of Sensors with Poor Timer Performance (Sensor ID)

| Jan* | Feb* | Mar* | Apr | May | Jun | Jul | Aug | Sep | Oct* | Nov* | Dec* |
|------|------|------|------|------|------|-----|-----|-----|------|------|------|
| 4470 | 4470 | 4470 | 4850 | 2330 | 430 | | | | | | |
| 700 | 2330 | 4270 | 2330 | 310 | 2330 | | | | | | |
| 2330 | 4870 | 2790 | 430 | 2360 | 3010 | | | | | | |
| 4240 | 3010 | 4240 | 5720 | 430 | 2360 | | | | | | |
| 3010 | 1660 | 4870 | 2970 | 4470 | 310 | | | | | | |
| 4870 | 4240 | 3010 | 2360 | 4870 | 1660 | | | | | | |

*- Only sensors that operate year-round (weather stations and stations in Boulder County) are included for the analysis in these months.

Sensors identified as having poor timer performance in multiple months are shaded with unique colors. A developing trend can thus be identified from the color shading as the year progresses.

III. Rain Sensor Event Reporting Summary

A. District-Wide Total Tip/Count Statistics

The incrementing reports from all 1-mm rain sensors were analyzed to quantify the District-wide statistical total monthly tip summary (Table 11). For the months of January, February, March, October, November and December only the stations that operate year-round are included in the rain event analysis. These stations include all weather stations and the stations in Boulder County.

Table 11. District-Wide Total Tip/Count Statistical Summary

| Statistical Parameter | Value | Comments |
|--|-------|---|
| Mean | 86.9 | Only the 1-mm rain sensors were included in the analysis |
| Median | 82 | Only the 1-mm rain sensors were included in the analysis |
| Standard deviation | 37.7 | Only the 1-mm rain sensors were included in the analysis |
| Mean plus three standard deviations | 200.0 | Only the 1-mm rain sensors were included in the analysis |
| Mean minus two standard deviations | 11.5 | Only the 1-mm rain sensors were included in the analysis |
| Minimum total count | 2 | Wx-Brighton Ditch (1570) – third month in a row as the lowest reporting rain gage |
| Maximum total count | 206 | Fire Station #19 (530) |
| Sensors showing NO rain for the month | 1 | Swiss Peaks (4130) |
| Sensors greater than 3 SD (over reporting) | 2 | Fire Station #19 (530) and Harvard Gulch (600) |
| Sensors less than 2 SD (under reporting) | 3 | Wx-Brighton Ditch (1570), Louisville Rec (1100), Heritage Square (1060) |

B. Monthly Average Tip/Count Summary

A monthly summary of the District-wide mean total tip/count is presented (Table 12).

Table 12. Monthly Summary of District-Wide Mean Total 1-mm Tip/Count

| Year | Jan* | Feb* | Mar* | Apr | May | Jun | Jul | Aug | Sep | Oct* | Nov* | Dec* | Ave |
|------|-------|-------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|-------|
| 2006 | 4.62 | 5.92 | 18.39 | 20.47 | 19.44 | 13.75 | 74.03 | 46.89 | 24.17 | 41.13 | 5.04 | 16.45 | 24.19 |
| 2007 | 11.56 | 5.40 | 29.75 | 65.03 | 68.30 | 15.87 | 36.20 | 46.38 | 22.13 | 29.50 | 6.54 | 11.29 | 29.00 |
| 2008 | 4.05 | 7.38 | 12.26 | 20.57 | 54.82 | 26.06 | 16.43 | 90.20 | 37.54 | 19.59 | 2.82 | 9.24 | 25.08 |
| 2009 | 6.33 | 3.11 | 11.37 | 59.26 | 63.45 | 68.00 | 65.00 | 20.00 | 27.29 | 30.24 | 11.00 | 5.60 | 30.89 |
| 2010 | 5.97 | 11.90 | 32.54 | 70.57 | 39.63 | 56.04 | 50.23 | 31.01 | 4.18 | 18.31 | 8.30 | 3.31 | 27.67 |
| 2011 | 6.78 | 7.45 | 7.54 | 33.94 | 92.68 | 39.42 | 90.87 | 18.25 | 37.67 | 25.73 | 10.41 | 13.59 | 32.03 |
| 2012 | 4.89 | 13.57 | 2.35 | 30.17 | 38.97 | 19.35 | 73.03 | 11.31 | 48.81 | 22.32 | 2.98 | 4.18 | 22.66 |
| 2013 | 2.96 | 14.31 | 21.86 | 35.96 | 45.87 | 16.39 | 52.33 | 50.63 | 229.74 | 29.64 | 5.86 | 4.00 | 42.46 |
| 2014 | 6.88 | 11.86 | 25.91 | 29.30 | 77.30 | 29.16 | 99.73 | 43.59 | 50.96 | 29.26 | 13.36 | 8.11 | 35.45 |
| 2015 | 9.88 | 24.42 | 20.78 | 69.75 | 143.07 | 86.93 | | | | | | | |

*- Only sensors that operate year-round (weather stations and stations in Boulder County) are included for the analysis in these months.

C. Sensors with a Jump of Six or More in the Sequential Count

Several sensors experienced a large jump in the sequential tip count (Table 13).

Table 13. Sensors with a Jump of 6 or More in Sequential Count

| Sensor Description | Sensor ID | Comment |
|--------------------|-----------|---------|
| Utah Park | 430 | |
| Little Narrows | 4470 | |
| Morrison | 2330 | |
| Bear Cr below Cub | 2230 | |

D. Sensor-by-Sensor Incrementing Count Summary

The system-wide reception rate of incrementing, 1-mm tip reports for the month was approximately 92 percent. A total of 14,511 incrementing reports were received and a total of 15,821 reports were expected. The total loss of incrementing reports for the month was approximately 8 percent. Those sensors with the worst event transmission performance are summarized (Table 14).

Table 14. Monthly Summary of Sensors with the Worst Performance

| Jan* | Feb* | Mar* | Apr | May | Jun | Jul | Aug | Sep | Oct* | Nov* | Dec* |
|------|------|--------|--------|------|------|-----|-----|-----|------|------|------|
| 4470 | 2330 | 100150 | 100150 | 310 | 430 | | | | | | |
| 700 | 4470 | 4470 | 4240 | 1620 | 4470 | | | | | | |
| 4750 | 700 | 2340 | 430 | 2330 | 2330 | | | | | | |
| 4330 | 2320 | 100140 | 100140 | 430 | 2970 | | | | | | |
| 2790 | 4330 | 1520 | 2330 | 2230 | 2230 | | | | | | |
| 4870 | 4870 | 1100 | 1620 | 4470 | 2360 | | | | | | |

*-Only sensors that are operational year-round (weather stations and stations in Boulder County) are included for the analysis in these months.

Sensors identified as having poor event performance in multiple months are shaded with unique colors. A developing trend can thus be identified from the color shading as the year progresses.

IV. Unknown Device Analysis – Received Data Log

The ALERT IDs present in the audio signal received by the decoder are compared against a list of “active” device IDs that are defined within NovaStar. Those IDs received by the decoder that are not defined within NovaStar are considered to be “unknown” and may be the result of radio noise or problems with the telemetry system. The reception of “unknown” device reports for the month is summarized (Table 15).

Table 15. Summary of Unknown IDs

| Description | Concentrator | Legacy | A2 |
|--|--------------|---------|---------|
| Total number of unknown IDs (IDs without a device definition) | 217 | 292 | 0 |
| Total reports from unknown IDs | 699 | 717 | 0 |
| Unknown IDs with only a single received report (potential noise) | 150 | 239 | 0 |
| Total reports from all IDs – RecData Log entire month | 511,002 | 348,979 | 302,746 |
| Unknown reports as a fraction of total reports | 0.14% | 0.21% | 0% |

The total number of reports from unknown sensors is very small relative to the total reports received for the month. Shown below (Table 16) are the total reports received from unknown sensor IDs for each month of the year.

Table 16. Monthly Summary of Total Reports from Unknown IDs (Concentrator)

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|--------|-------|
| 2010 | 1,220 | 1,474 | 1,276 | 1,174 | 721 | 5,707 | 610 | 1,738 | 442 | 533 | 2,857 | 6,396 |
| 2011 | 1,231 | 2,165 | 3,065 | 1,254 | 2,051 | 439 | 489 | 456 | 191 | 683 | 747 | 861 |
| 2012 | 692 | 750 | 1,575 | 977 | 5,469 | 11,016 | 453 | 683 | 774 | 2,657 | 3,854 | 5,466 |
| 2013 | 4,265 | 994 | 1,100 | 2,589 | 3,623 | 6,973 | 5,230 | 1,070 | 4,429 | 781 | 13,459 | 1,213 |
| 2014 | 870 | 4,284 | 2,399 | 2,104 | 25,746 | 1,832 | 3,983 | 268 | 369 | 448 | 470 | 1,099 |
| 2015 | 542 | 9,137 | 1,524 | 1,007 | 946 | 699 | | | | | | |

The fraction of reports from unknown sensors relative to the total number of reports is shown below (Table 17).

Table 17. Monthly Percent of Unknown Sensor Reports (Concentrator)

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2010 | 0.42% | 0.56% | 0.38% | 0.32% | 0.20% | 1.61% | 0.17% | 0.49% | 0.13% | 0.16% | 0.93% | 1.88% |
| 2011 | 0.39% | 0.73% | 0.90% | 0.37% | 0.58% | 0.12% | 0.12% | 0.05% | 0.12% | 0.18% | 0.22% | 0.26% |
| 2012 | 0.30% | 0.25% | 0.43% | 0.26% | 1.37% | 2.74% | 0.11% | 0.18% | 0.20% | 0.72% | 1.15% | 1.62% |
| 2013 | 1.40% | 0.31% | 0.29% | 0.60% | 0.37% | 0.61% | 0.82% | 0.21% | 0.96% | 0.31% | 5.37% | 0.23% |
| 2014 | 0.14% | 0.94% | 0.40% | 0.34% | 3.95% | 0.34% | 0.66% | 0.03% | 0.03% | 0.07% | 0.11% | 0.26% |
| 2015 | 0.15% | 2.25% | 0.34% | 0.22% | 0.19% | 0.14% | | | | | | |

Any month shaded in yellow has an excessive number of reports from unknown sensors.

