

# Memo

**Date:** May 2, 2014  
**To:** Kevin Stewart  
**From:** Markus Ritsch  
**Subject:** April 2014 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 April 1 through April 30, 2014.

## II. General System Analysis Summary

In 2014 data will be received at the District through both the legacy ALERT channel and through the ALET2 (concentrator plus A2 self-reports) channel. The following table quantifies the data reception through each telemetry source. The West Creek repeater in Douglas County processes both incoming data on A1 and A2 but passes on only A2 format messages to Diamond Hill. All other repeaters in the system send data on both legacy and A2 channels.

**Table 1. Reception of A1/A2 Data at Diamond Hill**

| Month        | Jan            | Feb            | Mar            | Apr            | May      | Jun      | Jul      | Aug      | Sep      | Oct      | Nov      | Dec      |
|--------------|----------------|----------------|----------------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Legacy       | 320,303        | 214,698        | 279,782        | 293,137        |          |          |          |          |          |          |          |          |
| Concentrator | 508,306        | 370,222        | 495,874        | 515,526        |          |          |          |          |          |          |          |          |
| ALERT2       | 129,855        | 86,506         | 110,086        | 107,478        |          |          |          |          |          |          |          |          |
| <b>TOTAL</b> | <b>958,464</b> | <b>671,426</b> | <b>885,742</b> | <b>916,141</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |
| Conc+A2      | 638,161        | 456,728        | 605,960        | 623,004        |          |          |          |          |          |          |          |          |
| Conc/Leg     | 1.59           | 1.72           | 1.77           | 1.76           |          |          |          |          |          |          |          |          |
| DataChron    | 498,846        | 444,211        | 599,923        | 630,962        |          |          |          |          |          |          |          |          |

The daily ratio of ALERT2 reports received versus legacy ALERT reports received is shown (Figure 1). In general periods where the ratio of A2 to legacy reports is high (greater than 2) correspond to a cold spell where the air temperature goes below freezing. The Blue Mountain repeater does not forward legacy ALERT reports when the temperature is below freezing. This results in a relative increase in data concentrator reports which drives up the ratio. This was the case on April 13<sup>th</sup> and April 14<sup>th</sup>.

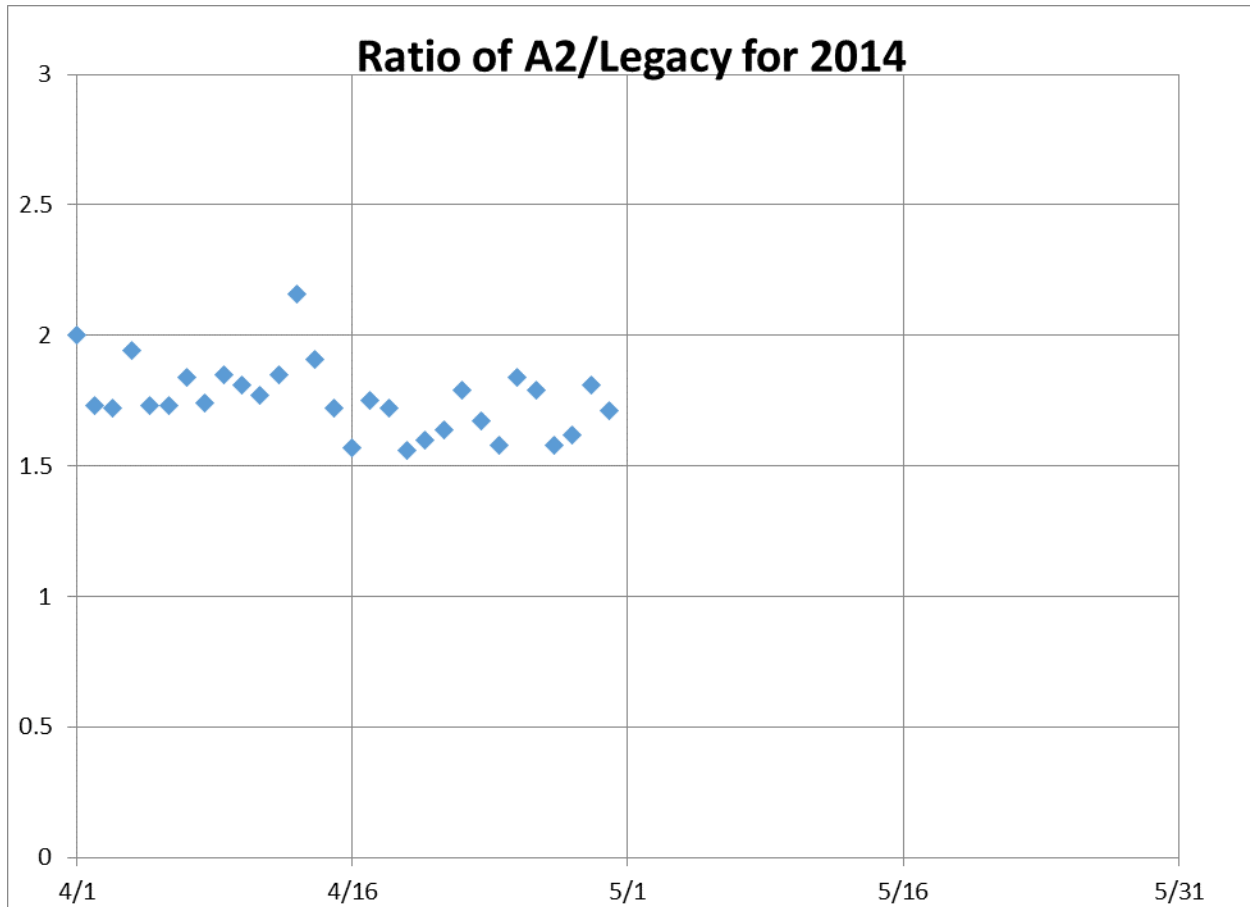


Figure 1. Daily Ratio of ALERT2/Legacy Reports

### ***A. Continuous Operation of Base Receiver/Decoder***

The NS5 base station was in continuous operation for the entire month.

## B. Specific Issues Identified this Month

Performance of the following sensors (Table 2) was questionable this month.

**Table 2. Sensors with Poor Performance Characteristics**

| Sensor ID | Description  | Timer | Event | Comments                             |
|-----------|--|-------|-------|--------------------------------------|
| 2810      | Pine Cliff Road  | 32    | 100   | Poor timer reporting                 |
| 2330      | Morrison   | 60    | 78    | Generally not good performance       |
| 2980      | Dakan Road   | 89    | 71    | Generally not good performance       |
| 2230      | Bear Cr below Cub  | 74    | 74    | Generally not good performance       |
| 3070      | CC at Cottonwood   | n/a   | n/a   | Counting down.....WET to investigate |
| 730       | No Name at Quincy  | 84    | 96    | Many invalid reports                 |
| 1023      | Lena Gulch at Nolte Pond – bad data  |       |       |                                      |
| 633       | Temple Pond at DTC – bad data and missing since April 24   |       |       |                                      |
| 203       | Leyden Reservoir – bad data and need to confirm reference level as it was different on both Contrail and NS5 at the District |       |       |                                      |
| 213       | Leyden Confluence – bad data, OneRain to replace PT  |       |       |                                      |
| 1020      | Nolte Pond.....this transmitter sending many invalid IDs (1022, 1021, 1024.....)   |       |       |                                      |
| 210       | Leyden Confluence.....this transmitter sending many invalid IDs (211, 212, 214....)  |       |       |                                      |

## C. Performance of New A2 Sites

Currently there are only a handful of remote sites operating on the new A2 protocol. The “event” performance of these sites is tracked throughout the 2014 flood season in the table below.

