

# *Boulder County Community Forestry Sort Yard 2018 Annual Report*

*Written by Wayne Harrington*

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## **Introduction:**

*The mission of the Community Forestry Sort Yard (CFSY) program is to inspire landowners to actively manage their forested properties. This annual report covers trends, origins of material, reasons for removal, and volumes of removed material. The volume figures in this report are approximate, includes materials sorted and processed at both sort yard sites.*

*This is the eleventh year that we have operated the sort yard program. This year, on Saturday May 5 we hosted a Wildfire Awareness Day at the Nederland CFSY. Since many of our sort yard users complete fire mitigation work around their homes this seemed like a logical place to hold such an event. At the event, we showcased local organizations participating in firefighting and fire mitigation. Saws and Slaws (Coal Creek Canyon), Wildfire Partners, Nederland Fire Department, Boulder County Office of Emergency Management, and Parks and Open Forestry staff all participated. Thanks to everyone who came out to learn, eat, and mingle! As the day progressed many of the participating agencies helped sort yard users unload their slash. It was an overall success that we hope to repeat in 2019.*

*We continued the monthly newsletter which keeps users up to date on sort yard happenings, while also providing good resources for landowners. The monthly CFSY newsletter had an average of a 37% opening rate each month; the industry average is around 24%! The current email list has over a thousand active emails. Many of those on the list discuss the newsletter with our sort yard technicians.*

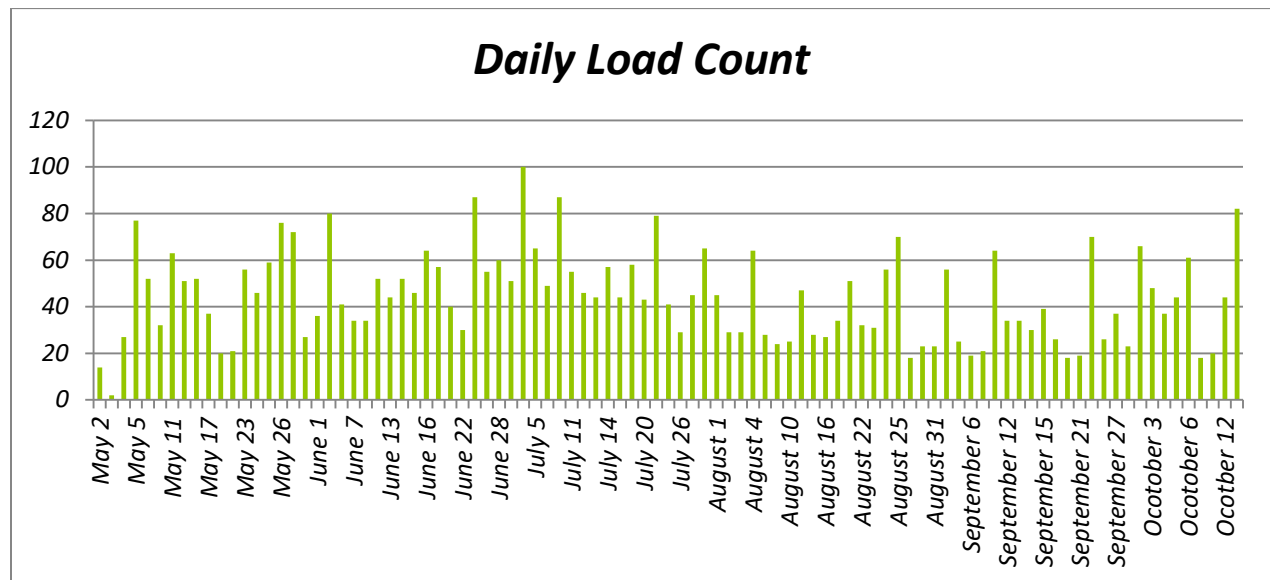
*It was an overall productive year and this was a reminder of how well this public service is received by the public. This report will discuss the overall numbers and trends for each individual forestry sort yard and then will have a summary of both yards.*

## **Nederland CFSY**

### **Trends:**

The Nederland CFSY opened on May 2 to a cold and snowy day; which resulted in just 14 loads. The last day was on October 13, and there were 86 loads. The Nederland CFSY was closed on July 4; otherwise it was open 4 days a week during the year for a total of 95 days of operation. Average daily load count was 44.2 per day, totaling 4,199 loads for this year's operational period. Days of operation were up 5 operational days but load count was down 101 compared to 2017. Even with a decreased load count overall volume was up. There was only one, 100 load count day this year on June 30.