A number of “unknown” sensors had multiple reports, which may indicate the existence of a transmitter that is sending information on an ID that is not currently defined within NovaStar. The unknown IDs with multiple reports including the number of reports received by each are shown (Table 18).

Table 18. Reports Received by Unknown IDs

| Concentrator | | Legacy ALERT | | Comment |
|--------------|---------|--------------|---------|----------------------|
| Unknown ID | Reports | Unknown ID | Reports | |
| 2283 | 62 | 2283 | 60 | |
| 2274 | 55 | 2274 | 57 | Cub Creek below Blue |
| 623 | 54 | 623 | 55 | |
| 2272 | 51 | 2272 | 52 | Cub Creek below Blue |
| 2271 | 49 | 2271 | 51 | Cub Creek below Blue |
| 1430 | 25 | 1339 | 20 | |
| 1339 | 21 | 1430 | 20 | |

V. Sensors with Invalid Reports

The sensors below (Table 19 and Table 20) have the largest number of invalid decodes as determined by the validation process defined at the District NovaStar5 base station. These invalid reports may indicate poor radio paths (bit flip/contention errors/random decode) or validation criteria that do not match the physical installation at the site.

Table 19. Rain Sensors with the Most Invalid Reports

| Sensor ID | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Bear Creek @ Lowell (1530) | 5 | 6 | 2 | 1 | 15 | 9 | | | | | | |
| Pine Cliff Road (2810) | 4 | 5 | 6 | 4 | 2 | 7 | | | | | | |
| Porphory Mtn (4850) | 0 | 0 | 0 | 0 | 0 | 7 | | | | | | |
| East/West Trailhead (3050) | 0 | 0 | 0 | 0 | 0 | 5 | | | | | | |
| Haskins Gulch (2820) | 0 | 0 | 0 | 0 | 64 | 0 | | | | | | |
| Wx-West Creek (3020) | 0 | 0 | 10 | 4 | 13 | 1 | | | | | | |
| Wx-Castle Rock (2750) | 0 | 0 | 5 | 2 | 30 | 0 | | | | | | |
| A2-Newlin Gulch (3070) | 0 | 0 | 0 | 6 | 35 | 2 | | | | | | |

Table 20. Level Sensors with the Most Invalid Reports

| Sensor ID | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ferril Lake (1383) | 666 | 667 | 725 | 720 | 261 | 0 | | | | | | |
| Kelly Dam (413) | 0 | 0 | 0 | 0 | 61 | 70 | | | | | | |
| A2-Lena @ Nolte Pond (1023) | na | 545 | 745 | 738 | 0 | 0 | | | | | | |
| Piney at Liverpool (953) | 0 | 0 | 228 | 232 | 26 | 0 | | | | | | |
| Flying J (853) | 0 | 0 | 52 | 60 | 60 | 58 | | | | | | |
| Sanderson at Xavier (1343) | 0 | 0 | 31 | 7 | 15 | 26 | | | | | | |
| Little Narrows (4473) | 33 | 208 | 2 | 8 | 11 | 24 | | | | | | |
| SPR at Dartmouth (1629) | | | | 49 | 58 | 3 | | | | | | |
| Murphy Creek GC (873) | 0 | 0 | 0 | 0 | 36 | 1 | | | | | | |
| Marston Lake North (1523) | 0 | 0 | 0 | 0 | 20 | 10 | | | | | | |
| Bridge (4423) | 0 | 0 | 0 | 0 | 0 | 32 | | | | | | |
| SBC @ San Souci (4833) | 0 | 0 | 0 | 0 | 0 | 26 | | | | | | |
| Sand Creek Park (1803) | 0 | 0 | 0 | 0 | 0 | 23 | | | | | | |

VI. Rainfall Alarms and Intensity Analysis

The following rainfall rate alarms from the Urban Drainage and Flood Control District NovaStar 5.0 Web Server were identified this month. A total of 114 alarms were triggered this month and 43 total tweets went out.

| Sensor | Description | Alarm Type | Date |
|--------|--|---|----------------|
| 3030 | Bingham Lake Park Precipitation-DG | Douglas County 10 minute rainfall | 6/3/2015 18:07 |
| 3030 | Bingham Lake Park Precipitation-DG | Douglas County 1 hour-1 Inch rainfall | 6/3/2015 18:20 |
| 750 | Quincy Reservoir Precipitation | Plains 10 minute rainfall | 6/3/2015 19:51 |
| 750 | Quincy Reservoir Precipitation | Plains 1 hour rainfall | 6/3/2015 20:03 |
| 100110 | ETG @ Hampden Precipitation | Plains 10 minute rainfall | 6/3/2015 20:04 |
| 730 | No Name @ Quincy Precipitation-AR | Plains 10 minute rainfall | 6/3/2015 20:15 |
| 100110 | ETG @ Hampden Precipitation | Plains 1 hour rainfall | 6/3/2015 20:18 |
| 100110 | ETG @ Hampden Precipitation | Plains 10 minute rainfall | 6/3/2015 20:20 |
| 730 | No Name @ Quincy Precipitation-AR | Plains 1 hour rainfall | 6/3/2015 20:24 |
| 4520 | Eagle Ridge Precipitation-BO | Boulder County 1 hour rainfall | 6/4/2015 19:47 |
| 4520 | Eagle Ridge Precipitation-BO | Boulder County 10 minute rainfall | 6/4/2015 19:54 |
| 4290 | Red Hill Precipitation-BO | Boulder County 1 hour rainfall | 6/4/2015 20:26 |
| 4250 | Geer Canyon Precipitation-BO | Boulder County 1 hour rainfall | 6/4/2015 20:38 |
| 100 | Carr Street Precipitation-JF-Arvada | Jefferson County 10 minute rainfall | 6/4/2015 21:34 |
| 200 | Leyden Reservoir Precipitation-JF-Arvada | Jefferson County 10 minute rainfall | 6/4/2015 21:54 |
| 4160 | Sunshine Precipitation-BO | FMC-BA 0.25" in 10 Min Rainfall | 6/4/2015 21:55 |
| 220 | Upper Leyden Precipitation-JF | Jefferson County 10 minute rainfall | 6/4/2015 22:02 |
| 220 | Upper Leyden Precipitation-JF | Jefferson County 1 hour rainfall | 6/4/2015 22:05 |
| 220 | Upper Leyden Precipitation-JF | Jefferson County 10 minute rainfall | 6/4/2015 22:13 |
| 1460 | Urban Farm Precipitation | Plains 10 minute rainfall | 6/4/2015 22:34 |
| 1520 | Marston Lake North Precipitation | Plains 10 minute rainfall | 6/4/2015 22:58 |
| 1340 | Sanderson at Xavier Precipitation-DN | Plains 10 minute rainfall | 6/4/2015 23:01 |
| 1320 | SPR at 3rd Avenue Precipitation-DN | Plains 10 minute rainfall | 6/4/2015 23:11 |
| 1340 | Sanderson at Xavier Precipitation-DN | Plains 1 hour rainfall | 6/4/2015 23:11 |
| 2860 | Cherry Creek at Stroh Precipitation-DG | Douglas County 10 minute rainfall | 6/5/2015 12:45 |
| 2860 | Cherry Creek at Stroh Precipitation-DG | Douglas County 1 hour-1 Inch rainfall | 6/5/2015 12:50 |
| 3080 | Tallman Gulch at Tallman Park Precipitation-DG | Douglas County 10 minute rainfall | 6/5/2015 12:54 |
| 100100 | Blackstone Precipitation | Plains 10 minute rainfall | 6/5/2015 13:20 |
| 100100 | Blackstone Precipitation | Plains 1 hour rainfall | 6/5/2015 13:24 |
| 2870 | Cherry Creek at Cottonwood Park Precipitation-DG | Douglas County 10 minute rainfall | 6/5/2015 14:33 |
| 750 | Quincy Reservoir Precipitation | Plains 10 minute rainfall | 6/5/2015 14:39 |
| 950 | Piney at Liverpool Precipitation-AR | Plains 10 minute rainfall | 6/5/2015 14:41 |
| 2330 | Bear Creek at Morrison Precipitation-JF | Jefferson County 10 minute rainfall | 6/5/2015 20:32 |
| 1010 | Denver West Precipitation-JF | Jefferson County 10 minute rainfall | 6/5/2015 20:46 |
| 1530 | Bear Creek at Lowell Precipitation-AR | Plains 10 minute rainfall | 6/5/2015 20:55 |
| 1640 | SPR at Union Avenue Precipitation | Plains 10 minute rainfall | 6/5/2015 20:57 |
| 1500 | Powers Park Precipitation-AR | Plains 10 minute rainfall | 6/5/2015 21:00 |
| 1420 | Diamond Hill Precipitation | Plains 10 minute rainfall | 6/5/2015 21:01 |
| 2970 | Rampart Range Road Precipitation-DG | 2970 Rampart Range Road 0.2" in 30 Minutes Rainfall | 6/5/2015 21:15 |