**Table 3. Event Performance of New A2 Sites (percent)**

| Description            | ID     | Install Date | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug* | Sep* | Oct | Nov | Dec |
|------------------------|--------|--------------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|
| Heritage Regional Park | 3090   | 03/14/2013   | n/a | n/a | 100 | 100 |     |     |     |      |      |     |     |     |
| ETG @ Hampden          | 100110 | 05/01/2013   | n/a | n/a | 83  | 97  |     |     |     |      |      |     |     |     |
| Blackstone             | 100100 | 05/03/2013   | n/a | n/a | 100 | 100 |     |     |     |      |      |     |     |     |
| Newlin Gulch           | 3070   | 05/24/2013   | 100 | 83  | 100 | 100 |     |     |     |      |      |     |     |     |
| Carr Street            | 100    | 05/31/2013   | n/a | n/a | 100 | 100 |     |     |     |      |      |     |     |     |
| Maple Grove            | 1000   | 05/20/2013   | 100 | 90  | 97  | 100 |     |     |     |      |      |     |     |     |
| Haystack Road          | 100150 | 02/26/2014   | n/a | n/a | 100 | 79  |     |     |     |      |      |     |     |     |
| Sand Cr at Colfax      | 100160 | 05/01/2014   | n/a | n/a | n/a | n/a |     |     |     |      |      |     |     |     |
| New site 2014          |        |              |     |     |     |     |     |     |     |      |      |     |     |     |
| New site 2014          |        |              |     |     |     |     |     |     |     |      |      |     |     |     |
| New site 2014          |        |              |     |     |     |     |     |     |     |      |      |     |     |     |
| New site 2014          |        |              |     |     |     |     |     |     |     |      |      |     |     |     |

The event performance of the A2 self-reporting sites will be tracked over the flood monitoring season.

## D. Rain Sensor Timer Reporting Summary

The following analysis assumes that each rain sensor has a 12-hour timer-reporting interval. The worst performing rain sensors for the month are summarized (Table 4).

**Table 4. Monthly Summary of Sensors with Poor Timer Performance (Sensor ID)**

| Jan* | Feb* | Mar* | Apr  | May | Jun | Jul | Aug | Sep | Oct* | Nov* | Dec* |
|------|------|------|------|-----|-----|-----|-----|-----|------|------|------|
| 4470 | 2710 | 2790 | 2810 |     |     |     |     |     |      |      |      |
| 2710 | 4470 | 2710 | 2330 |     |     |     |     |     |      |      |      |
| 2330 | 2730 | 4470 | 2360 |     |     |     |     |     |      |      |      |
| 4870 | 4550 | 4870 | 420  |     |     |     |     |     |      |      |      |
| 920  | 3010 | 3010 | 1700 |     |     |     |     |     |      |      |      |
| 3010 | 4330 | 4330 | 1710 |     |     |     |     |     |      |      |      |

\*- 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 5). 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 5. District-Wide Total Tip/Count Statistical Summary**

| Statistical Parameter                 | Value | Comments  |
|---------------------------------------|-------|---|
| Mean                                  | 29.30 | Only the 1-mm rain sensors were included in the analysis  |
| Median                                | 31    | Only the 1-mm rain sensors were included in the analysis  |
| Standard deviation                    | 9.23  | Only the 1-mm rain sensors were included in the analysis  |
| Mean plus three standard deviations   | 57.00 | Only the 1-mm rain sensors were included in the analysis  |
| Minimum total count                   | 8     | Spruce Mt – Douglas Cnty (2890)   |
| Maximum total count                   | 54    | Shanahan Ridge (4810)   |
| Sensors showing NO rain for the month |       | 2710 – Highlands Ranch WTP<br>2870 – CC at Cottonwood (counting down)<br>5900 – Horse Creek<br>220 – Upper Leyden |

### B. Monthly Average Tip/Count Summary

A monthly summary of the District-wide mean total tip/count is presented (Table 6).

**Table 6. 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 |       |       |       |       |        |       |       |       |       |

\*- 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 7).

**Table 7. Sensors with a Jump of 6 or More in Sequential Count**

| Sensor Description | Sensor ID | Comment  |
|--------------------|-----------|--|
| Flying J           | 850       | Looks to be a field maintenance start-up activity on April 4 |
| EPC at Hwy 105     | 3010      | Field maintenance activity                                   |

### **D. Sensor-by-Sensor Incrementing Count Summary**

The system-wide reception rate of incrementing, 1-mm tip reports for the month was approximately 96 percent. A total of 5,022 incrementing reports were received and a total of 5,238 reports were expected. The total loss of incrementing reports for the month was approximately 4 percent. Those sensors with the worst event transmission performance are summarized (Table 8).

**Table 8. Monthly Summary of Sensors with the Worst Performance**

| Jan* | Feb* | Mar* | Apr    | May | Jun | Jul | Aug | Sep | Oct* | Nov* | Dec* |
|------|------|------|--------|-----|-----|-----|-----|-----|------|------|------|
| 4520 | 2730 | 2790 | 2980   |     |     |     |     |     |      |      |      |
| 4010 | 4330 | 4790 | 2230   |     |     |     |     |     |      |      |      |
| 4170 | 4200 | 4530 | 4510   |     |     |     |     |     |      |      |      |
| 3030 | 4240 | 4510 | 3050   |     |     |     |     |     |      |      |      |
| 1460 | 4870 | 4240 | 2330   |     |     |     |     |     |      |      |      |
| 1700 | 4470 | 4870 | 100150 |     |     |     |     |     |      |      |      |

\*-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. Heavy Radio Traffic Analysis

Periods exceeding 1,000 messages per hour are analyzed independently in an attempt to quantify data loss rates from rain sensors using their sequential tip count series.

### A. The Heaviest Hourly Traffic Periods This Month

The hourly periods of highest radio traffic this month are shown (Table 9). The five heaviest hours of radio traffic are analyzed to quantify the number of missing rain reports for that hour.

**Table 9. Periods of Heavy Radio Traffic (total load includes legacy and A2 reports)**

| Day | Hour | Expected | Received | Total Load | Loss  |
|-----|------|----------|----------|------------|-------|
| 3   | 13   | 317      | 309      | 1556       | 2.52% |
| 3   | 12   | 178      | 171      | 1408       | 3.93% |
| 3   | 14   | 218      | 216      | 1373       | 0.92% |
| 23  | 19   | 167      | 167      | 1365       | 0.00% |
| 23  | 20   | 119      | 119      | 1260       | 0.00% |

## V. 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 10).

**Table 10. Summary of Unknown IDs**

| Description  | Conc & A2 | Legacy  |
|--|-----------|---------|
| Total number of unknown IDs (IDs without a device definition)    | 320       | 367     |
| Total reports from unknown IDs                                   | 2,104     | 2,030   |
| Unknown IDs with only a single received report (potential noise) | 173       | 243     |
| Total reports from all IDs – RecData Log entire month            | 623,004   | 293,137 |
| Unknown reports as a fraction of total reports                   | 0.34%     | 0.69%   |

The total number of reports from unknown sensors is very small relative to the total reports received for the month. Shown below (Table 11) are the total reports received from unknown sensor IDs for each month of the year.

**Table 11. Monthly Summary of Total Reports from Unknown IDs (Conc & A2)**

| 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 |       |        |       |       |       |       |        |       |

The fraction of reports from unknown sensors relative to the total number of reports is shown below (Table 12).

**Table 12. Monthly Percent of Unknown Sensor Reports (Conc & A2)**

| 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% |       |       |       |       |       |       |       |       |

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 13).

**Table 13. Reports Received by Unknown IDs**

| Conc + A2  |         | Legacy ALERT |         | Comment                                   |
|------------|---------|--------------|---------|---|
| Unknown ID | Reports | Unknown ID   | Reports |   |
| 1022       | 238     | 1022         | 237     | Unknown IDs coming from Nolte Pond (1020) |
| 1021       | 237     | 1021         | 237     | Unknown IDs coming from Nolte Pond (1020) |
| 1024       | 195     | 1024         | 197     | Unknown IDs coming from Nolte Pond (1020) |
| 1026       | 172     | 1026         | 171     | Unknown IDs coming from Nolte Pond (1020) |
| 1027       | 149     | 1027         | 148     | Unknown IDs coming from Nolte Pond (1020) |
| 1028       | 129     | 1028         | 127     | Unknown IDs coming from Nolte Pond (1020) |
| 214        | 68      | 214          | 67      | Unknown IDs coming from Leyden Conf (210) |

## VI. Sensors with Invalid Reports

The following sensors had a large number of invalid reports (bit flip/contention errors/random decode):

| Sensor ID | Description          | Invalid Reports | Comments  |
|-----------|----------------------|-----------------|---|
| 730       | No Name @ Quincy     | 19              | Was marked as "out-of-service" placed back into service on April 4, 2014  |
| 100110    | A2-ETG @ Hampden     | 3               | Erroneous report received on April 4 with a value of 66 source of four repeaters (6502, 6503, 6505, 6506)                               |
| 1383      | Ferril Lake          | 155             | All negative stage report for the month. OneRain: not a reliable site using a bubbler that is failing....trying to replace this spring. |
| 1023      | Lena at Nolte Pond   | 67              | Many invalid reports on NS5.....looks like bad data.....OneRain to investigate  |
| 2813      | Pine Cliff Road      | 5               | Sporadic erroneous transmissions  |
| 203       | Leyden Reservoir     | 37              | OneRain to investigate  |
| 213       | Leyden Confluence    | 37              | OneRain to replace a faulty PT  |
| 633       | Temple Pond at DTC   | 25              | Many invalid reports on NS5.....delta change violation.....OneRain to investigate   |
| 2870      | CC at Cottonwood     | 63              | Rain gage counting down..... WET to investigate   |
| 1530      | Bear Creek at Lowell | 8               | Sporadic erroneous transmissions  |

## VII. 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.

---

No rainfall alarms recorded this month.