211 new properties registered at the yard and a total of 878 properties used the yard this year. Direction of travel flow along Ridge Road entering the Nederland CFSY was also tracked in 2018; refer to Appendix C.



### **Origin of Material:**

Boulder County residents accounted for 93% of the users and 92% of the biomass transported to the yard. Jefferson County and Gilpin County had an increase of 2 users in 2018.

County	Number of Users	Percentage of Users	Total Tons of Biomass	Percentage of Biomass
Boulder	819	93.2%	851.1	92.7%
Gilpin	29	3.3%	49.1	5.3%
Jefferson	28	3.2%	17.0	1.8%
Larimer	2	0.2%	0.2	0.0%
N/A*	1	0.1%	0.9	0.1%
<b>Grand Total</b>	<b>879</b>	<b>100.0%</b>	<b>918.2</b>	<b>100.0%</b>

\* Incomplete addresses

Contractor percentage was down roughly 1% on load count and 8% on wood volume, but slash volume was up 2%.

User Type	Load Count	Slash Volume	Wood Volume	Percent volume of yard debris
Private	92.5%	81.0%	91.7%	92.5%
Contractor	7.5%	19.0%	8.3%	7.5%

## Reason for Removal:

Reason for removal is tracked to find out why residents are bringing biomass to the sort yards. The list below contains the thirteen primary categories:

1. Fire Mitigation
  - a. Includes any material removed within the home ignition zone (HIZ) 100 feet adjacent to structures. Also, any vegetation that will affect intensity of wildland fire that approaches a HIZ. This includes removal of trees, limbs, old slash piles, and other woody material, except construction and demolition debris/scrap.
2. Noxious Weed Management
  - a. Tracking volume of noxious weed management.
3. Yard cleaning
  - a. Yard clean up.
4. Wind Throw/ Wind Damage
  - a. Tracking how much volume caused by high winds.
5. Other
  - a. Primary reason had a low volume, not a hot topic or was not on the current drop down list.
6. Construction
  - a. Slash/branches and logs from construction projects
7. Forest Health
  - a. Material generated by forest enhancement projects, storm damage, construction site clearance, or other forest restoration related activities.
8. Cold Springs Fire Clean up
  - b. This category was tracked after the Cold Springs Fire to see how much material can be attributed to the fire.
9. Bark Beetles
  - c. Mountain Pine Beetle (MPB)
  - d. Ips spp.
  - e. Spruce Beetle
10. Hazard Tree
  - f. Trees that have a target that can cause property damage or personal injury.
11. Wildfire Partners
  - g. Wildfire Partners was the main reason for doing fire mitigation.
12. Insurance Company
  - h. Woody vegetation generated by insurance company influence on policies related to fire mitigation.
13. Snow Damage
  - i. Material damaged by snow storm.

Fire mitigation (75.6%) was the primary reason for removal, resulting in the highest amount of slash (82.1%), wood (83.6%) and yard debris (75.6%) volume removed. Noxious Weed Management was the second highest reason load count (8.1%) and second highest volume of yard debris (8.1%). Wind damage was second highest slash volume (3.9%). Construction was the second highest wood volume (4.0%).