| | | | |
|--------|---|---|-----------------|
| 100230 | A2-Havana Pond Precipitation | Plains 10 minute rainfall | 6/5/2015 21:20 |
| 1700 | Cherry Creek at Champa Precipitation-DN | Plains 10 minute rainfall | 6/6/2015 14:04 |
| 1420 | Diamond Hill Precipitation | Plains 10 minute rainfall | 6/6/2015 14:05 |
| 2970 | Rampart Range Road Precipitation-DG | 2970 Rampart Range Road 0.2" in 30 Minutes Rainfall | 6/6/2015 21:00 |
| 1360 | Denver Zoo Precipitation-DN | Plains 10 minute rainfall | 6/7/2015 18:03 |
| 1800 | Sand Creek Park Precipitation-AD | Plains 10 minute rainfall | 6/7/2015 18:23 |
| 1460 | Urban Farm Precipitation | Plains 10 minute rainfall | 6/7/2015 18:23 |
| 1460 | Urban Farm Precipitation | Plains 1 hour rainfall | 6/7/2015 18:25 |
| 1800 | Sand Creek Park Precipitation-AD | Plains 1 hour rainfall | 6/7/2015 18:29 |
| 1800 | Sand Creek Park Precipitation-AD | Plains 10 minute rainfall | 6/7/2015 18:34 |
| 100230 | A2-Havana Pond Precipitation | Plains 1 hour rainfall | 6/7/2015 19:04 |
| 2810 | Pine Cliff Road Precipitation-DG | Douglas County 10 minute rainfall | 6/10/2015 16:09 |
| 2750 | Castle Rock Precipitation-DG | Douglas County 10 minute rainfall | 6/10/2015 16:21 |
| 2970 | Rampart Range Road Precipitation-DG | 2970 Rampart Range Road 0.2" in 30 Minutes Rainfall | 6/10/2015 16:45 |
| 2970 | Rampart Range Road Precipitation-DG | 2970 Rampart Range Road 0.4" in 1 Hour Rainfall | 6/10/2015 16:45 |
| 4820 | Doudy Draw Precipitation-BO | Boulder County 10 minute rainfall | 6/11/2015 15:58 |
| 4820 | Doudy Draw Precipitation-BO | Boulder County 1 hour rainfall | 6/11/2015 16:04 |
| 2870 | Cherry Creek at Cottonwood Park Precipitation-DG | Douglas County 10 minute rainfall | 6/11/2015 16:45 |
| 940 | Sampson Gulch Precipitation-AR | Plains 10 minute rainfall | 6/11/2015 16:50 |
| 940 | Sampson Gulch Precipitation-AR | Plains 1 hour rainfall | 6/11/2015 16:56 |
| 940 | Sampson Gulch Precipitation-AR | Plains 10 minute rainfall | 6/11/2015 17:01 |
| 950 | Piney at Liverpool Precipitation-AR | Plains 1 hour rainfall | 6/11/2015 17:10 |
| 950 | Piney at Liverpool Precipitation-AR | Plains 10 minute rainfall | 6/11/2015 17:10 |
| 2820 | East Plum Creek at Haskins Gulch Precipitation-DG | Douglas County 10 minute rainfall | 6/11/2015 17:19 |
| 2820 | East Plum Creek at Haskins Gulch Precipitation-DG | Douglas County 1 hour-1 Inch rainfall | 6/11/2015 17:23 |
| 2850 | CC blw Bayou Gulch Precipitation-DG | Douglas County 10 minute rainfall | 6/11/2015 17:30 |
| 2820 | East Plum Creek at Haskins Gulch Precipitation-DG | Douglas County 10 minute rainfall | 6/11/2015 17:30 |
| 900 | Aurora Reservoir Precipitation | Plains 1 hour rainfall | 6/11/2015 17:43 |
| 2850 | CC blw Bayou Gulch Precipitation-DG | Douglas County 1 hour-1 Inch rainfall | 6/11/2015 17:48 |
| 2970 | Rampart Range Road Precipitation-DG | 2970 Rampart Range Road 0.2" in 30 Minutes Rainfall | 6/11/2015 18:00 |
| 2970 | Rampart Range Road Precipitation-DG | 2970 Rampart Range Road 0.4" in 1 Hour Rainfall | 6/11/2015 18:15 |
| 1640 | SPR at Union Avenue Precipitation | Plains 10 minute rainfall | 6/11/2015 18:31 |
| 1640 | SPR at Union Avenue Precipitation | Plains 1 hour rainfall | 6/11/2015 18:44 |
| 1500 | Powers Park Precipitation-AR | Plains 1 hour rainfall | 6/11/2015 18:53 |
| 610 | Harvard Gulch @ Jackson Precipitation-DN | Plains 10 minute rainfall | 6/11/2015 18:59 |
| 620 | Quincy/Highline Precipitation-AR | Plains 1 hour rainfall | 6/11/2015 19:08 |
| 610 | Harvard Gulch @ Jackson Precipitation-DN | Plains 1 hour rainfall | 6/11/2015 19:11 |
| 600 | Harvard Gulch Park Precipitation-DN | Plains 1 hour rainfall | 6/11/2015 19:18 |
| 640 | Goldsmith @ Eastman Precipitation-DN | Plains 1 hour rainfall | 6/11/2015 19:39 |
| 2970 | Rampart Range Road Precipitation-DG | 2970 Rampart Range Road 0.2" in 30 Minutes Rainfall | 6/12/2015 7:30 |
| 1360 | Denver Zoo Precipitation-DN | Plains 10 minute rainfall | 6/24/2015 16:55 |
| 600 | Harvard Gulch Park Precipitation-DN | Plains 10 minute rainfall | 6/24/2015 16:56 |
| 530 | Fire Station #19 Precipitation-DN | Plains 10 minute rainfall | 6/24/2015 16:58 |

| | | | |
|------|---|--|-----------------|
| 220 | Upper Leyden Precipitation-JF | Tweet Jefferson County Heavy Rain 0.5"-10min | 6/4/2015 22:13 |
| 2860 | Cherry Creek at Stroh Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/5/2015 12:45 |
| 2860 | Cherry Creek at Stroh Precipitation-DG | Tweet Douglas County Heavy Rain 1"-1hour | 6/5/2015 12:50 |
| 3080 | Tallman Gulch at Tallman Park Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/5/2015 12:54 |
| 2870 | Cherry Creek at Cottonwood Park Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/5/2015 14:33 |
| 950 | Piney at Liverpool Precipitation-AR | Tweet Arapahoe County Heavy Rain 0.5"-10min | 6/5/2015 14:41 |
| 2330 | Bear Creek at Morrison Precipitation-JF | Tweet Jefferson County Heavy Rain 0.5"-10min | 6/5/2015 20:32 |
| 1010 | Denver West Precipitation-JF | Tweet Jefferson County Heavy Rain 0.5"-10min | 6/5/2015 20:46 |
| 1530 | Bear Creek at Lowell Precipitation-AR | Tweet Arapahoe County Heavy Rain 0.5"-10min | 6/5/2015 20:55 |
| 1500 | Powers Park Precipitation-AR | Tweet Arapahoe County Heavy Rain 0.5"-10min | 6/5/2015 21:00 |
| 2810 | Pine Cliff Road Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/10/2015 16:09 |
| 2750 | Castle Rock Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/10/2015 16:21 |
| 4820 | Doudy Draw Precipitation-BO | Tweet Boulder County Heavy Rain 0.5"-10min | 6/11/2015 15:58 |
| 4820 | Doudy Draw Precipitation-BO | Tweet Boulder County Heavy Rain 1"-1hour | 6/11/2015 16:04 |
| 2870 | Cherry Creek at Cottonwood Park Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/11/2015 16:45 |
| 940 | Sampson Gulch Precipitation-AR | Tweet Arapahoe County Heavy Rain 0.5"-10min | 6/11/2015 16:50 |
| 940 | Sampson Gulch Precipitation-AR | Tweet Arapahoe County Heavy Rain 1"-1hour | 6/11/2015 16:56 |
| 940 | Sampson Gulch Precipitation-AR | Tweet Arapahoe County Heavy Rain 0.5"-10min | 6/11/2015 17:01 |
| 950 | Piney at Liverpool Precipitation-AR | Tweet Arapahoe County Heavy Rain 0.5"-10min | 6/11/2015 17:10 |
| 950 | Piney at Liverpool Precipitation-AR | Tweet Arapahoe County Heavy Rain 1"-1hour | 6/11/2015 17:10 |
| 2820 | East Plum Creek at Haskins Gulch Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/11/2015 17:19 |
| 2820 | East Plum Creek at Haskins Gulch Precipitation-DG | Tweet Douglas County Heavy Rain 1"-1hour | 6/11/2015 17:23 |
| 2850 | CC blw Bayou Gulch Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/11/2015 17:30 |
| 2820 | East Plum Creek at Haskins Gulch Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/11/2015 17:30 |
| 2850 | CC blw Bayou Gulch Precipitation-DG | Tweet Douglas County Heavy Rain 1"-1hour | 6/11/2015 17:48 |
| 1500 | Powers Park Precipitation-AR | Tweet Arapahoe County Heavy Rain 1"-1hour | 6/11/2015 18:53 |
| 620 | Quincy/Highline Precipitation-AR | Tweet Arapahoe County Heavy Rain 1"-1hour | 6/11/2015 19:08 |
| 1530 | Bear Creek at Lowell Precipitation-AR | Tweet Arapahoe County Heavy Rain 0.5"-10min | 6/24/2015 17:16 |
| 4710 | Ward C-1 Precipitation-BO | Tweet Boulder County Heavy Rain 0.5"-10min | 6/24/2015 18:45 |
| 2900 | Russellville Gulch Precipitation-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/25/2015 17:35 |
| 3040 | East Cherry Creek at Russellville Road Precip-DG | Tweet Douglas County Heavy Rain 0.5"-10min | 6/25/2015 17:53 |
| 2900 | Russellville Gulch Precipitation-DG | Tweet Douglas County Heavy Rain 1"-1hour | 6/25/2015 18:01 |