# General System Analysis

**Database Name** P:\A207-UDFCD-Data-Analysis\2014\4-2014\Novastar\_extract\_2014Apr.mdb

|                               |                  |                    |       |
|-------------------------------|------------------|--------------------|-------|
| <b>First Date in Database</b> | 3/31/14 11:59 PM | <b>Total Days</b>  | 30.0  |
| <b>Last Date in Database</b>  | 4/30/14 11:59 PM | <b>Total Hours</b> | 720.0 |

**Total Records Analyzed** 623,004

| Records by Group        | Conc & A2 Self Report | Conc & A2 Self Report | ALERT Legacy   | ALERT Legacy |
|-------------------------|-----------------------|-----------------------|----------------|--------------|
| Wind Data               | 267,528               | 43%                   | 113,778        | 39%          |
| Temperature             | 82,974                | 13%                   | 38,299         | 13%          |
| Relative Humidity       | 75,675                | 12%                   | 38,674         | 13%          |
| Battery Voltage         | 43,549                | 7%                    | 14,222         | 5%           |
| Barometric Pressure     | 35,252                | 6%                    | 20,650         | 7%           |
| Water Level             | 29,267                | 5%                    | 24,379         | 8%           |
| Precipitation           | 18,527                | 3%                    | 12,937         | 4%           |
| Dew Point Temperature   | 11,343                | 2%                    | 0              | 0%           |
| Wind Chill              | 11,317                | 2%                    | 0              | 0%           |
| Peak Wind               | 10,972                | 2%                    | 0              | 0%           |
| Solar Radiation         | 10,539                | 2%                    | 10,314         | 4%           |
| Wind Direction          | 6,096                 | 1%                    | 1              | 0%           |
| Fuel Moisture           | 5,926                 | 1%                    | 5,705          | 2%           |
| Fuel Temperature        | 5,828                 | 1%                    | 5,709          | 2%           |
| Soil Moisture           | 2,881                 | 0%                    | 2,742          | 1%           |
| Unknown                 | 2,104                 | 0%                    | 2,030          | 1%           |
| Repeater Status Report  | 2,023                 | 0%                    | 2,425          | 1%           |
| 12Hr Status Report      | 461                   | 0%                    | 446            | 0%           |
| Flasher Status          | 288                   | 0%                    | 0              | 0%           |
| Not Used                | 175                   | 0%                    | 171            | 0%           |
| Handar 585 ALARM Status | 116                   | 0%                    | 114            | 0%           |
| Hayman Battery          | 78                    | 0%                    | 0              | 0%           |
| Repeater Pass List      | 66                    | 0%                    | 526            | 0%           |
| Solar Power             | 14                    | 0%                    | 13             | 0%           |
| ALERT/A2 Testing        | 4                     | 0%                    | 1              | 0%           |
| Longmont Water Level PT | 1                     | 0%                    | 1              | 0%           |
| <b>Total</b>            | <b>623,004</b>        | <b>100%</b>           | <b>293,137</b> | <b>100%</b>  |

| Traffic Loading Summary | Conc & A2 Self Report | ALERT Legacy |                 |
|-------------------------|-----------------------|--------------|-----------------|
| Alert Reports           | 623,004               | 293,137      |                 |
| Average Daily Traffic   | 20,097                | 9,771        |                 |
| Average Hourly Traffic  | 837                   | 407          |                 |
| Median Hourly Traffic   | 843                   | 398          | hour beginning  |
| Peak Hourly Traffic     | 1,573                 | 835          | Apr 3, 1:00 PM  |
| 2nd Max                 | 1,411                 | 766          | Apr 23, 7:00 PM |
| 3rd Max                 | 1,379                 | 727          | Apr 23, 8:00 PM |
| 4th Max                 | 1,365                 | 705          | Apr 3, 12:00 PM |
| 5th Max                 | 1,273                 | 690          | Apr 23, 9:00 PM |



# Rain Timer Performance

Analyze Rain Sensors

| Rain Sensors | Description                         | Rcv | Timer | Exp | Performance | Comment |
|--------------|-------------------------------------|-----|-------|-----|-------------|---------|
| 2810         | Pine Cliff Road                     | 20  | 14:15 | 62  | 32%         |         |
| 2330         | Morrison                            | 37  | 18:36 | 62  | 60%         |         |
| 2360         | Indian Hills                        | 41  | 16:55 | 62  | 66%         |         |
| 420          | Expo Park                           | 42  | 12:19 | 62  | 68%         |         |
| 1700         | Cherry Cr @ Champa                  | 44  | 12:18 | 62  | 71%         |         |
| 1710         | Shop Creek                          | 44  | 16:14 | 62  | 71%         |         |
| 4470         | Little Narrows                      | 45  | 14:21 | 62  | 73%         |         |
| 2230         | Bear Cr below Cub                   | 46  | 13:57 | 62  | 74%         |         |
| 4330         | Hansen Rain                         | 46  | 13:44 | 62  | 74%         |         |
| 100150       | A2-Sellers Gulch at Haystack Precip | 48  | 14:55 | 62  | 77%         |         |
| 850          | Flying J                            | 50  | 12:17 | 62  | 81%         |         |
| 4870         | SBC @ SB Road                       | 50  | 14:10 | 62  | 81%         |         |
| 2790         | Wx-W. Cherry Creek                  | 51  | 13:07 | 62  | 82%         |         |
| 4850         | Porphory Mtn                        | 51  | 13:04 | 62  | 82%         |         |
| 730          | No Name @ Quincy                    | 52  | 11:57 | 62  | 84%         |         |
| 870          | Murphy Creek GC                     | 52  | 13:08 | 62  | 84%         |         |
| 1620         | Slaughterhouse Glch                 | 52  | 13:21 | 62  | 84%         |         |
| 4790         | Wx-Button Rock                      | 52  | 13:15 | 62  | 84%         |         |
| 4810         | Shanahan Ridge                      | 52  | 12:29 | 62  | 84%         |         |
| 2240         | Cold Sprg Glch conf                 | 53  | 13:23 | 62  | 85%         |         |
| 2280         | Kinney Peak                         | 53  | 13:21 | 62  | 85%         |         |
| 2820         | Haskins Gulch Conf                  | 53  | 12:15 | 62  | 85%         |         |
| 2890         | Spruce Mt - Douglas                 | 53  | 13:18 | 62  | 85%         |         |
| 4510         | Pinewood Springs                    | 53  | 13:52 | 62  | 85%         |         |
| 1660         | SPR at Henderson                    | 54  | 12:30 | 62  | 87%         |         |
| 2320         | Choke Cherry Resvr                  | 54  | 12:17 | 62  | 87%         |         |
| 2750         | Wx-Castle Rock                      | 54  | 13:00 | 62  | 87%         |         |
| 3030         | WX-Bingham Lake Park                | 54  | 12:15 | 62  | 87%         |         |
| 3050         | East/West Trailhead                 | 54  | 12:30 | 62  | 87%         |         |
| 4010         | Crescent                            | 54  | 12:45 | 62  | 87%         |         |
| 4270         | Cannon Mountain                     | 54  | 12:43 | 62  | 87%         |         |
| 310          | Guy Hill Ranch                      | 55  | 13:01 | 62  | 89%         |         |
| 330          | Van Bibber @ Hwy 93                 | 55  | 12:43 | 62  | 89%         |         |
| 400          | Montview Park                       | 55  | 12:27 | 62  | 89%         |         |
| 620          | Quincy/Highline                     | 55  | 12:29 | 62  | 89%         |         |
| 700          | Toll Gate @ 6th                     | 55  | 12:45 | 62  | 89%         |         |
| 970          | Pump Sta 3                          | 55  | 12:00 | 62  | 89%         |         |
| 1350         | Chatfield COE                       | 55  | 13:00 | 62  | 89%         |         |
| 2370         | Red Rocks Park                      | 55  | 13:01 | 62  | 89%         |         |
| 2800         | Columbine Open Space                | 55  | 12:32 | 62  | 89%         |         |
| 2950         | DC Public Works                     | 55  | 12:46 | 62  | 89%         |         |
| 2980         | Dakan Rd                            | 55  | 12:15 | 62  | 89%         |         |
| 4080         | Twin Sisters                        | 55  | 12:29 | 62  | 89%         |         |
| 4190         | Slaughterhouse                      | 55  | 12:45 | 62  | 89%         |         |
| 110          | Ralston Reservoir                   | 56  | 12:12 | 62  | 90%         |         |
| 430          | Utah Park                           | 56  | 12:31 | 62  | 90%         |         |
| 540          | Parker/Mississippi                  | 56  | 12:41 | 62  | 90%         |         |
| 1030         | NREL/S. Table Mtn.                  | 56  | 12:42 | 62  | 90%         |         |
| 1300         | Hidden Lake                         | 56  | 12:28 | 62  | 90%         |         |
| 1340         | Sanderson at Xavier                 | 56  | 12:12 | 62  | 90%         |         |
| 1420         | Wx-Diamond Hill                     | 56  | 12:14 | 62  | 90%         |         |
| 1480         | Third Creek at DIA                  | 56  | 12:31 | 62  | 90%         |         |
| 1550         | Lakewood CC                         | 56  | 12:42 | 62  | 90%         |         |
| 1640         | SPR at Union Ave.                   | 56  | 12:41 | 62  | 90%         |         |