<i>Primary Reason for Removal</i>	<i>Percentage of Load Count</i>	<i>Percentage of Slash Tons</i>	<i>Percentage of Wood Tons</i>	<i>Percentage of Yard Debris Volume</i>
<i>Fire Mitigation/ D-space</i>	<b>75.6%</b>	<b>82.1%</b>	<b>83.6%</b>	<b>75.6%</b>
<i>Noxious Weed Management</i>	<b>8.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>8.1%</b>
<i>Yard cleaning</i>	<b>4.7%</b>	<b>2.8%</b>	<b>0.7%</b>	<b>4.7%</b>
<i>Wind throw / Wind Damage</i>	<b>3.0%</b>	<b>3.9%</b>	<b>2.3%</b>	<b>3.0%</b>
<i>Other</i>	<b>2.5%</b>	<b>2.8%</b>	<b>2.9%</b>	<b>2.5%</b>
<i>Construction</i>	<b>1.7%</b>	<b>3.5%</b>	<b>4.0%</b>	<b>1.7%</b>
<i>Forest Health</i>	<b>1.3%</b>	<b>1.5%</b>	<b>1.7%</b>	<b>1.3%</b>
<i>Cold Springs Fire Clean Up</i>	<b>1.2%</b>	<b>1.3%</b>	<b>2.2%</b>	<b>1.2%</b>
<i>Bark Beetles</i>	<b>0.5%</b>	<b>0.6%</b>	<b>1.7%</b>	<b>0.5%</b>
<i>Hazard Tree</i>	<b>0.5%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>0.5%</b>
<i>Wildfire Partners</i>	<b>0.5%</b>	<b>0.4%</b>	<b>0.9%</b>	<b>0.5%</b>
<i>Insurance Company</i>	<b>0.3%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.3%</b>
<i>Snow Damage</i>	<b>0.1%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.1%</b>

### **Volume Totals:**

Slash volume was up 153.7 tons and wood volume was up 55.3 tons, chip volume was down 10.6 tons respectively, from the previous year, with yard debris volume added, overall volume increasing 215.8 tons from 2017. A total of 39 semi loads of ground woody biomass were hauled off site.

<i>Type of Woody Biomass</i>	<i>Slash Tons</i>	<i>Wood Tons</i>	<i>Chip Tons</i>	<i>Noxious Weed 40 yd<sup>3</sup> Roll-Offs Tons</i>
<b>Totals</b>	753.4	164.8	99.4	17.4