General System Analysis

Database Name

P:\A207-UDFCD-Data-Analysis\2015\06-2015\Novastar_extract_2015June.mdb

Summarize

First Date in Database

5/31/15 11:59 PM

Total Days

30.0

Last Date in Database

6/30/15 11:59 PM

Total Hours

720.0

Total Records Analyzed

511,002

| Records by Group | Concentrator | Percent | Legacy | Percent | ALERT2 | Percent |
|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Wind Data | 159,655 | 31.24% | 94,410 | 27.05% | 75,641 | 24.98% |
| Water Level | 99,319 | 19.44% | 95,990 | 27.51% | 37,403 | 12.35% |
| Temperature | 69,859 | 13.67% | 37,935 | 10.87% | 34,902 | 11.53% |
| Relative Humidity | 64,774 | 12.68% | 37,759 | 10.82% | 34,310 | 11.33% |
| Barometric Pressure | 34,984 | 6.85% | 20,483 | 5.87% | 314 | 0.10% |
| Battery Voltage | 25,455 | 4.98% | 13,428 | 3.85% | 27,146 | 8.97% |
| Precipitation | 24,224 | 4.74% | 18,964 | 5.43% | 24,224 | 8.00% |
| Solar Radiation | 10,126 | 1.98% | 10,442 | 2.99% | 0 | 0.00% |
| Fuel Temperature | 5,691 | 1.11% | 5,701 | 1.63% | 0 | 0.00% |
| Fuel Moisture | 5,661 | 1.11% | 5,653 | 1.62% | 0 | 0.00% |
| Wind Direction | 3,844 | 0.75% | 0 | 0.00% | 3,198 | 1.06% |
| Soil Moisture | 2,541 | 0.50% | 2,715 | 0.78% | 0 | 0.00% |
| Repeater Status Report | 1,876 | 0.37% | 2,823 | 0.81% | 0 | 0.00% |
| ET-Hourly | 709 | 0.14% | 707 | 0.20% | 0 | 0.00% |
| Unknown | 699 | 0.14% | 717 | 0.21% | 0 | 0.00% |
| Hayman Battery | 609 | 0.12% | 0 | 0.00% | 0 | 0.00% |
| 12Hr Status Report | 377 | 0.07% | 376 | 0.11% | 2,741 | 0.91% |
| Not Used | 284 | 0.06% | 274 | 0.08% | 757 | 0.25% |
| GPS Lock | 203 | 0.04% | 0 | 0.00% | 9,637 | 3.18% |
| Handar 585 ALARM Status | 51 | 0.01% | 56 | 0.02% | 0 | 0.00% |
| Repeater Pass List | 31 | 0.01% | 515 | 0.15% | 0 | 0.00% |
| ET-Daily | 30 | 0.01% | 30 | 0.01% | 0 | 0.00% |
| ALERT/A2 Testing | 0 | 0.00% | 1 | 0.00% | 0 | 0.00% |
| Wind Gust | 0 | 0.00% | 0 | 0.00% | 33,885 | 11.19% |
| Wind Speed | 0 | 0.00% | 0 | 0.00% | 321 | 0.11% |
| Dew Point Temperature | 0 | 0.00% | 0 | 0.00% | 8,486 | 2.80% |
| Flasher Status | 0 | 0.00% | 0 | 0.00% | 1,305 | 0.43% |
| Wind Chill | 0 | 0.00% | 0 | 0.00% | 8,476 | 2.80% |
| Total | 511,002 | 100.00% | 348,979 | 100.00% | 302,746 | 100.00% |

Traffic Loading Summary

| | Concentrator | | Legacy | | ALERT2 | |
|------------------------|--------------|-----------------|---------|-----------------|---------|-----------------|
| Alert Reports | 511,002 | | 348,979 | | 302,746 | |
| Average Daily Traffic | 16,484 | | 11,633 | | 10,092 | |
| Average Hourly Traffic | 687 | | 485 | | 420 | |
| Median Hourly Traffic | 678 | hour beginning | 458 | hour beginning | 414 | hour beginning |
| Peak Hourly Traffic | 1,871 | Jun 11, 7:00 PM | 1,504 | Jun 11, 7:00 PM | 756 | Jun 24, 5:00 PM |
| 2nd Max | 1,770 | Jun 11, 8:00 PM | 1,419 | Jun 11, 8:00 PM | 749 | Jun 5, 9:00 PM |
| 3rd Max | 1,553 | | 1,238 | | 657 | Jun 11, 8:00 PM |
| 4th Max | 1,541 | Jun 11, 6:00 PM | 1,224 | Jun 24, 5:00 PM | 655 | Jun 7, 6:00 PM |
| 5th Max | 1,537 | Jun 24, 5:00 PM | 1,134 | Jun 11, 6:00 PM | 644 | Jun 11, 7:00 PM |

Rain Timer Performance

Analyze Rain Sensors

| Rain Sensors | Description | Rcv | Timer | Exp | Performance | Comment |
|--------------|-------------------------------------|-----|-------|-----|-------------|-----------------------------|
| 2800 | Columbine Open Space | 5 | 0:04 | 62 | 8% | Out of Service |
| 3070 | A2-Newlin Gulch Precip | 118 | 5:58 | 720 | 16% | Out of Service |
| 430 | Utah Park | 20 | 21:54 | 62 | 32% | |
| 100270 | A2-WestCreek (Hayman) - Precip | 274 | | 720 | 38% | New Install - Partial Month |
| 100260 | A2-Trumbull (Hayman) - Precip | 24 | 5:25 | 62 | 39% | New Install - Partial Month |
| 2330 | Morrison | 29 | 17:34 | 62 | 47% | |
| 3010 | WX-EPC at Hwy 105 | 33 | 13:33 | 62 | 53% | |
| 2360 | Indian Hills | 34 | 16:30 | 62 | 55% | |
| 310 | Guy Hill Ranch | 39 | 14:57 | 62 | 63% | |
| 1660 | SPR at Henderson | 42 | 15:16 | 62 | 68% | |
| 2280 | Kinney Peak | 43 | 14:25 | 62 | 69% | |
| 1710 | Shop Creek | 43 | 13:14 | 62 | 69% | |
| 4870 | SBC @ SB Road | 45 | 14:20 | 62 | 73% | |
| 2230 | Bear Cr below Cub | 46 | 14:20 | 62 | 74% | |
| 4270 | Cannon Mountain | 46 | 12:43 | 62 | 74% | |
| 2320 | Choke Cherry Resvr | 46 | 14:23 | 62 | 74% | |
| 2790 | Wx-W. Cherry Creek | 46 | 14:32 | 62 | 74% | |
| 4330 | Hansen Rain | 47 | 13:27 | 62 | 76% | |
| 4510 | Pinewood Springs | 48 | 12:53 | 62 | 77% | |
| 2850 | Cherry Cr bl Bayou Glch | 50 | 12:20 | 62 | 81% | |
| 2350 | Idledale | 50 | 11:57 | 62 | 81% | |
| 4850 | Porphory Mtn | 50 | 13:07 | 62 | 81% | |
| 4490 | Apple Valley | 51 | 13:08 | 62 | 82% | |
| 2270 | Cub Cr below Blue | 51 | 12:34 | 62 | 82% | |
| 1720 | Cherry Cr @ Steele | 52 | 12:38 | 62 | 84% | |
| 1550 | Lakewood CC | 52 | 12:50 | 62 | 84% | |
| 150 | Nott Creek | 52 | 12:52 | 62 | 84% | |
| 1620 | Slaughterhouse Glch | 52 | 12:33 | 62 | 84% | |
| 220 | Upper Leyden | 52 | 12:16 | 62 | 84% | |
| 2240 | Cold Sprg Glch conf | 53 | 12:16 | 62 | 85% | |
| 4010 | Cresent | 53 | 12:14 | 62 | 85% | |
| 1010 | Denver West | 53 | 12:31 | 62 | 85% | |
| 1060 | Heritage Square | 53 | 13:00 | 62 | 85% | |
| 2370 | Red Rocks Park | 53 | 12:56 | 62 | 85% | |
| 830 | Side Creek Park | 53 | 12:34 | 62 | 85% | |
| 1520 | Wx-Marston Lake North | 53 | 12:00 | 62 | 85% | |
| 100140 | A2-Upper Sellers Gulch Precip | 625 | | 720 | 87% | |
| 1530 | Bear Creek @ Lowell | 54 | 12:35 | 62 | 87% | |
| 1700 | Cherry Cr @ Champa | 54 | 12:50 | 62 | 87% | |
| 1360 | Denver Zoo | 54 | 12:40 | 62 | 87% | |
| 4220 | Fling's | 54 | 12:50 | 62 | 87% | |
| 200 | Leyden Reservoir | 54 | 12:13 | 62 | 87% | |
| 620 | Quincy/Highline | 54 | 12:36 | 62 | 87% | |
| 1480 | Third Creek at DIA | 54 | 12:34 | 62 | 87% | |
| 4790 | Wx-Button Rock | 54 | 12:16 | 62 | 87% | |
| 100150 | A2-Sellers Gulch at Haystack Precip | 634 | | 720 | 88% | |
| 720 | Confluence Pond | 55 | 11:58 | 62 | 89% | |
| 2980 | Dakan Rd | 55 | 12:47 | 62 | 89% | |
| 2910 | East Cherry Cr-Douglas | 55 | 12:34 | 62 | 89% | |
| 820 | ETG @ Buckley | 55 | 11:57 | 62 | 89% | |
| 4250 | Geer Canyon | 55 | 12:48 | 62 | 89% | |
| 810 | Granby Ditch @ 6th | 55 | 12:32 | 62 | 89% | |
| 1300 | Hidden Lake | 55 | 12:16 | 62 | 89% | |
| 4060 | Lakeshore | 55 | 12:29 | 62 | 89% | |
| 210 | Leyden Confluence | 55 | 11:57 | 62 | 89% | |
| 110 | Ralston Reservoir | 55 | 12:13 | 62 | 89% | |
| 1800 | Sand Creek Park | 55 | 12:33 | 62 | 89% | |
| 330 | Van Bibber @ Hwy 93 | 55 | 12:30 | 62 | 89% | |
| 4050 | Walker Ranch | 55 | 11:57 | 62 | 89% | |
| 2940 | Willow Creek - DougCnty | 55 | 12:16 | 62 | 89% | |
| 3030 | WX-Bingham Lake Park | 55 | 12:13 | 62 | 89% | |
| 1440 | Wx-Elbert | 55 | 12:16 | 62 | 89% | |
| 4110 | Betasso | 56 | 12:14 | 62 | 90% | |
| 1350 | Chatfield COE | 56 | 12:15 | 62 | 90% | |
| 2870 | Cottonwood (Apache) | 56 | 12:00 | 62 | 90% | |
| 2340 | El Rancho | 56 | 12:33 | 62 | 90% | |
| 420 | Expo Park | 56 | 12:35 | 62 | 90% | |
| 4860 | Fairview Peak | 56 | 12:19 | 62 | 90% | |
| 4180 | Gold Lake | 56 | 12:16 | 62 | 90% | |
| 2820 | Haskins Gulch Conf | 56 | 12:31 | 62 | 90% | |
| 650 | Iliff Pond | 56 | 12:14 | 62 | 90% | |