|        |                             |    |       |    |     |
|--------|-----------------------------|----|-------|----|-----|
| 1720   | Cherry Cr @ Steele          | 56 | 12:42 | 62 | 90% |
| 2840   | Sulphur Gulch               | 56 | 12:43 | 62 | 90% |
| 2870   | Cottonwood (Apache)         | 56 | 12:44 | 62 | 90% |
| 2880   | Happy Canyon at N Surrey Dr | 56 | 12:15 | 62 | 90% |
| 2900   | Russelville Gulch-Douglas   | 56 | 12:32 | 62 | 90% |
| 2910   | East Cherry Cr-Douglas      | 56 | 12:00 | 62 | 90% |
| 4360   | Justice Center              | 56 | 12:57 | 62 | 90% |
| 4490   | Apple Valley                | 56 | 12:42 | 62 | 90% |
| 4570   | St. Antons                  | 56 | 12:16 | 62 | 90% |
| 4710   | Wx-Ward C-1                 | 56 | 12:00 | 62 | 90% |
| 4770   | Wx-Cal-Wood Ranch           | 56 | 11:15 | 62 | 90% |
| 210    | Leyden Confluence           | 57 | 11:58 | 62 | 92% |
| 410    | Kelly Dam                   | 57 | 12:26 | 62 | 92% |
| 500    | Havana Park                 | 57 | 12:41 | 62 | 92% |
| 520    | Jewell Detention            | 57 | 12:13 | 62 | 92% |
| 530    | Fire Station #19            | 57 | 12:12 | 62 | 92% |
| 830    | Side Creek Park             | 57 | 12:13 | 62 | 92% |
| 940    | Aurora Regional Pond        | 57 | 12:13 | 62 | 92% |
| 1100   | Louisville Rec Ctr          | 57 | 12:28 | 62 | 92% |
| 1200   | Broomfield 3207             | 57 | 12:14 | 62 | 92% |
| 1320   | SPR at 3rd Ave              | 57 | 12:27 | 62 | 92% |
| 1360   | Denver Zoo                  | 57 | 12:00 | 62 | 92% |
| 1400   | Upper Sloan Det.            | 57 | 11:58 | 62 | 92% |
| 1440   | Wx-Elbert                   | 57 | 12:14 | 62 | 92% |
| 1460   | Wx-Urban Farm               | 57 | 12:00 | 62 | 92% |
| 1530   | Bear Creek @ Lowell         | 57 | 11:57 | 62 | 92% |
| 1800   | Sand Creek Park             | 57 | 12:12 | 62 | 92% |
| 2250   | Rosedale                    | 57 | 11:57 | 62 | 92% |
| 2270   | Cub Cr below Blue           | 57 | 12:31 | 62 | 92% |
| 2340   | El Rancho                   | 57 | 12:12 | 62 | 92% |
| 2730   | Wx-Salisbury Park           | 57 | 12:00 | 62 | 92% |
| 2860   | CC at Stroh Rd              | 57 | 12:26 | 62 | 92% |
| 3040   | CC @ Prairie Canyon Ranch   | 57 | 12:29 | 62 | 92% |
| 3060   | Fire Sta 47                 | 57 | 12:14 | 62 | 92% |
| 3080   | Tallman Gulch               | 57 | 12:14 | 62 | 92% |
| 4030   | Red Garden                  | 57 | 12:28 | 62 | 92% |
| 4040   | Martin Gulch                | 57 | 11:58 | 62 | 92% |
| 4060   | Lakeshore                   | 57 | 12:45 | 62 | 92% |
| 4160   | Sunshine                    | 57 | 12:13 | 62 | 92% |
| 4200   | Lazy Acres                  | 57 | 12:29 | 62 | 92% |
| 4250   | Geer Canyon                 | 57 | 12:10 | 62 | 92% |
| 4340   | Riverside                   | 57 | 12:12 | 62 | 92% |
| 4860   | Fairview Peak               | 57 | 12:15 | 62 | 92% |
| 100110 | A2-ETG @ Hampden Precip     | 57 | 12:00 | 62 | 92% |
| 120    | West Woods                  | 58 | 12:13 | 62 | 94% |
| 320    | Sports Complex              | 58 | 12:26 | 62 | 94% |
| 510    | Virginia Court              | 58 | 11:57 | 62 | 94% |
| 600    | Harvard Gulch Park          | 58 | 11:58 | 62 | 94% |
| 630    | Temple Pond at DTC          | 58 | 12:12 | 62 | 94% |
| 640    | Goldsmith @ Eastman         | 58 | 12:12 | 62 | 94% |
| 650    | Iliff Pond                  | 58 | 12:14 | 62 | 94% |
| 720    | Confluence Pond             | 58 | 12:13 | 62 | 94% |
| 760    | Mission Viejo Park          | 58 | 12:12 | 62 | 94% |
| 800    | Sable Ditch @ 18th          | 58 | 12:26 | 62 | 94% |
| 810    | Granby Ditch @ 6th          | 58 | 12:27 | 62 | 94% |
| 820    | ETG @ Buckley               | 58 | 12:12 | 62 | 94% |
| 1040   | Lena @ U.S. Hwy 6           | 58 | 12:14 | 62 | 94% |
| 1520   | Wx-Marston Lake North       | 58 | 12:00 | 62 | 94% |
| 1570   | Wx-Brighton Ditch           | 58 | 12:00 | 62 | 94% |