**Total material processed for the 2018 season: 1,035.0 Tons**

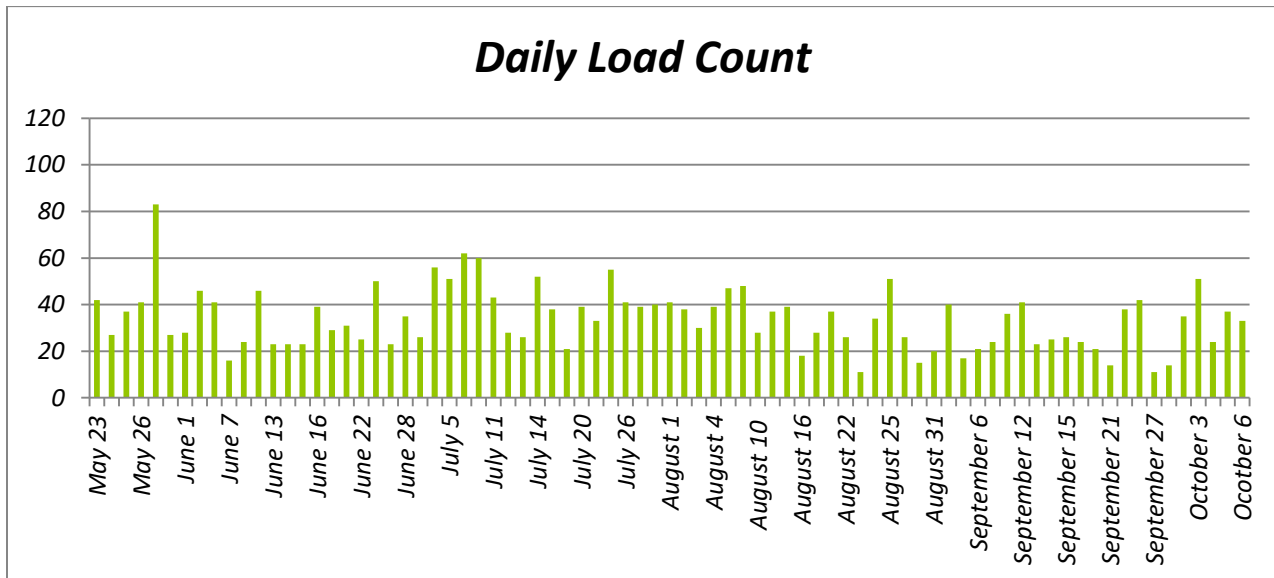


*Figure 1: Opening day May 2*

## **Meeker Park CFSY**

### **Trends:**

In 2018, the Meeker CFSY opened on May 23 to an overcast day with hail on the ground from a storm that moved through the area the night before. By noon there were 28 loads and the day's load total was 42. The last day was October 6 and there were 33 loads for the day. The Meeker Park CFSY was also closed on July 4. There were a total of 79 days of operation with an average load count of 33.9 loads per day which totals 2679 loads for this operational period, an increase 34 loads from 2017.



### **Origin of Material:**

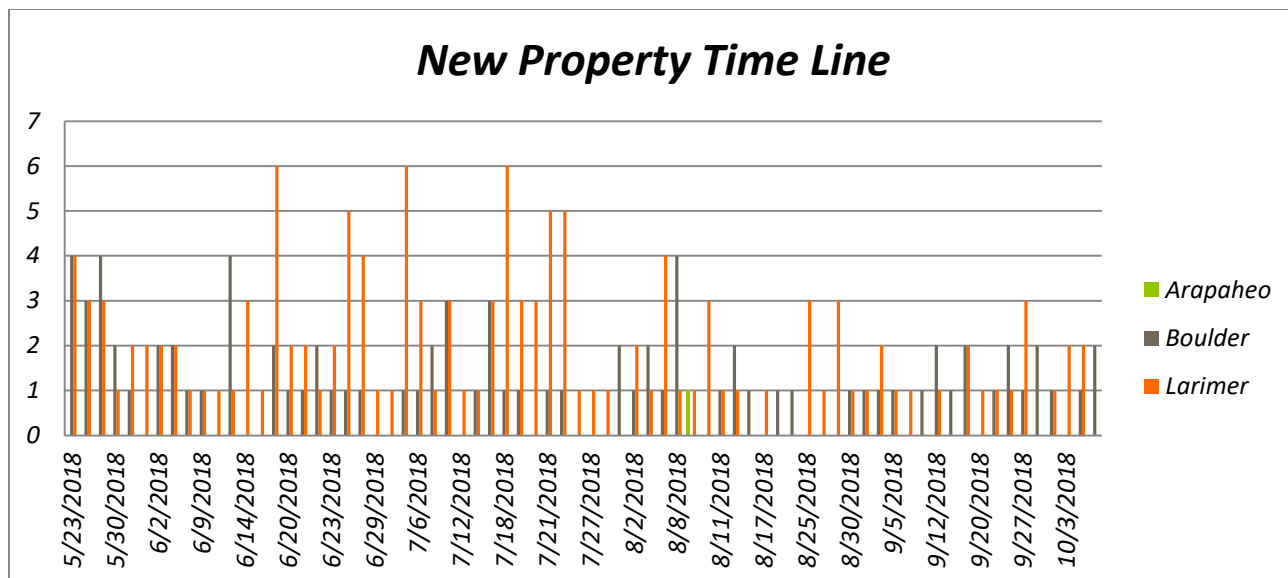
Larimer County residents had an increase of 6.7% of the load count to bring the 2018 load count percentage up to 43.3%, and biomass volume increased by 8.2% to bring the percentage up to 46.3%. This is the second straight year of a significant increase in use from Larimer County, mostly from Town of Estes.

Yes, that is correct on the chart below, someone did drive from Arapahoe County to the Meeker Pak CFSY, and this was confirmed by the Sort Yard Technician.