| | | | | | |
|------|-------------------------------|----|-------|----|-----|
| 2960 | Indian Creek | 56 | 12:36 | 62 | 90% |
| 1050 | Jeffco Fairgrounds | 56 | 12:14 | 62 | 90% |
| 1040 | Lena @ U.S. Hwy 6 | 56 | 12:15 | 62 | 90% |
| 540 | Parker/Mississippi | 56 | 12:16 | 62 | 90% |
| 1500 | Powers Park | 56 | 12:18 | 62 | 90% |
| 2250 | Rosedale | 56 | 11:57 | 62 | 90% |
| 2890 | Spruce Mt - Douglas | 56 | 12:45 | 62 | 90% |
| 630 | Temple Pond at DTC | 56 | 12:39 | 62 | 90% |
| 510 | Virginia Court | 56 | 12:14 | 62 | 90% |
| 120 | West Woods | 56 | 12:29 | 62 | 90% |
| 940 | Aurora Regional Pond | 57 | 12:33 | 62 | 92% |
| 4070 | Bear Peak | 57 | 12:29 | 62 | 92% |
| 4300 | Big Elk Park | 57 | 11:57 | 62 | 92% |
| 4550 | Boulder Jail | 57 | 11:57 | 62 | 92% |
| 1200 | Broomfield 3207 | 57 | 12:00 | 62 | 92% |
| 4350 | Conifer Hill | 57 | 11:57 | 62 | 92% |
| 4820 | Doudy Draw | 57 | 11:57 | 62 | 92% |
| 1600 | Englewood Dam | 57 | 12:12 | 62 | 92% |
| 530 | Fire Station #19 | 57 | 12:15 | 62 | 92% |
| 440 | Fire Station #7 | 57 | 11:57 | 62 | 92% |
| 840 | Fire Station 12 | 57 | 12:16 | 62 | 92% |
| 2310 | Genesee Village | 57 | 12:14 | 62 | 92% |
| 610 | Harvard @ Jackson | 57 | 11:57 | 62 | 92% |
| 710 | Horseshoe Park Drop | 57 | 12:15 | 62 | 92% |
| 4310 | Johnny Park | 57 | 11:57 | 62 | 92% |
| 4360 | Justice Center | 57 | 12:11 | 62 | 92% |
| 410 | Kelly Dam | 57 | 11:57 | 62 | 92% |
| 4200 | Lazy Acres | 57 | 11:57 | 62 | 92% |
| 2810 | Pine Cliff Road | 57 | 12:15 | 62 | 92% |
| 970 | Pump Sta 3 | 57 | 12:00 | 62 | 92% |
| 4290 | Red Hill | 57 | 12:31 | 62 | 92% |
| 4340 | Riverside | 57 | 12:14 | 62 | 92% |
| 2900 | Russelville Gulch-Douglas | 57 | 12:15 | 62 | 92% |
| 1640 | SPR at Union Ave. | 57 | 11:57 | 62 | 92% |
| 700 | Toll Gate @ 6th | 57 | 12:16 | 62 | 92% |
| 1400 | Upper Sloan Det. | 57 | 12:30 | 62 | 92% |
| 4530 | Winiger Ridge | 57 | 12:14 | 62 | 92% |
| 920 | Wx-Aurora Town Hall | 57 | 12:18 | 62 | 92% |
| 140 | Wx-Blue Mountain | 57 | 12:15 | 62 | 92% |
| 1920 | Wx-Brighton | 57 | 12:00 | 62 | 92% |
| 2750 | Wx-Castle Rock | 57 | 12:16 | 62 | 92% |
| 1420 | Wx-Diamond Hill | 57 | 12:16 | 62 | 92% |
| 2710 | Wx-Highlands Ranch WTP | 57 | 12:19 | 62 | 92% |
| 4750 | Wx-Louisville Lake | 57 | 12:15 | 62 | 92% |
| 3090 | A2-Highland Heritage Park | 58 | 12:00 | 62 | 94% |
| 2950 | DC Public Works | 58 | 12:00 | 62 | 94% |
| 4520 | Eagle Ridge | 58 | 12:00 | 62 | 94% |
| 3050 | East/West Trailhead | 58 | 12:00 | 62 | 94% |
| 4100 | Filter Plant | 58 | 11:57 | 62 | 94% |
| 850 | Flying J | 58 | 12:17 | 62 | 94% |
| 4230 | Golden Age | 58 | 11:57 | 62 | 94% |
| 2880 | Happy Canyon at N Surrey Dr | 58 | 11:56 | 62 | 94% |
| 600 | Harvard Gulch Park | 58 | 11:57 | 62 | 94% |
| 520 | Jewell Detention | 58 | 11:57 | 62 | 94% |
| 1310 | LDC at 64th | 58 | 11:57 | 62 | 94% |
| 4040 | Martin Gulch | 58 | 12:13 | 62 | 94% |
| 760 | Mission Viejo Park | 58 | 11:57 | 62 | 94% |
| 1900 | Niver Detention | 58 | 12:16 | 62 | 94% |
| 730 | No Name @ Quincy | 58 | 11:57 | 62 | 94% |
| 1030 | NREL/S. Table Mtn. | 58 | 12:13 | 62 | 94% |
| 4030 | Red Garden | 58 | 11:59 | 62 | 94% |
| 4020 | Rio Grande | 58 | 11:57 | 62 | 94% |
| 800 | Sable Ditch @ 18th | 58 | 12:14 | 62 | 94% |
| 4810 | Shanahan Ridge | 58 | 12:12 | 62 | 94% |
| 1320 | SPR at 3rd Ave | 58 | 11:57 | 62 | 94% |
| 4570 | St. Antons | 58 | 11:59 | 62 | 94% |
| 4240 | Sunset | 58 | 12:13 | 62 | 94% |
| 4130 | Swiss Peaks | 58 | 12:09 | 62 | 94% |
| 4260 | Taylor Mountain | 58 | 11:57 | 62 | 94% |
| 4080 | Twin Sisters | 58 | 12:13 | 62 | 94% |
| 300 | Van Bibber Park | 58 | 12:14 | 62 | 94% |
| 2920 | West Cherry Head-Douglas Cnty | 58 | 12:15 | 62 | 94% |
| 1370 | West Metro FS13 | 58 | 12:12 | 62 | 94% |
| 4770 | Wx-Cal-Wood Ranch | 58 | 12:00 | 62 | 94% |
| 1460 | Wx-Urban Farm | 58 | 12:16 | 62 | 94% |
| 3020 | Wx-West Creek WX | 58 | 12:00 | 62 | 94% |

| | | | | | |
|--------|--|------|-------|------|------|
| 100100 | A2-Blackstone Precip | 59 | 12:00 | 62 | 95% |
| 100110 | A2-ETG @ Hampden Precip | 59 | 12:00 | 62 | 95% |
| 2260 | Brook Forest | 59 | 11:57 | 62 | 95% |
| 3060 | Fire Sta 47 | 59 | 12:00 | 62 | 95% |
| 4150 | Gold Hill | 59 | 11:57 | 62 | 95% |
| 1110 | Gunbarrel | 59 | 11:57 | 62 | 95% |
| 500 | Havana Park | 59 | 11:57 | 62 | 95% |
| 4320 | Lee Hill Rain 2012 | 59 | 11:57 | 62 | 95% |
| 4470 | Little Narrows | 59 | 10:19 | 62 | 95% |
| 4140 | Logan Mill | 59 | 11:57 | 62 | 95% |
| 1100 | Louisville Rec Ctr | 59 | 11:59 | 62 | 95% |
| 4090 | Magnolia | 59 | 11:58 | 62 | 95% |
| 4170 | Pine Brook | 59 | 11:57 | 62 | 95% |
| 4830 | SBC @ San Souci | 59 | 11:57 | 62 | 95% |
| 4840 | SBC@S Boulder Ditch | 59 | 11:57 | 62 | 95% |
| 4190 | Slaughterhouse | 59 | 12:14 | 62 | 95% |
| 320 | Sports Complex | 59 | 11:57 | 62 | 95% |
| 2840 | Sulphur Gulch | 59 | 11:59 | 62 | 95% |
| 4160 | Sunshine | 59 | 11:57 | 62 | 95% |
| 3080 | Tallman Gulch | 59 | 11:43 | 62 | 95% |
| 4880 | Whispering Pines | 59 | 11:57 | 62 | 95% |
| 900 | Wx-Aurora Reservoir | 59 | 12:00 | 62 | 95% |
| 1570 | Wx-Brighton Ditch | 59 | 12:00 | 62 | 95% |
| 2930 | Wx-Spring Valley Rd-DougCnty | 59 | 11:15 | 62 | 95% |
| 4730 | Wx-Sugarloaf | 59 | 12:00 | 62 | 95% |
| 4710 | Wx-Ward C-1 | 59 | 12:01 | 62 | 95% |
| 3040 | CC @ Russelville Road Precip | 60 | 11:50 | 62 | 97% |
| 2860 | CC at Stroh Rd | 60 | 11:57 | 62 | 97% |
| 950 | Piney at Liverpool | 60 | 11:41 | 62 | 97% |
| 2210 | Wx-Hiwan G.C. | 60 | 11:42 | 62 | 97% |
| 750 | Wx-Quincy Reservoir | 60 | 11:57 | 62 | 97% |
| 640 | Goldsmith @ Eastman | 61 | 11:18 | 62 | 98% |
| 2730 | Wx-Salisbury Park | 61 | 11:44 | 62 | 98% |
| 2990 | Wx-Tomah Rd-DougCnty | 61 | 11:31 | 62 | 98% |
| 100 | A2-Carr Street | 714 | | 720 | 99% |
| 870 | A2-Murphy Creek GC | 718 | | 720 | 100% |
| 100160 | A2-Sand Creek at Colfax Precip | 718 | | 720 | 100% |
| 100230 | A2-Havana Pond Precip | 719 | | 720 | 100% |
| 1000 | A2-Maple Grove Resv. | 719 | | 720 | 100% |
| 100210 | A2-South St Vrain at Berry Rain (not used) | 719 | | 720 | 100% |
| 100240 | A2-Westerly Cr Dam Precip | 719 | | 720 | 100% |
| 1340 | Sanderson at Xavier | 76 | 8:27 | 62 | 123% |
| 6601 | A2-Magnolia WX-Precip | 89 | 8:00 | 62 | 144% |
| 2970 | Rampart Range Rd-Satellite | 238 | | 238 | 100% |
| 5720 | Four Mile Creek | 52 | 13:50 | 62 | 84% |
| 5730 | West Creek | 59 | 12:00 | 62 | 95% |
| 5740 | Trail Creek | 56 | 12:16 | 62 | 90% |
| 5810 | Stump Bump | 59 | 12:00 | 62 | 95% |
| 5860 | Cedar Mountain | 56 | 12:33 | 62 | 90% |
| 5880 | Hackett Mountain | 57 | 12:16 | 62 | 92% |
| 5900 | Horse Creek-Satellite | 2410 | | 2410 | 100% |
| 5940 | Log Jumper | 46 | 14:40 | 62 | 74% |