|      |                               |    |       |    |     |
|------|-------------------------------|----|-------|----|-----|
| 1900 | Niver Detention               | 58 | 12:25 | 62 | 94% |
| 2210 | Wx-Hiwan G.C.                 | 58 | 12:14 | 62 | 94% |
| 2310 | Genesee Village               | 58 | 12:13 | 62 | 94% |
| 2350 | Idledale                      | 58 | 12:13 | 62 | 94% |
| 2710 | Wx-Highlands Ranch WTP        | 58 | 12:13 | 62 | 94% |
| 2850 | Cherry Cr bl Bayou Glch       | 58 | 12:00 | 62 | 94% |
| 2920 | West Cherry Head-Douglas Cnty | 58 | 12:00 | 62 | 94% |
| 2930 | Wx-Spring Valley Rd-DougCnty  | 58 | 12:00 | 62 | 94% |
| 2960 | Indian Creek                  | 58 | 12:14 | 62 | 94% |
| 2990 | Wx-Tomah Rd-DougCnty          | 58 | 12:00 | 62 | 94% |
| 3010 | WX-EPC at Hwy 105             | 58 | 12:16 | 62 | 94% |
| 4050 | Walker Ranch                  | 58 | 12:12 | 62 | 94% |
| 4070 | Bear Peak                     | 58 | 12:12 | 62 | 94% |
| 4100 | Filter Plant                  | 58 | 12:13 | 62 | 94% |
| 4110 | Betasso                       | 58 | 11:59 | 62 | 94% |
| 4130 | Swiss Peaks                   | 58 | 12:15 | 62 | 94% |
| 4180 | Gold Lake                     | 58 | 12:13 | 62 | 94% |
| 4230 | Golden Age                    | 58 | 12:12 | 62 | 94% |
| 4240 | Sunset                        | 58 | 12:13 | 62 | 94% |
| 4260 | Taylor Mountain               | 58 | 12:12 | 62 | 94% |
| 4290 | Red Hill                      | 58 | 12:10 | 62 | 94% |
| 4310 | Johnny Park                   | 58 | 12:11 | 62 | 94% |
| 4880 | Whispering Pines              | 58 | 11:57 | 62 | 94% |
| 100  | A2-Carr Street                | 59 | 12:00 | 62 | 95% |
| 140  | Wx-Blue Mountain              | 59 | 12:00 | 62 | 95% |
| 200  | Leyden Reservoir              | 59 | 11:57 | 62 | 95% |
| 300  | Van Bibber Park               | 59 | 11:58 | 62 | 95% |
| 440  | Fire Station #7               | 59 | 11:57 | 62 | 95% |
| 610  | Harvard @ Jackson             | 59 | 11:57 | 62 | 95% |
| 710  | Horseshoe Park Drop           | 59 | 11:58 | 62 | 95% |
| 750  | Wx-Quincy Reservoir           | 59 | 11:57 | 62 | 95% |
| 840  | Fire Station 12               | 59 | 12:00 | 62 | 95% |
| 900  | Wx-Aurora Reservoir           | 59 | 12:00 | 62 | 95% |
| 920  | Wx-Aurora Town Hall           | 59 | 12:00 | 62 | 95% |
| 950  | Piney at Liverpool            | 59 | 11:57 | 62 | 95% |
| 1000 | A2-Maple Grove Resv.          | 59 | 12:00 | 62 | 95% |
| 1010 | Denver West                   | 59 | 11:57 | 62 | 95% |
| 1050 | Jeffco Fairgrounds            | 59 | 12:11 | 62 | 95% |
| 1060 | Heritage Square               | 59 | 11:57 | 62 | 95% |
| 1110 | Gunbarrel                     | 59 | 11:58 | 62 | 95% |
| 1310 | LDC at 64th                   | 59 | 12:11 | 62 | 95% |
| 1370 | West Metro FS13               | 59 | 11:57 | 62 | 95% |
| 1500 | Powers Park                   | 59 | 11:57 | 62 | 95% |
| 1920 | Wx-Brighton                   | 59 | 12:00 | 62 | 95% |
| 2260 | Brook Forest                  | 59 | 11:58 | 62 | 95% |
| 2940 | Willow Creek - DougCnty       | 59 | 12:00 | 62 | 95% |
| 3020 | Wx-West Creek WX              | 59 | 12:00 | 62 | 95% |
| 4020 | Rio Grande                    | 59 | 11:58 | 62 | 95% |
| 4090 | Magnolia                      | 59 | 11:58 | 62 | 95% |
| 4150 | Gold Hill                     | 59 | 11:58 | 62 | 95% |
| 4170 | Pine Brook                    | 59 | 11:57 | 62 | 95% |
| 4220 | Fling's                       | 59 | 11:58 | 62 | 95% |
| 4300 | Big Elk Park                  | 59 | 11:57 | 62 | 95% |
| 4520 | Eagle Ridge                   | 59 | 12:01 | 62 | 95% |
| 4530 | Winiger Ridge                 | 59 | 11:58 | 62 | 95% |
| 4550 | Boulder Jail                  | 59 | 11:57 | 62 | 95% |
| 4730 | Wx-Sugarloaf                  | 59 | 12:00 | 62 | 95% |
| 4750 | Wx-Louisville Lake            | 59 | 12:00 | 62 | 95% |
| 4820 | Doudy Draw                    | 59 | 11:54 | 62 | 95% |

|        |                            |     |       |     |      |
|--------|----------------------------|-----|-------|-----|------|
| 4830   | SBC @ San Souci            | 59  | 12:12 | 62  | 95%  |
| 4840   | SBC@S Boulder Ditch        | 59  | 11:58 | 62  | 95%  |
| 100100 | A2-Blackstone Precip       | 59  | 12:00 | 62  | 95%  |
| 150    | Nott Creek                 | 60  | 11:57 | 62  | 97%  |
| 220    | Upper Leyden               | 60  | 11:47 | 62  | 97%  |
| 1600   | Englewood Dam              | 60  | 11:57 | 62  | 97%  |
| 3090   | A2-Highland Heritage Park  | 60  | 12:00 | 62  | 97%  |
| 4140   | Logan Mill                 | 60  | 11:58 | 62  | 97%  |
| 4320   | Lee Hill Rain 2012         | 60  | 11:58 | 62  | 97%  |
| 4350   | Conifer Hill               | 60  | 11:58 | 62  | 97%  |
| 3070   | A2-Newlin Gulch            | 117 | 6:00  | 120 | 98%  |
| 2970   | Rampart Range Rd-Satellite | 64  |       | 62  | 103% |
| 5720   | Four Mile Creek            | 12  | 15:36 | 62  | 19%  |
| 5730   | West Creek                 | 15  | 12:00 | 62  | 24%  |
| 5740   | Trail Creek                | 14  | 12:00 | 62  | 23%  |
| 5810   | Stump Bump                 | 16  | 12:00 | 62  | 26%  |
| 5860   | Cedar Mountain             | 15  | 12:00 | 62  | 24%  |
| 5880   | Hackett Mountain           | 15  | 12:00 | 62  | 24%  |
| 5900   | Horse Creek-Satellite      | 66  | 1:59  | 62  | 106% |