County	Number of Users	Percentage of Users	Total Tons of Biomass	Percentage of Biomass
Boulder	353	56.4%	312.5	53.2%
Larimer	271	43.3%	271.5	46.3%
N/A*	1	0.2%	1.8	0.3%
Arapahoe	1	0.2%	1.1	0.2%
Grand Total	626	100.0%	586.9	100.0%

\*incomplete addresses

The chart below shows a timeline of new property registrations at the Meeker Park CFSY. There were a total of 221 new properties registered; 84 from Boulder County, 136 from Larimer County, and 1 from Arapahoe County.



Private landowners were the primary patrons of the Meeker Sort Yard and, consequently generated the majority of the slash. Contractor use was down 2% in 2018; but with an increase in slash volume of 4%, although wood volume was down roughly 10%.

User Type	Load Count	Slash Volume	Wood Volume	Percent Volume of Yard Debris
Private	88.5%	74.5%	68.6%	88.5%
Contractor	11.5%	25.5%	31.4%	11.5%

### Reason for Removal:

Fire mitigation (79.6%) was the primary reason for removal resulting in the highest amount of slash (85.2%), wood volume (74.8%) and yard debris (79.6%) removed. Yard cleaning was the second highest reason for removal at 9.4% of the load counts.

Primary Reason for Removal	Percentage of Load Count	Percentage of Slash Tons	Percentage of Wood Tons	Percentage of Yard Debris Volume
Fire Mitigation / D- Space	79.6%	85.2%	74.8%	79.6%
Yard cleaning	9.4%	1.4%	1.2%	9.4%
Wind throw/ Wind Damage	3.8%	4.4%	0.8%	3.8%
Construction	3.7%	7.0%	20.2%	3.7%
Noxious Weed Management	1.8%	0.0%	0.0%	1.8%
Other	0.6%	0.7%	0.0%	0.6%
Bark Beetles	0.4%	0.5%	2.9%	0.4%
Forest Health	0.3%	0.3%	0.0%	0.3%
Hazard Tree	0.2%	0.3%	0.0%	0.2%
Insurance Company	0.1%	0.1%	0.0%	0.1%
Snow Damage	0.1%	0.1%	0.0%	0.1%
Grand Total	100.0%	100.0%	100.0%	100.0%



**Volume Totals:**

Slash volume was up 151.3 tons, wood volume was up 64.5 tons, and chip volume was up 16.7 tons from the previous year. Overall volume increased 246.6 tons from 2017 which includes tonnage from pine needles and noxious weeds. There were a total of 27 semi-truck loads removed from the site in 2018.

<b>Type of Woody Biomass</b>	<b>Slash Tons</b>	<b>Wood Tons</b>	<b>Chip Tons</b>	<b>Noxious Weed 40 yd<sup>3</sup> Roll-Offs Tons</b>
<b>Totals</b>	458.7	128.2	19.2	11.6

**Total material processed for the 2018 season: 617.7 Tons**



*Figure 2: Residents unloading at the Meeker Park CFSY*

## **Combined Yard Data**

### **Load Count:**

The total load count for 2018 was 6,878 loads, averaging 39.5 loads per day. There were 431 new users in 2018 (211 from Nederland, 220 from Meeker Park). In total, there were 1503 different users with an average of 4.8 loads per user. In 2017; there were 1251 different users with an average of 5.6 loads per user.

<b>Community Forestry Sort Yard Property User Count</b>				
<b>Yard</b>	<i>Previous Property</i>	<i>New Property</i>	<i>New Property Owners</i>	<i>Total Property User Count</i>
<b>Meeker Park</b>	404	220	1	625
<b>Nederland</b>	652	211	15	878
<b>Totals</b>	<b>1056</b>	<b>431</b>	<b>16</b>	<b>1503</b>

<b>Year</b>	<b>Operational Days</b>	<b>Load Count</b>	<b>Daily Average</b>
<b>2014</b>	187	4722	25.3
<b>2015</b>	187	4688	25.1
<b>2016</b>	192	6509	33.9
<b>2017</b>	169	6945	41.1
<b>2018</b>	174	6878	39.5
<b>Totals</b>	909	29742	32.7
<b>5- Year Average</b>	181.8	5948.4	32.7