| Rain Event Performance | | Reports Received | Reports Received | 14,511 | Analyze Rain Sensors | | | | | | 0 | <<show stations with zero rain (1=yes, 0=no) | | | | | |
|----------------------------|--------|------------------|------------------|--------|----------------------|--------|--------|--------|---------|-----|-----|--|------|---------|-----------------|----------|--|
| | | Systemwide Avg | Total Tips | 15,821 | | | | | | | | | | | | | |
| | | 91.72% | Data Loss | 8.28% | | | | | | | | | | | | | |
| Description | Sensor | Performance | 1-tips | 2-tips | 3-tips | 4-tips | 5-tips | 6-tips | >6-tips | Rcv | Exp | Miss | Hold | Bucket | | | |
| Utah Park | 430 | 58% | 47 | 14 | 5 | 2 | 0 | 1 | 1 | 69 | 120 | 35 | 0 | 0.03937 | | | |
| Little Narrows | 4470 | 58% | 21 | 5 | 3 | 0 | 1 | 0 | 1 | 30 | 52 | 15 | 0 | 0.03937 | Mean | 86.92857 | |
| Morrison | 2330 | 58% | 30 | 11 | 7 | 1 | 0 | 0 | 1 | 49 | 84 | 28 | 0 | 0.03937 | Median | 81.5 | |
| Rampart Range Rd-Satellite | 2970 | 69% | 52 | 4 | 5 | 2 | 0 | 0 | 1 | 63 | 91 | 20 | 0 | 0.03937 | St. Dev | 37.69301 | |
| Bear Cr below Cub | 2230 | 78% | 46 | 4 | 2 | 0 | 0 | 0 | 1 | 52 | 67 | 8 | 0 | 0.03937 | Mean plus 3 SD | 200.0076 | |
| Indian Hills | 2360 | 78% | 34 | 6 | 3 | 0 | 0 | 0 | 0 | 43 | 55 | 12 | 0 | 0.03937 | Min | 2 | |
| Wx-W. Cherry Creek | 2790 | 78% | 34 | 8 | 0 | 0 | 1 | 0 | 0 | 43 | 55 | 12 | 0 | 0.03937 | Max | 206 | |
| Toll Gate @ 6th | 700 | 79% | 33 | 5 | 3 | 0 | 0 | 0 | 0 | 41 | 52 | 11 | 0 | 0.03937 | Mean minis 2 SD | 11.54256 | |
| Wx-Button Rock | 4790 | 80% | 45 | 10 | 2 | 0 | 0 | 0 | 0 | 57 | 71 | 14 | 0 | 0.03937 | | | |
| Pinewood Springs | 4510 | 80% | 34 | 4 | 3 | 0 | 0 | 0 | 0 | 41 | 51 | 10 | 0 | 0.03937 | | | |
| Cherry Cr bl Bayou Glch | 2850 | 81% | 98 | 13 | 0 | 1 | 0 | 0 | 1 | 112 | 139 | 16 | 0 | 0.03937 | | | |
| Red Hill | 4290 | 81% | 64 | 12 | 1 | 0 | 1 | 0 | 0 | 78 | 96 | 18 | 0 | 0.03937 | | | |
| Dakan Rd | 2980 | 83% | 40 | 8 | 1 | 0 | 0 | 0 | 0 | 49 | 59 | 10 | 0 | 0.03937 | | | |
| Chatfield COE | 1350 | 84% | 62 | 10 | 2 | 0 | 0 | 0 | 0 | 74 | 88 | 14 | 0 | 0.03937 | | | |
| Sports Complex | 320 | 84% | 67 | 11 | 2 | 0 | 0 | 0 | 0 | 80 | 95 | 15 | 0 | 0.03937 | | | |
| Choke Cherry Resvr | 2320 | 84% | 59 | 9 | 2 | 0 | 0 | 0 | 0 | 70 | 83 | 13 | 0 | 0.03937 | | | |
| Gold Lake | 4180 | 84% | 31 | 7 | 0 | 0 | 0 | 0 | 0 | 38 | 45 | 7 | 0 | 0.03937 | | | |
| SBC @ SB Road | 4870 | 85% | 57 | 9 | 0 | 1 | 0 | 0 | 0 | 67 | 79 | 12 | 0 | 0.03937 | | | |
| Parker/Mississippi | 540 | 85% | 95 | 10 | 3 | 1 | 0 | 0 | 0 | 109 | 128 | 19 | 1 | 0.03937 | | | |
| NREL/S. Table Mtn. | 1030 | 85% | 45 | 5 | 2 | 0 | 0 | 0 | 0 | 52 | 61 | 9 | 0 | 0.03937 | | | |
| Cherry Cr @ Champa | 1700 | 86% | 117 | 17 | 1 | 0 | 1 | 0 | 0 | 136 | 159 | 23 | 0 | 0.03937 | | | |
| Cannon Mountain | 4270 | 86% | 61 | 2 | 2 | 0 | 0 | 1 | 0 | 66 | 77 | 11 | 0 | 0.03937 | | | |
| A2-Newlin Gulch Precip | 3070 | 86% | 52 | 1 | 0 | 1 | 0 | 1 | 1 | 55 | 64 | 9 | 0 | 0.03937 | | | |
| Kelly Dam | 410 | 86% | 104 | 18 | 1 | 0 | 0 | 0 | 0 | 123 | 143 | 20 | 0 | 0.03937 | | | |
| SPR at Union Ave. | 1640 | 86% | 100 | 17 | 1 | 0 | 0 | 0 | 0 | 118 | 137 | 19 | 1 | 0.03937 | | | |
| Eagle Ridge | 4520 | 86% | 64 | 10 | 1 | 0 | 0 | 0 | 0 | 75 | 87 | 12 | 0 | 0.03937 | | | |
| Upper Sloan Det. | 1400 | 86% | 86 | 12 | 2 | 0 | 0 | 0 | 0 | 100 | 116 | 16 | 0 | 0.03937 | | | |
| Third Creek at DIA | 1480 | 87% | 53 | 4 | 1 | 1 | 0 | 0 | 0 | 59 | 68 | 9 | 0 | 0.03937 | | | |
| Justice Center | 4360 | 87% | 23 | 4 | 0 | 0 | 0 | 0 | 0 | 27 | 31 | 4 | 0 | 0.03937 | | | |
| West Metro FS13 | 1370 | 87% | 48 | 6 | 1 | 0 | 0 | 0 | 0 | 55 | 63 | 8 | 0 | 0.03937 | | | |
| Lakewood CC | 1550 | 87% | 86 | 8 | 3 | 0 | 0 | 0 | 0 | 97 | 111 | 14 | 0 | 0.03937 | | | |
| SPR at Henderson | 1660 | 88% | 37 | 4 | 1 | 0 | 0 | 0 | 0 | 42 | 48 | 6 | 0 | 0.03937 | | | |
| Apple Valley | 4490 | 88% | 37 | 4 | 1 | 0 | 0 | 0 | 0 | 42 | 48 | 6 | 0 | 0.03937 | | | |
| Cub Cr below Blue | 2270 | 88% | 49 | 6 | 1 | 0 | 0 | 0 | 0 | 56 | 64 | 8 | 0 | 0.03937 | | | |
| Red Rocks Park | 2370 | 88% | 61 | 8 | 1 | 0 | 0 | 0 | 0 | 70 | 80 | 10 | 0 | 0.03937 | | | |
| Van Bibber @ Hwy 93 | 330 | 88% | 94 | 8 | 2 | 1 | 0 | 0 | 0 | 105 | 120 | 15 | 0 | 0.03937 | | | |
| WX-Bingham Lake Park | 3030 | 88% | 106 | 11 | 3 | 0 | 0 | 0 | 0 | 120 | 137 | 17 | 0 | 0.03937 | | | |
| Englewood Dam | 1600 | 88% | 26 | 2 | 1 | 0 | 0 | 0 | 0 | 29 | 33 | 4 | 0 | 0.03937 | | | |
| Leyden Confluence | 210 | 88% | 69 | 11 | 0 | 0 | 0 | 0 | 0 | 80 | 91 | 11 | 0 | 0.03937 | | | |
| Denver West | 1010 | 88% | 71 | 8 | 0 | 1 | 0 | 0 | 0 | 80 | 91 | 11 | 0 | 0.03937 | | | |
| Idledale | 2350 | 88% | 64 | 8 | 1 | 0 | 0 | 0 | 0 | 73 | 83 | 10 | 0 | 0.03937 | | | |
| Sanderson at Xavier | 1340 | 88% | 102 | 14 | 1 | 0 | 0 | 0 | 0 | 117 | 133 | 16 | 0 | 0.03937 | | | |
| Wx-Diamond Hill | 1420 | 88% | 96 | 13 | 1 | 0 | 0 | 0 | 0 | 110 | 125 | 15 | 5 | 0.03937 | | | |
| Upper Leyden | 220 | 88% | 85 | 9 | 2 | 0 | 0 | 0 | 0 | 96 | 109 | 13 | 4 | 0.03937 | | | |
| Wx-Urban Farm | 1460 | 88% | 139 | 15 | 3 | 0 | 0 | 0 | 0 | 157 | 178 | 21 | 9 | 0.03937 | | | |
| Bear Creek @ Lowell | 1530 | 89% | 119 | 15 | 1 | 0 | 0 | 0 | 0 | 135 | 152 | 17 | 0 | 0.03937 | | | |
| Doudy Draw | 4820 | 89% | 82 | 5 | 0 | 2 | 0 | 0 | 0 | 89 | 100 | 11 | 0 | 0.03937 | | | |
| Quincy/Highline | 620 | 89% | 106 | 5 | 3 | 1 | 0 | 0 | 0 | 115 | 129 | 14 | 0 | 0.03937 | | | |
| Cold Sprg Glch conf | 2240 | 89% | 65 | 9 | 0 | 0 | 0 | 0 | 0 | 74 | 83 | 9 | 0 | 0.03937 | | | |
| Kinney Peak | 2280 | 89% | 46 | 3 | 0 | 1 | 0 | 0 | 0 | 50 | 56 | 6 | 0 | 0.03937 | | | |
| Leyden Reservoir | 200 | 89% | 60 | 6 | 1 | 0 | 0 | 0 | 0 | 67 | 75 | 8 | 0 | 0.03937 | | | |
| Denver Zoo | 1360 | 89% | 136 | 14 | 2 | 0 | 0 | 0 | 0 | 152 | 170 | 18 | 0 | 0.03937 | | | |
| Wx-Cal-Wood Ranch | 4770 | 90% | 68 | 9 | 0 | 0 | 0 | 0 | 0 | 77 | 86 | 9 | 0 | 0.03937 | | | |
| Sand Creek Park | 1800 | 90% | 102 | 11 | 1 | 0 | 0 | 0 | 0 | 114 | 127 | 13 | 0 | 0.03937 | | | |
| SBC @ San Souci | 4830 | 90% | 64 | 6 | 1 | 0 | 0 | 0 | 0 | 71 | 79 | 8 | 0 | 0.03937 | | | |
| Side Creek Park | 830 | 90% | 48 | 6 | 0 | 0 | 0 | 0 | 0 | 54 | 60 | 6 | 0 | 0.03937 | | | |
| LDC at 64th | 1310 | 90% | 99 | 7 | 1 | 1 | 0 | 0 | 0 | 108 | 120 | 12 | 0 | 0.03937 | | | |
| Haskins Gulch Conf | 2820 | 90% | 124 | 12 | 0 | 1 | 0 | 0 | 0 | 137 | 152 | 15 | 3 | 0.03937 | | | |
| Hansen Rain | 4330 | 90% | 58 | 5 | 1 | 0 | 0 | 0 | 0 | 64 | 71 | 7 | 0 | 0.03937 | | | |
| Rio Grande | 4020 | 90% | 49 | 6 | 0 | 0 | 0 | 0 | 0 | 55 | 61 | 6 | 0 | 0.03937 | | | |
| Ralston Reservoir | 110 | 91% | 77 | 9 | 0 | 0 | 0 | 0 | 0 | 86 | 95 | 9 | 0 | 0.03937 | | | |
| Wx-Aurora Town Hall | 920 | 91% | 69 | 8 | 0 | 0 | 0 | 0 | 0 | 77 | 85 | 8 | 0 | 0.03937 | | | |