| Rain Event Performance              |                |                  |        |        |        |        |        |        |         |     |     |      |      |         |                |  |        |  |
|-------------------------------------|----------------|------------------|--------|--------|--------|--------|--------|--------|---------|-----|-----|------|------|---------|----------------|--|--------|--|
|                                     |                | Reports Received | 5,022  |        |        |        |        |        |         |     |     |      |      |         |                |  |        |  |
|                                     | Systemwide Avg | Total Tips       | 5,238  |        |        |        |        |        |         |     |     |      |      |         |                |  |        |  |
|                                     | 95.88%         | Data Loss        | 4.12%  |        |        |        |        |        |         |     |     |      |      |         |                |  |        |  |
| Description                         | Sensor         | Performance      | 1-tips | 2-tips | 3-tips | 4-tips | 5-tips | 6-tips | >6-tips | Rcv | Exp | Miss | Hold | Bucket  |                |  |        |  |
| Dakan Rd                            | 2980           | 71%              | 10     | 7      | 0      | 0      | 0      | 0      | 0       | 17  | 24  | 7    | 0    | 0.03937 |                |  |        |  |
| Bear Cr below Cub                   | 2230           | 74%              | 19     | 6      | 0      | 1      | 0      | 0      | 0       | 26  | 35  | 9    | 0    | 0.03937 | Mean           |  | 29.299 |  |
| Pinewood Springs                    | 4510           | 76%              | 19     | 5      | 0      | 1      | 0      | 0      | 0       | 25  | 33  | 8    | 0    | 0.03937 | Median         |  | 31     |  |
| East/West Trailhead                 | 3050           | 76%              | 12     | 3      | 1      | 0      | 0      | 0      | 0       | 16  | 21  | 5    | 0    | 0.03937 | St. Dev        |  | 9.2359 |  |
| Morrison                            | 2330           | 78%              | 19     | 5      | 1      | 0      | 0      | 0      | 0       | 25  | 32  | 7    | 0    | 0.03937 | Mean plus 3 SD |  | 57.007 |  |
| A2-Sellers Gulch at Haystack Precip | 100150         | 79%              | 15     | 3      | 1      | 0      | 0      | 0      | 0       | 19  | 24  | 5    | 0    | 0.03937 | Min            |  | 8      |  |
| Slaughterhouse Gch                  | 1620           | 80%              | 25     | 1      | 1      | 0      | 1      | 0      | 0       | 28  | 35  | 7    | 0    | 0.03937 | Max            |  | 54     |  |
| Wx-Spring Valley Rd-DougCnty        | 2930           | 80%              | 6      | 2      | 0      | 0      | 0      | 0      | 0       | 8   | 10  | 2    | 0    | 0.03937 |                |  |        |  |
| Hansen Rain                         | 4330           | 80%              | 17     | 2      | 0      | 1      | 0      | 0      | 0       | 20  | 25  | 5    | 0    | 0.03937 |                |  |        |  |
| Wx-Button Rock                      | 4790           | 83%              | 12     | 3      | 0      | 0      | 0      | 0      | 0       | 15  | 18  | 3    | 0    | 0.03937 |                |  |        |  |
| Shop Creek                          | 1710           | 86%              | 27     | 3      | 1      | 0      | 0      | 0      | 0       | 31  | 36  | 5    | 0    | 0.03937 |                |  |        |  |
| Wx-W. Cherry Creek                  | 2790           | 88%              | 13     | 2      | 0      | 0      | 0      | 0      | 0       | 15  | 17  | 2    | 0    | 0.03937 |                |  |        |  |
| SBC @ SB Road                       | 4870           | 88%              | 34     | 3      | 1      | 0      | 0      | 0      | 0       | 38  | 43  | 5    | 0    | 0.03937 |                |  |        |  |
| West Metro FS13                     | 1370           | 88%              | 21     | 1      | 1      | 0      | 0      | 0      | 0       | 23  | 26  | 3    | 0    | 0.03937 |                |  |        |  |
| Temple Pond at DTC                  | 630            | 89%              | 28     | 4      | 0      | 0      | 0      | 0      | 0       | 32  | 36  | 4    | 0    | 0.03937 |                |  |        |  |
| ETG @ Buckley                       | 820            | 89%              | 21     | 3      | 0      | 0      | 0      | 0      | 0       | 24  | 27  | 3    | 0    | 0.03937 |                |  |        |  |
| SPR at Union Ave.                   | 1640           | 89%              | 14     | 2      | 0      | 0      | 0      | 0      | 0       | 16  | 18  | 2    | 0    | 0.03937 |                |  |        |  |
| Indian Hills                        | 2360           | 89%              | 30     | 2      | 1      | 0      | 0      | 0      | 0       | 33  | 37  | 4    | 0    | 0.03937 |                |  |        |  |
| Red Hill                            | 4290           | 89%              | 22     | 3      | 0      | 0      | 0      | 0      | 0       | 25  | 28  | 3    | 0    | 0.03937 |                |  |        |  |
| Geer Canyon                         | 4250           | 90%              | 23     | 3      | 0      | 0      | 0      | 0      | 0       | 26  | 29  | 3    | 0    | 0.03937 |                |  |        |  |
| Justice Center                      | 4360           | 90%              | 40     | 5      | 0      | 0      | 0      | 0      | 0       | 45  | 50  | 5    | 0    | 0.03937 |                |  |        |  |
| Chatfield COE                       | 1350           | 91%              | 27     | 3      | 0      | 0      | 0      | 0      | 0       | 30  | 33  | 3    | 0    | 0.03937 |                |  |        |  |
| Cold Sprg Gch conf                  | 2240           | 91%              | 27     | 3      | 0      | 0      | 0      | 0      | 0       | 30  | 33  | 3    | 0    | 0.03937 |                |  |        |  |
| Wx-Diamond Hill                     | 1420           | 91%              | 29     | 3      | 0      | 0      | 0      | 0      | 0       | 32  | 35  | 3    | 0    | 0.03937 |                |  |        |  |
| Red Rocks Park                      | 2370           | 91%              | 30     | 1      | 1      | 0      | 0      | 0      | 0       | 32  | 35  | 3    | 0    | 0.03937 |                |  |        |  |
| Cherry Cr bl Bayou Gch              | 2850           | 92%              | 20     | 2      | 0      | 0      | 0      | 0      | 0       | 22  | 24  | 2    | 0    | 0.03937 |                |  |        |  |
| WX-Bingham Lake Park                | 3030           | 92%              | 30     | 3      | 0      | 0      | 0      | 0      | 0       | 33  | 36  | 3    | 0    | 0.03937 |                |  |        |  |
| Wx-Salisbury Park                   | 2730           | 92%              | 11     | 1      | 0      | 0      | 0      | 0      | 0       | 12  | 13  | 1    | 0    | 0.03937 |                |  |        |  |
| Fire Station #7                     | 440            | 93%              | 36     | 3      | 0      | 0      | 0      | 0      | 0       | 39  | 42  | 3    | 0    | 0.03937 |                |  |        |  |
| Cub Cr below Blue                   | 2270           | 93%              | 36     | 3      | 0      | 0      | 0      | 0      | 0       | 39  | 42  | 3    | 0    | 0.03937 |                |  |        |  |
| SBC @ San Souci                     | 4830           | 93%              | 37     | 3      | 0      | 0      | 0      | 0      | 0       | 40  | 43  | 3    | 0    | 0.03937 |                |  |        |  |
| Wx-Elbert                           | 1440           | 93%              | 13     | 1      | 0      | 0      | 0      | 0      | 0       | 14  | 15  | 1    | 1    | 0.03937 |                |  |        |  |
| Wx-Marston Lake North               | 1520           | 93%              | 26     | 2      | 0      | 0      | 0      | 0      | 0       | 28  | 30  | 2    | 0    | 0.03937 |                |  |        |  |
| Bear Creek @ Lowell                 | 1530           | 93%              | 26     | 2      | 0      | 0      | 0      | 0      | 0       | 28  | 30  | 2    | 0    | 0.03937 |                |  |        |  |
| SPR at Henderson                    | 1660           | 93%              | 13     | 1      | 0      | 0      | 0      | 0      | 0       | 14  | 15  | 1    | 0    | 0.03937 |                |  |        |  |
| Sand Creek Park                     | 1800           | 93%              | 26     | 2      | 0      | 0      | 0      | 0      | 0       | 28  | 30  | 2    | 0    | 0.03937 |                |  |        |  |
| Happy Canyon at N Surrey Dr         | 2880           | 93%              | 27     | 0      | 1      | 0      | 0      | 0      | 0       | 28  | 30  | 2    | 0    | 0.03937 |                |  |        |  |
| Quincy/Highline                     | 620            | 93%              | 40     | 3      | 0      | 0      | 0      | 0      | 0       | 43  | 46  | 3    | 0    | 0.03937 |                |  |        |  |
| Havana Park                         | 500            | 94%              | 28     | 2      | 0      | 0      | 0      | 0      | 0       | 30  | 32  | 2    | 0    | 0.03937 |                |  |        |  |
| Parker/Mississippi                  | 540            | 94%              | 29     | 0      | 1      | 0      | 0      | 0      | 0       | 30  | 32  | 2    | 0    | 0.03937 |                |  |        |  |
| Pump Sta 3                          | 970            | 94%              | 42     | 3      | 0      | 0      | 0      | 0      | 0       | 45  | 48  | 3    | 0    | 0.03937 |                |  |        |  |
| West Cherry Head-Douglas Cnty       | 2920           | 94%              | 14     | 1      | 0      | 0      | 0      | 0      | 0       | 15  | 16  | 1    | 0    | 0.03937 |                |  |        |  |
| Little Narrows                      | 4470           | 94%              | 28     | 2      | 0      | 0      | 0      | 0      | 0       | 30  | 32  | 2    | 0    | 0.03937 |                |  |        |  |
| Cherry Cr @ Steele                  | 1720           | 94%              | 29     | 2      | 0      | 0      | 0      | 0      | 0       | 31  | 33  | 2    | 0    | 0.03937 |                |  |        |  |
| Choke Cherry Resvr                  | 2320           | 94%              | 29     | 2      | 0      | 0      | 0      | 0      | 0       | 31  | 33  | 2    | 0    | 0.03937 |                |  |        |  |
| SPR at 3rd Ave                      | 1320           | 94%              | 30     | 2      | 0      | 0      | 0      | 0      | 0       | 32  | 34  | 2    | 0    | 0.03937 |                |  |        |  |
| Sulphur Gulch                       | 2840           | 94%              | 30     | 2      | 0      | 0      | 0      | 0      | 0       | 32  | 34  | 2    | 0    | 0.03937 |                |  |        |  |
| Haskins Gulch Conf                  | 2820           | 94%              | 31     | 2      | 0      | 0      | 0      | 0      | 0       | 33  | 35  | 2    | 0    | 0.03937 |                |  |        |  |
| Rio Grande                          | 4020           | 94%              | 31     | 2      | 0      | 0      | 0      | 0      | 0       | 33  | 35  | 2    | 0    | 0.03937 |                |  |        |  |
| Guy Hill Ranch                      | 310            | 94%              | 16     | 1      | 0      | 0      | 0      | 0      | 0       | 17  | 18  | 1    | 0    | 0.03937 |                |  |        |  |
| Doudy Draw                          | 4820           | 94%              | 32     | 2      | 0      | 0      | 0      | 0      | 0       | 34  | 36  | 2    | 0    | 0.03937 |                |  |        |  |
| Wx-Cal-Wood Ranch                   | 4770           | 95%              | 18     | 1      | 0      | 0      | 0      | 0      | 0       | 19  | 20  | 1    | 0    | 0.03937 |                |  |        |  |