The chart above tracks the load counts during the past five years. In appendix D, there is a chart of usage since 2008. The load count in 2018 was lower than 2017; however overall volume of material collected increased due to improved

volume estimation (volume is approximate because not all loads are physically measured due to time constraints. Personnel responsible for initial contact receives training on recording volume to increase the consistency between contacts), (See 2018 volume numbers on page 13). The following chart demonstrates the break down between the two sort yards during 2018 based on percentage of load count and slash and wood volume/weights. Operational days and percentage of operational days were also added to provide comparisons between the two yards. Nederland CFSY typically accounts for 70% load count, but Meeker Park load count was higher this year, due to increased usage from residents of Estes Park.



**Figure 3: Resident unloading at Nederland CFSY**





The 2018 CFSY Biomass Tons map demonstrates geographically where most of the loads originated. This map does not include tonnage from chips accepted at the yards and community grinding events. See the inserted section of the map where loads originated from the town of Estes Park. Estes Park and Larimer County don't contribute any funds or staffing to the Boulder County Community Forestry Sort Yard program.

### **Reason for Removal:**

The table below shows the tallies for the different types of primarily reasons for removal. Fire mitigation was the primary reason for removal, resulting in the largest amount of the slash (77.3%) wood volume (79.9%) and yard debris volume. Yard cleaning was the second highest reason for removal, representing 28.8% of yard debris volume. The Cold Springs Fire clean-up removal accounted for 0.8% of total slash volume and 1.2% of total wood volume. This reason for removal will be tracked again next year.

Primary Reason for Removal	Percentage of Load Count	Percentage of Slash Tons	Percentage of Wood Tons	Percentage of Yard Debris Volume
Fire Mitigation/ D-space	77.3%	83.7%	79.9%	55.0%
Yard cleaning	6.5%	2.3%	0.9%	28.8%
Noxious Weed Management	5.7%	0.0%	0.1%	14.1%
Other	4.0%	6.3%	12.6%	1.2%
Wind Throw/ Wind Damage	3.3%	4.1%	1.6%	0.3%
Forest Health	1.0%	1.2%	0.9%	0.3%
Cold Springs Fire Clean Up	0.8%	0.8%	1.2%	0.0%
Bark Beetles	0.5%	0.6%	2.2%	0.0%
Hazard Tree	0.4%	0.5%	0.0%	0.0%
Wildfire Partners	0.3%	0.3%	0.5%	0.3%
Insurance Company	0.2%	0.3%	0.0%	0.0%
Snow Damage	0.1%	0.1%	0.0%	0.0%
Grand Total	100.0%	100.0%	100.0%	100.0%

### **Grinding Operations:**

In 2018, there were 188 total hours of grinding. Grinding operations are separated into three categories; Biomass Fuel, CFSY, and Community Grinding.

**Biomass Fuel:** There was a total of 2 loads of biomass were produced at the Nederland yard from the stored in-house project which were sent to the Boulder County Jail. The majority of the 2018/19 biomass fuel was produced from the Reynolds Ranch forestry project. There are approximately 5 loads of biomass at the Meeker Park yard and 3 loads at the Nederland yard of sort yard wood earmarked for the biomass facilities.

**CFSY:** The grinder was transported between yards during the summer months in order to keep the sites clear and open for more slash. Slash was ground directly into semi-trucks this year in order to reduce handling time. The Meeker Park yard produced 27 semi-loads and the Nederland yard produced 39 semi-loads, an increase of 6 semi

loads from 2017, for a total of 66 semi-trucks loads of ground slash. See Appendix A for breakdown of cost by yard and charges.

**Community Grinding:** Lake of the Pines and the Town of Lyons were the repeat grinding events in 2018. The road maintenance project was processing their slash pile at OSTC from their road side collections; they transported the excavator around Boulder County.

The Sunshine Canyon project was a one-time project: They had built slash piles of woody debris from the Four Mile Fire. They were not able to burn all the piles due to a mild winter. The remaining piles were brought to a central location to be ground. Friar Farm hauled off the ground material at no charge.