| | | | | | | | | | | | | | | | |
|-------------------------------------|--------|-----|-----|----|---|---|---|---|---|---|-----|-----|----|---|---------|
| Powers Park | 1500 | 91% | 134 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 147 | 162 | 15 | 0 | 0.03937 |
| liff Pond | 650 | 91% | 116 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 128 | 141 | 13 | 0 | 0.03937 |
| Genesee Village | 2310 | 91% | 82 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 89 | 98 | 9 | 0 | 0.03937 |
| Guy Hill Ranch | 310 | 91% | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 22 | 2 | 0 | 0.03937 |
| Horseshoe Park Drop | 710 | 91% | 56 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 60 | 66 | 6 | 0 | 0.03937 |
| Lena @ U.S. Hwy 6 | 1040 | 91% | 54 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 66 | 6 | 0 | 0.03937 |
| Geer Canyon | 4250 | 91% | 65 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 70 | 77 | 7 | 0 | 0.03937 |
| Expo Park | 420 | 91% | 82 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 100 | 9 | 0 | 0.03937 |
| Harvard @ Jackson | 610 | 91% | 139 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 153 | 168 | 15 | 0 | 0.03937 |
| Fire Station #19 | 530 | 91% | 171 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 188 | 206 | 18 | 1 | 0.03937 |
| A2-Sellers Gulch at Haystack Precip | 100150 | 91% | 109 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 115 | 126 | 11 | 0 | 0.03937 |
| Nott Creek | 150 | 91% | 57 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 69 | 6 | 0 | 0.03937 |
| DC Public Works | 2950 | 91% | 107 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 118 | 129 | 11 | 0 | 0.03937 |
| Wx-Louisville Lake | 4750 | 91% | 39 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 47 | 4 | 0 | 0.03937 |
| Flying J | 850 | 92% | 84 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 91 | 99 | 8 | 0 | 0.03937 |
| Cresent | 4010 | 92% | 52 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 62 | 5 | 0 | 0.03937 |
| Conifer Hill | 4350 | 92% | 96 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 104 | 113 | 9 | 0 | 0.03937 |
| Wx-Blue Mountain | 140 | 92% | 78 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 83 | 90 | 7 | 2 | 0.03937 |
| Slaughterhouse Glch | 1620 | 92% | 87 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 103 | 8 | 0 | 0.03937 |
| West Woods | 120 | 92% | 78 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 84 | 91 | 7 | 0 | 0.03937 |
| Jewell Detention | 520 | 92% | 78 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 84 | 91 | 7 | 0 | 0.03937 |
| Pine Cliff Road | 2810 | 92% | 77 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 91 | 7 | 0 | 0.03937 |
| Willow Creek - DougCnty | 2940 | 92% | 78 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 92 | 7 | 0 | 0.03937 |
| Sunshine | 4160 | 93% | 57 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 67 | 5 | 0 | 0.03937 |
| Goldsmith @ Eastman | 640 | 93% | 115 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 124 | 134 | 10 | 0 | 0.03937 |
| Confluence Pond | 720 | 93% | 71 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 83 | 6 | 0 | 0.03937 |
| Cherry Cr @ Steele | 1720 | 93% | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 70 | 5 | 0 | 0.03937 |
| Shop Creek | 1710 | 93% | 96 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 104 | 112 | 8 | 0 | 0.03937 |
| Slaughterhouse | 4190 | 93% | 61 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 71 | 5 | 0 | 0.03937 |
| Granby Ditch @ 6th | 810 | 93% | 51 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 54 | 58 | 4 | 0 | 0.03937 |
| Tallman Gulch | 3080 | 93% | 114 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 122 | 131 | 9 | 0 | 0.03937 |
| Aurora Regional Pond | 940 | 93% | 127 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 136 | 146 | 10 | 0 | 0.03937 |
| Spruce Mt - Douglas | 2890 | 93% | 52 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 55 | 59 | 4 | 0 | 0.03937 |
| Lazy Acres | 4200 | 93% | 64 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 74 | 5 | 0 | 0.03937 |
| Wx-Marston Lake North | 1520 | 93% | 79 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 84 | 90 | 6 | 1 | 0.03937 |
| Virginia Court | 510 | 94% | 67 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 77 | 5 | 0 | 0.03937 |
| East Cherry Cr-Douglas | 2910 | 94% | 67 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 77 | 5 | 0 | 0.03937 |
| Rosedale | 2250 | 94% | 55 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 58 | 62 | 4 | 0 | 0.03937 |
| Temple Pond at DTC | 630 | 94% | 138 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 147 | 157 | 10 | 1 | 0.03937 |
| Pump Sta 3 | 970 | 94% | 70 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 74 | 79 | 5 | 0 | 0.03937 |
| SPR at 3rd Ave | 1320 | 94% | 141 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 150 | 160 | 10 | 0 | 0.03937 |
| Wx-Quincy Reservoir | 750 | 94% | 131 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 139 | 148 | 9 | 0 | 0.03937 |
| Fire Station 12 | 840 | 94% | 58 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 66 | 4 | 0 | 0.03937 |
| Wx-Highlands Ranch WTP | 2710 | 94% | 78 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 88 | 5 | 0 | 0.03937 |
| ETG @ Buckley | 820 | 94% | 48 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 54 | 3 | 0 | 0.03937 |
| CC at Stroh Rd | 2860 | 94% | 98 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 103 | 109 | 6 | 0 | 0.03937 |
| Filter Plant | 4100 | 95% | 34 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 38 | 2 | 0 | 0.03937 |
| Indian Creek | 2960 | 95% | 89 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 99 | 5 | 0 | 0.03937 |
| Harvard Gulch Park | 600 | 95% | 181 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 189 | 199 | 10 | 0 | 0.03937 |
| Russelville Gulch-Douglas | 2900 | 95% | 108 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 120 | 6 | 1 | 0.03937 |
| A2-Westerly Cr Dam Precip | 100240 | 95% | 111 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 114 | 120 | 6 | 1 | 0.03937 |
| Sable Ditch @ 18th | 800 | 95% | 75 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 83 | 4 | 0 | 0.03937 |
| Sulphur Gulch | 2840 | 95% | 118 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 124 | 130 | 6 | 0 | 0.03937 |
| Van Bibber Park | 300 | 95% | 79 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 87 | 4 | 0 | 0.03937 |
| El Rancho | 2340 | 95% | 60 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 66 | 3 | 0 | 0.03937 |
| Havana Park | 500 | 96% | 103 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 113 | 5 | 0 | 0.03937 |
| West Cherry Head-Douglas Cnty | 2920 | 96% | 47 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 48 | 50 | 2 | 0 | 0.03937 |
| Jeffco Fairgrounds | 1050 | 96% | 70 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 76 | 3 | 0 | 0.03937 |
| Fling's | 4220 | 96% | 71 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 77 | 3 | 0 | 0.03937 |
| Hidden Lake | 1300 | 96% | 96 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 104 | 4 | 0 | 0.03937 |
| Riverside | 4340 | 96% | 74 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 80 | 3 | 0 | 0.03937 |
| Wx-Castle Rock | 2750 | 96% | 128 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 133 | 138 | 5 | 2 | 0.03937 |
| Wx-Elbert | 1440 | 96% | 78 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 80 | 83 | 3 | 0 | 0.03937 |
| SBC@S Boulder Ditch | 4840 | 96% | 77 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 83 | 3 | 0 | 0.03937 |
| Johnny Park | 4310 | 96% | 53 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 57 | 2 | 0 | 0.03937 |
| Broomfield 3207 | 1200 | 97% | 80 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 86 | 3 | 0 | 0.03937 |
| No Name @ Quincy | 730 | 97% | 109 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 112 | 116 | 4 | 0 | 0.03937 |