|                         |        |      |    |   |   |   |   |   |   |   |    |    |   |   |         |
|-------------------------|--------|------|----|---|---|---|---|---|---|---|----|----|---|---|---------|
| St. Antons              | 4570   | 95%  | 39 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 43 | 2 | 0 | 0.03937 |
| No Name @ Quincy        | 730    | 96%  | 21 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 23 | 1 | 0 | 0.03937 |
| Brook Forest            | 2260   | 96%  | 46 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 50 | 2 | 0 | 0.03937 |
| Montview Park           | 400    | 96%  | 24 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 26 | 1 | 0 | 0.03937 |
| Wx-Urban Farm           | 1460   | 96%  | 24 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 26 | 1 | 0 | 0.03937 |
| Johnny Park             | 4310   | 96%  | 24 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 26 | 1 | 0 | 0.03937 |
| Expo Park               | 420    | 96%  | 25 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 27 | 1 | 0 | 0.03937 |
| Lena @ U.S. Hwy 6       | 1040   | 96%  | 25 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 27 | 1 | 0 | 0.03937 |
| Wx-Aurora Town Hall     | 920    | 96%  | 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 28 | 1 | 0 | 0.03937 |
| Lakewood CC             | 1550   | 96%  | 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 28 | 1 | 0 | 0.03937 |
| Gold Lake               | 4180   | 96%  | 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 28 | 1 | 0 | 0.03937 |
| Lee Hill Rain 2012      | 4320   | 96%  | 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 28 | 1 | 0 | 0.03937 |
| Louisville Rec Ctr      | 1100   | 97%  | 28 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 30 | 1 | 0 | 0.03937 |
| Tallman Gulch           | 3080   | 97%  | 29 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 31 | 1 | 0 | 0.03937 |
| Lakeshore               | 4060   | 97%  | 29 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 31 | 1 | 0 | 0.03937 |
| Columbine Open Space    | 2800   | 97%  | 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 32 | 1 | 0 | 0.03937 |
| Virginia Court          | 510    | 97%  | 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 33 | 1 | 0 | 0.03937 |
| Iliff Pond              | 650    | 97%  | 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 33 | 1 | 0 | 0.03937 |
| Gunbarrel               | 1110   | 97%  | 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 33 | 1 | 0 | 0.03937 |
| Crescent                | 4010   | 97%  | 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 33 | 1 | 0 | 0.03937 |
| Twin Sisters            | 4080   | 97%  | 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 33 | 1 | 0 | 0.03937 |
| Conifer Hill            | 4350   | 97%  | 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 33 | 1 | 0 | 0.03937 |
| CC at Stroh Rd          | 2860   | 97%  | 32 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 34 | 1 | 0 | 0.03937 |
| Lazy Acres              | 4200   | 97%  | 32 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 34 | 1 | 0 | 0.03937 |
| A2-ETG @ Hampden Precip | 100110 | 97%  | 32 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 34 | 1 | 0 | 0.03937 |
| Jewell Detention        | 520    | 97%  | 33 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 35 | 1 | 0 | 0.03937 |
| Slaughterhouse          | 4190   | 97%  | 33 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 35 | 1 | 0 | 0.03937 |
| Fire Sta 47             | 3060   | 97%  | 35 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 37 | 1 | 0 | 0.03937 |
| Sanderson at Xavier     | 1340   | 97%  | 36 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 38 | 1 | 0 | 0.03937 |
| Idledale                | 2350   | 97%  | 37 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 39 | 1 | 0 | 0.03937 |
| Genesee Village         | 2310   | 98%  | 40 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 42 | 1 | 0 | 0.03937 |
| SBC@S Boulder Ditch     | 4840   | 98%  | 42 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 44 | 1 | 0 | 0.03937 |
| Betasso                 | 4110   | 98%  | 45 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 47 | 1 | 0 | 0.03937 |
| Shanahan Ridge          | 4810   | 98%  | 52 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 54 | 1 | 0 | 0.03937 |
| A2-Carr Street          | 100    | 100% | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 23 | 0 | 0 | 0.03937 |
| Ralston Reservoir       | 110    | 100% | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 17 | 0 | 0 | 0.03937 |
| West Woods              | 120    | 100% | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 0 | 0 | 0.03937 |
| Wx-Blue Mountain        | 140    | 100% | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 0.03937 |
| Nott Creek              | 150    | 100% | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 37 | 0 | 0 | 0.03937 |
| Leyden Reservoir        | 200    | 100% | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 26 | 0 | 0 | 0.03937 |
| Leyden Confluence       | 210    | 100% | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 0 | 0 | 0.03937 |
| Van Bibber Park         | 300    | 100% | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 16 | 0 | 0 | 0.03937 |
| Sports Complex          | 320    | 100% | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 17 | 0 | 0 | 0.03937 |
| Van Bibber @ Hwy 93     | 330    | 100% | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 28 | 0 | 0 | 0.03937 |
| Kelly Dam               | 410    | 100% | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 | 0 | 0 | 0.03937 |
| Utah Park               | 430    | 100% | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0.03937 |
| Fire Station #19        | 530    | 100% | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 32 | 0 | 0 | 0.03937 |
| Harvard Gulch Park      | 600    | 100% | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | 0 | 0 | 0.03937 |
| Harvard @ Jackson       | 610    | 100% | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 43 | 0 | 0 | 0.03937 |
| Goldsmith @ Eastman     | 640    | 100% | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 35 | 0 | 0 | 0.03937 |
| Toll Gate @ 6th         | 700    | 100% | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 35 | 0 | 0 | 0.03937 |
| Horseshoe Park Drop     | 710    | 100% | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 33 | 0 | 0 | 0.03937 |
| Confluence Pond         | 720    | 100% | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 24 | 0 | 0 | 0.03937 |
| Wx-Quincy Reservoir     | 750    | 100% | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 28 | 0 | 0 | 0.03937 |
| Mission Viejo Park      | 760    | 100% | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | 0 | 0 | 0.03937 |
| Sable Ditch @ 18th      | 800    | 100% | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 32 | 0 | 0 | 0.03937 |
| Granby Ditch @ 6th      | 810    | 100% | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 35 | 0 | 0 | 0.03937 |