**Big Elk Meadows Project:** Since the flood of 2013, they have not been able to burn their community slash pile. There was slash spread across approximately an acre and an half. Six large slash piles were created on the site before grinding. Grinding was slow since they were not the cleanest piles, and had material that we were unable to grind mixed in. We will be in contact each year to see if they need to have their community pile ground, if they are not able to burn it over the winter months.

**Coal Creek Canyon Fire Station#2:** This was the first year that Boulder County had a slash collection at this location. There were over 300 loads collected on August 18 and 19. The slash collection site is located on the stations helicopter landing zone. At the last minute, the party that plan to haul the ground mulch off site fell through. On September 7, Boulder County Road Maintenance hauled the material to the Nederland CFSY. For this Community Grinding Event to continue in the future; there needs to be funding found to pay for trucking or another location needs to be found were its not high priority to remove the ground mulch.



**Figure 4: Left Picture -Big Elk Meadows Community Grinding Event, Right Picture-Meeker Park CFSY**

<b>Community Grinding Events 2018</b>			
<i>Date(s)</i>	<i>Community</i>	<i>Grinding Hrs.</i>	<i>Total Tons</i>
<i>February 3</i>	<i>BC Road Maintenance</i>	<i>3.3</i>	<i>10</i>
<i>May 29</i>	<i>Town of Lyons</i>	<i>2</i>	<i>6</i>
<i>May 31- June 1</i>	<i>Lake of the Pines</i>	<i>4</i>	<i>12</i>
<i>June 6-8</i>	<i>Sunshine Canyon</i>	<i>14</i>	<i>30</i>
<i>July 12-18</i>	<i>Big Elk Meadows</i>	<i>11</i>	<i>30</i>
<i>August 21-24</i>	<i>Coal Creek Canyon Sta.2</i>	<i>10</i>	<i>40</i>
<b>Totals</b>	<b>6 Events</b>	<b>44.3</b>	<b>128</b>

### ***Pine Needles:***

*Instead of hauling pine needles with roll-offs, pine needles were put through the grinder and loaded directly into semi-trucks. Two semi-loads each were hauled out of the Nederland and Meeker Park yards for a total of 4 semi loads of pine needles in 2018.*

### ***Noxious Weed Collection:***



*Noxious weed collection keeps gaining momentum; a total of 10- 40 yd<sup>3</sup> (last year we used 30 yd<sup>3</sup>) roll-off containers were filled with noxious weeds, double the volume of last year. This was an increase of 3 additional roll-offs in 2018. There was also an increase in roll-offs cost this year, Nederland yard was up \$105 and Meeker Park was up \$205 per roll-off.*

*The roll-offs were sent to A-1 Organics in Weld County for composting. The last roll-offs of the season were topped off with pine needles.*

*This past year's invoice included tonnage per roll-off.*

***Figure 5: Meeker Park CFSY, Resident unloading a truck load of noxious weeds.***

<b>Noxious Weed 40 yd<sup>3</sup> Roll-Offs</b>							
<b>CFSY</b>	<i>Pine Needles</i>	<i>Noxious Weeds</i>	<i>Total Roll-offs</i>	<i>Total Roll-off Tons</i>	<i>Cost per Roll-off</i>	<i>No haul charge over 30 days</i>	<i>Total Cost</i>
<b>Meeker Park</b>	0.5	3.5	4	11.6	\$570	\$210	\$2,490
<b>Nederland</b>	0.2	5.8	6	17.4	\$470	\$105	\$2,925
<b>Totals</b>	<b>0.7</b>	<b>9.3</b>	<b>10</b>	<b>29.0</b>	<b>N/A</b>	<b>\$315</b>	<b>\$5,415</b>