| | | | | | | | | | | | | | | | |
|--------------------------------|--------|------------|-------|-----|-----|----|---|---|---|---|-------|-------|------|----|---------|
| Gunbarrel | 1110 | 97% | 57 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 61 | 2 | 0 | 0.03937 |
| Wx-Aurora Reservoir | 900 | 97% | 90 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 96 | 3 | 0 | 0.03937 |
| Wx-Salisbury Park | 2730 | 97% | 94 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 100 | 3 | 0 | 0.03937 |
| A2-Havana Pond Precip | 100230 | 97% | 157 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 162 | 167 | 5 | 3 | 0.03937 |
| Niver Detention | 1900 | 97% | 65 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 69 | 2 | 0 | 0.03937 |
| Cottonwood (Apache) | 2870 | 97% | 136 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 140 | 144 | 4 | 0 | 0.03937 |
| Walker Ranch | 4050 | 97% | 35 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 37 | 1 | 0 | 0.03937 |
| St. Antons | 4570 | 97% | 35 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 37 | 1 | 0 | 0.03937 |
| Wx-Ward C-1 | 4710 | 97% | 71 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 75 | 2 | 0 | 0.03937 |
| Red Garden | 4030 | 97% | 73 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 74 | 76 | 2 | 0 | 0.03937 |
| Sunset | 4240 | 97% | 37 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 39 | 1 | 0 | 0.03937 |
| Winiger Ridge | 4530 | 98% | 42 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 44 | 1 | 0 | 0.03937 |
| Lakeshore | 4060 | 98% | 44 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 46 | 1 | 0 | 0.03937 |
| Happy Canyon at N Surrey Dr | 2880 | 98% | 133 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 136 | 139 | 3 | 0 | 0.03937 |
| Mission Viejo Park | 760 | 98% | 91 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 92 | 94 | 2 | 0 | 0.03937 |
| A2-Upper Sellers Gulch Precip | 100140 | 98% | 91 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 92 | 94 | 2 | 0 | 0.03937 |
| Logan Mill | 4140 | 98% | 46 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 48 | 1 | 0 | 0.03937 |
| Martin Gulch | 4040 | 98% | 56 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 58 | 1 | 0 | 0.03937 |
| Lee Hill Rain 2012 | 4320 | 98% | 58 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 60 | 1 | 0 | 0.03937 |
| Wx-Spring Valley Rd-DougCnty | 2930 | 99% | 66 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 68 | 1 | 0 | 0.03937 |
| Shanahan Ridge | 4810 | 99% | 67 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 69 | 1 | 0 | 0.03937 |
| Fire Station #7 | 440 | 99% | 69 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 71 | 1 | 0 | 0.03937 |
| Golden Age | 4230 | 99% | 72 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 74 | 1 | 0 | 0.03937 |
| A2-Maple Grove Resv. | 1000 | 99% | 78 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 80 | 1 | 0 | 0.03937 |
| A2-Carr Street | 100 | 99% | 103 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 104 | 105 | 1 | 2 | 0.03937 |
| Piney at Liverpool | 950 | 99% | 118 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 120 | 1 | 0 | 0.03937 |
| Fire Sta 47 | 3060 | 99% | 143 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 144 | 145 | 1 | 0 | 0.03937 |
| Wx-Brighton Ditch | 1570 | 100% | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0.03937 |
| Louisville Rec Ctr | 1100 | 100% | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0.03937 |
| Heritage Square | 1060 | 100% | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 0 | 0 | 0.03937 |
| Pine Brook | 4170 | 100% | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 28 | 0 | 0 | 0.03937 |
| Wx-Brighton | 1920 | 100% | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 29 | 0 | 0 | 0.03937 |
| Wx-West Creek WX | 3020 | 100% | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 40 | 0 | 0 | 0.03937 |
| Big Elk Park | 4300 | 100% | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 42 | 0 | 0 | 0.03937 |
| Twin Sisters | 4080 | 100% | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 43 | 0 | 0 | 0.03937 |
| Betasso | 4110 | 100% | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 44 | 0 | 0 | 0.03937 |
| Wx-Sugarloaf | 4730 | 100% | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | 0 | 0 | 0.03937 |
| Whispering Pines | 4880 | 100% | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 46 | 0 | 0 | 0.03937 |
| Taylor Mountain | 4260 | 100% | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 48 | 0 | 0 | 0.03937 |
| Bear Peak | 4070 | 100% | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 | 0 | 0 | 0.03937 |
| Brook Forest | 2260 | 100% | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 52 | 0 | 0 | 0.03937 |
| Magnolia | 4090 | 100% | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 53 | 0 | 0 | 0.03937 |
| Gold Hill | 4150 | 100% | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 53 | 0 | 0 | 0.03937 |
| Wx-Tomah Rd-DougCnty | 2990 | 100% | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 60 | 0 | 0 | 0.03937 |
| Boulder Jail | 4550 | 100% | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 61 | 0 | 0 | 0.03937 |
| CC @ Russelville Road Precip | 3040 | 100% | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 65 | 0 | 0 | 0.03937 |
| Wx-Hiwan G.C. | 2210 | 100% | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 69 | 0 | 0 | 0.03937 |
| A2-Sand Creek at Colfax Precip | 100160 | 100% | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 76 | 0 | 0 | 0.03937 |
| East/West Trailhead | 3050 | 100% | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 94 | 94 | 0 | 0 | 0.03937 |
| A2-Murphy Creek GC | 870 | 100% | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 94 | 0 | 0 | 0.03937 |
| A2-Highland Heritage Park | 3090 | 100% | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 | 101 | 0 | 1 | 0.03937 |
| A2-Blackstone Precip | 100100 | 100% | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 114 | 0 | 4 | 0.03937 |
| A2-ETG @ Hampden Precip | 100110 | 100% | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 126 | 0 | 0 | 0.03937 |
| | | Total Tips | 13450 | 909 | 122 | 22 | 5 | 3 | | 8 | 14511 | 15821 | 1254 | 42 | |
| Four Mile Creek | 5720 | 100% | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 36 | 0 | 0 | 0.03937 |
| West Creek | 5730 | 100% | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 47 | 0 | 0 | 0.03937 |
| Trail Creek | 5740 | 93% | 49 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 51 | 55 | 4 | 0 | 0.03937 |
| Stump Bump | 5810 | 100% | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | 0 | 0 | 0.03937 |
| Cedar Mountain | 5860 | 98% | 40 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 42 | 1 | 0 | 0.03937 |
| Hackett Mountain | 5880 | 94% | 48 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 50 | 53 | 3 | 0 | 0.03937 |
| Horse Creek-Satellite | 5900 | 100% | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 41 | 0 | 0 | 0.03937 |
| Log Jumper | 5940 | 90% | 31 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 39 | 4 | 0 | 0.03937 |
| Porphory Mtn | 4850 | 78% | 181 | 26 | 6 | 4 | 2 | 1 | | 2 | 220 | 283 | 63 | 2 | 0.01 |
| Fairview Peak | 4860 | 93% | 315 | 22 | 1 | 0 | 0 | 0 | | 0 | 338 | 362 | 24 | 54 | 0.01 |
| A2-Magnolia WX-Precip | 6601 | 96% | 224 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 230 | 239 | 9 | 15 | 0.01 |

| | | | | | | | | | | | | | | | | | |
|--------------------------------|--------|-----|----|---|---|---|---|---|---|---|----|----|---|---|---------|--|--|
| A2-Trumbull (Hayman) - Precip | 100260 | 29% | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 7 | 5 | 0 | 0.03937 | | |
| A2-WestCreek (Hayman) - Precip | 100270 | 89% | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 1 | 0 | 0.03937 | | |
| WX-EPC at Hwy 105 | 3010 | 90% | 24 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 27 | 30 | 3 | 0 | 0.01 | | |

2015 Monthly Peak Hour ALERT Radio Traffic Summary