|                            |      |      |    |   |   |   |   |   |   |   |    |    |   |   |         |
|----------------------------|------|------|----|---|---|---|---|---|---|---|----|----|---|---|---------|
| Side Creek Park            | 830  | 100% | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | 0 | 0 | 0.03937 |
| Fire Station 12            | 840  | 100% | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 36 | 0 | 0 | 0.03937 |
| Flying J                   | 850  | 100% | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 21 | 21 | 0 | 0 | 0.03937 |
| Murphy Creek GC            | 870  | 100% | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 35 | 0 | 0 | 0.03937 |
| Piney at Liverpool         | 950  | 100% | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 35 | 0 | 0 | 0.03937 |
| A2-Maple Grove Resv.       | 1000 | 100% | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 24 | 0 | 0 | 0.03937 |
| Denver West                | 1010 | 100% | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 27 | 0 | 0 | 0.03937 |
| NREL/S. Table Mtn.         | 1030 | 100% | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 0 | 0 | 0.03937 |
| Jeffco Fairgrounds         | 1050 | 100% | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 0.03937 |
| Heritage Square            | 1060 | 100% | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0.03937 |
| Broomfield 3207            | 1200 | 100% | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 0 | 0 | 0.03937 |
| Hidden Lake                | 1300 | 100% | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 16 | 0 | 0 | 0.03937 |
| LDC at 64th                | 1310 | 100% | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 14 | 0 | 0 | 0.03937 |
| Denver Zoo                 | 1360 | 100% | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 0 | 0 | 0.03937 |
| Upper Sloan Det.           | 1400 | 100% | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 24 | 0 | 0 | 0.03937 |
| Third Creek at DIA         | 1480 | 100% | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 0.03937 |
| Powers Park                | 1500 | 100% | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 42 | 0 | 0 | 0.03937 |
| Wx-Brighton Ditch          | 1570 | 100% | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 24 | 0 | 0 | 0.03937 |
| Englewood Dam              | 1600 | 100% | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 | 0 | 0 | 0.03937 |
| Cherry Cr @ Champa         | 1700 | 100% | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 19 | 0 | 0 | 0.03937 |
| Niver Detention            | 1900 | 100% | 9  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9  | 9  | 0 | 0 | 0.03937 |
| Wx-Brighton                | 1920 | 100% | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 0.03937 |
| Wx-Hiwan G.C.              | 2210 | 100% | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 22 | 0 | 0 | 0.03937 |
| Rosedale                   | 2250 | 100% | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 47 | 0 | 0 | 0.03937 |
| Kinney Peak                | 2280 | 100% | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 0 | 0 | 0.03937 |
| El Rancho                  | 2340 | 100% | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 0 | 0 | 0.03937 |
| Wx-Castle Rock             | 2750 | 100% | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 0 | 0 | 0.03937 |
| Pine Cliff Road            | 2810 | 100% | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 13 | 0 | 0 | 0.03937 |
| Spruce Mt - Douglas        | 2890 | 100% | 8  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8  | 8  | 0 | 0 | 0.03937 |
| Russelville Gulch-Douglas  | 2900 | 100% | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | 0 | 0 | 0.03937 |
| East Cherry Cr-Douglas     | 2910 | 100% | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 13 | 0 | 0 | 0.03937 |
| Willow Creek - DougCnty    | 2940 | 100% | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 0 | 0 | 0.03937 |
| DC Public Works            | 2950 | 100% | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 0 | 0 | 0.03937 |
| Indian Creek               | 2960 | 100% | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 35 | 0 | 0 | 0.03937 |
| Rampart Range Rd-Satellite | 2970 | 100% | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | 0 | 0 | 0.03937 |
| Wx-Tomah Rd-DougCnty       | 2990 | 100% | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 32 | 0 | 0 | 0.03937 |
| Wx-West Creek WX           | 3020 | 100% | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 | 0 | 0 | 0.03937 |
| CC @ Prairie Canyon Ranch  | 3040 | 100% | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 16 | 0 | 0 | 0.03937 |
| A2-Highland Heritage Park  | 3090 | 100% | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 26 | 0 | 0 | 0.03937 |
| Red Garden                 | 4030 | 100% | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 42 | 0 | 0 | 0.03937 |
| Martin Gulch               | 4040 | 100% | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 44 | 0 | 0 | 0.03937 |
| Walker Ranch               | 4050 | 100% | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 23 | 0 | 0 | 0.03937 |
| Bear Peak                  | 4070 | 100% | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 37 | 0 | 0 | 0.03937 |
| Magnolia                   | 4090 | 100% | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 37 | 0 | 0 | 0.03937 |
| Filter Plant               | 4100 | 100% | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 0 | 0 | 0.03937 |
| Swiss Peaks                | 4130 | 100% | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | 0 | 0 | 0.03937 |
| Logan Mill                 | 4140 | 100% | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 26 | 0 | 0 | 0.03937 |
| Gold Hill                  | 4150 | 100% | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 33 | 0 | 0 | 0.03937 |
| Sunshine                   | 4160 | 100% | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 33 | 0 | 0 | 0.03937 |
| Pine Brook                 | 4170 | 100% | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 26 | 0 | 0 | 0.03937 |
| Fling's                    | 4220 | 100% | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 26 | 0 | 0 | 0.03937 |
| Golden Age                 | 4230 | 100% | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 16 | 0 | 0 | 0.03937 |
| Sunset                     | 4240 | 100% | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 27 | 0 | 0 | 0.03937 |
| Taylor Mountain            | 4260 | 100% | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 0 | 0 | 0.03937 |
| Cannon Mountain            | 4270 | 100% | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 19 | 0 | 0 | 0.03937 |
| Big Elk Park               | 4300 | 100% | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 0 | 0 | 0.03937 |
| Riverside                  | 4340 | 100% | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 19 | 0 | 0 | 0.03937 |

|                      |            |      |      |     |    |   |   |   |   |      |      |     |   |         |
|----------------------|------------|------|------|-----|----|---|---|---|---|------|------|-----|---|---------|
| Apple Valley         | 4490       | 100% | 21   | 0   | 0  | 0 | 0 | 0 | 0 | 21   | 21   | 0   | 0 | 0.03937 |
| Eagle Ridge          | 4520       | 100% | 12   | 0   | 0  | 0 | 0 | 0 | 0 | 12   | 12   | 0   | 0 | 0.03937 |
| Winiger Ridge        | 4530       | 100% | 21   | 0   | 0  | 0 | 0 | 0 | 0 | 21   | 21   | 0   | 0 | 0.03937 |
| Boulder Jail         | 4550       | 100% | 43   | 0   | 0  | 0 | 0 | 0 | 0 | 43   | 43   | 0   | 0 | 0.03937 |
| Wx-Ward C-1          | 4710       | 100% | 21   | 0   | 0  | 0 | 0 | 0 | 0 | 21   | 21   | 0   | 0 | 0.03937 |
| Wx-Sugarloaf         | 4730       | 100% | 33   | 0   | 0  | 0 | 0 | 0 | 0 | 33   | 33   | 0   | 0 | 0.03937 |
| Wx-Louisville Lake   | 4750       | 100% | 33   | 0   | 0  | 0 | 0 | 0 | 0 | 33   | 33   | 0   | 0 | 0.03937 |
| Whispering Pines     | 4880       | 100% | 36   | 0   | 0  | 0 | 0 | 0 | 0 | 36   | 36   | 0   | 0 | 0.03937 |
| A2-Blackstone Precip | 100100     | 100% | 32   | 0   | 0  | 0 | 0 | 0 | 0 | 32   | 32   | 0   | 0 | 0.03937 |
| Wx-Aurora Reservoir  | 900        | 100% | 32   | 0   | 0  | 0 | 0 | 0 | 0 | 32   | 32   | 0   | 0 | 0.03937 |
| Aurora Regional Pond | 940        | 100% | 40   | 0   | 0  | 0 | 0 | 0 | 0 | 40   | 40   | 0   | 0 | 0.03937 |
| A2-Newlin Gulch      | 3070       | 67%  | 19   | 15  | 1  | 0 | 0 | 0 | 0 | 35   | 52   | 17  | 0 | 0.03937 |
|                      | TOTAL TIPS |      | 4827 | 179 | 12 | 3 | 1 | 0 | 1 | 5022 | 5238 | 216 | 1 |         |
| WX-EPC at Hwy 105    | 3010       | 94%  | 76   | 5   | 0  | 0 | 0 | 0 | 1 | 81   | 86   | 5   | 0 | 0.01    |
| Porphory Mtn         | 4850       | 86%  | 31   | 6   | 0  | 0 | 0 | 0 | 0 | 37   | 43   | 6   | 0 | 0.01    |
| Fairview Peak        | 4860       | 98%  | 64   | 1   | 0  | 0 | 0 | 0 | 0 | 65   | 66   | 1   | 1 | 0.01    |
| Four Mile Creek      | 5720       | 67%  | 1    | 1   | 0  | 0 | 0 | 0 | 0 | 2    | 3    | 1   | 0 | 0.03937 |
| West Creek           | 5730       | 100% | 2    | 0   | 0  | 0 | 0 | 0 | 0 | 2    | 2    | 0   | 0 | 0.03937 |
| Trail Creek          | 5740       | 75%  | 2    | 1   | 0  | 0 | 0 | 0 | 0 | 3    | 4    | 1   | 1 | 0.03937 |
| Stump Bump           | 5810       | 100% | 2    | 0   | 0  | 0 | 0 | 0 | 0 | 2    | 2    | 0   | 0 | 0.03937 |
| Cedar Mountain       | 5860       | 100% | 3    | 0   | 0  | 0 | 0 | 0 | 0 | 3    | 3    | 0   | 0 | 0.03937 |
| Hackett Mountain     | 5880       | 100% | 2    | 0   | 0  | 0 | 0 | 0 | 0 | 2    | 2    | 0   | 0 | 0.03937 |



### 2014 Monthly Peak Hour ALERT Radio Traffic Summary