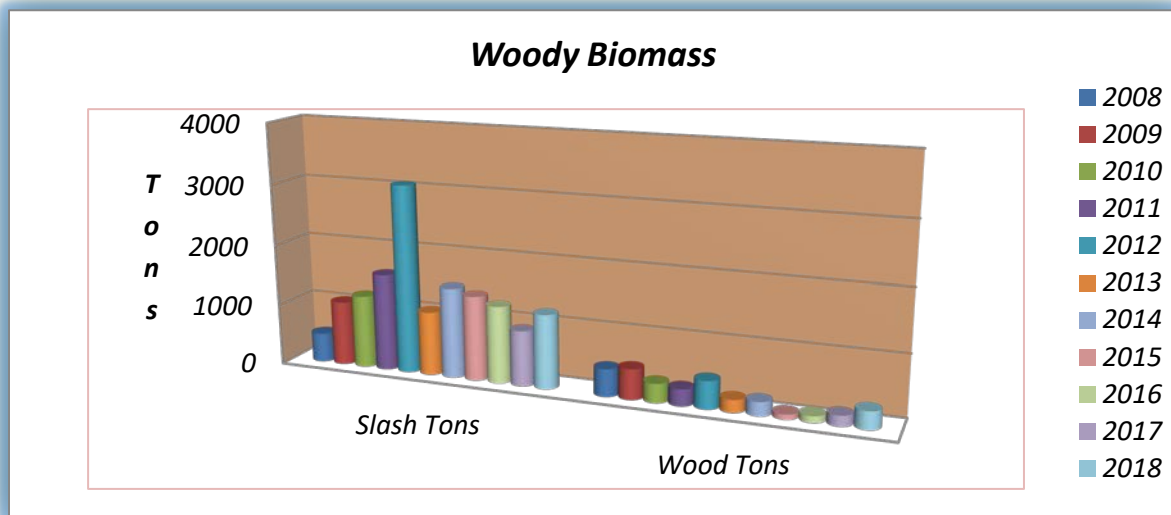
### ***Chip Disposal:***

*Wildfire Partner Contractors were allowed to bring chips to the CFSY directly from Wildfire Partners properties which they worked on. This service required the contractors to contact the CFSY Coordinator before loads could be hauled from a Wildfire Partners property. Chips had to be chipped directly into a trailers or trucks to avoid chip contamination from dirt and rocks. A total of 6 contractors took advantage of this and brought chips from 14*



Wildfire Partner Properties, one curb side slash collection, and the Coal Creek grinding event. The material was reground and filled 5 semi-trucks, totaling approximately 118 tons.

### 2018 Volume Numbers:



All the slash was ground and hauled by Renewable Fiber for composting in Weld County. Western Disposal hauled the noxious weeds roll-offs to the A- 1 Organics compost facility that is also in Weld County. With the additional yard debris tonnage added, overall tonnage is up 460 tons. There were a total of 66 semi loads of woody biomass hauled off site from both yards in 2018. The remaining wood is still on site to be ground for future biomass fuel. There approximately 70 tons at Meeker Park and 50 tons at the Nederland CFSY. Approximately 275 tons of woody biomass were removed from the Home Ignition Zone 1 in 2018.

### Year End Totals:

CFSY	Slash Tons	Wood Tons	Chip Tons	Noxious Weed 40 yd <sup>3</sup> Roll-Offs Tons
Nederland	753.4	164.8	99.4	17.4
Meeker Park	458.7	128.2	19.2	11.6
<b>Totals</b>	<b>1212.1</b>	<b>293.0</b>	<b>118.6</b>	<b>29</b>

**Total material processed for the 2018 Season: 1652.7**

## Acknowledgments:

*We would like to recognize Parks and Opens Space Forestry Staff, Nederland Transfer Station Staff, and the Wildfire Partners Staff for their support with staffing the yards during the summer when CFSY staff has additional commitments. The Nederland Road District Crew for their equipment support.*

*Nederland CFSY seasonal forestry technician and grinding operations: Nick Morgan*

*Meeker Park CFSY seasonal forestry technician and grinding operations: Jake Alexander*

*Grinding operations: Zack Price*

*Transporting excavator: Pat Feeney*

*Editing annual report: Stefan Reinold*

*Outreach: Vivienne Jannatpour*

*Website and monthly newsletter: Nick Brockman*

*CFSY map: Erik Hinkley*

*CFSY signs: Mary Rolf*

*County Wi-Fi installed at the Nederland CFSY: Carrie Inoshita and Joe Barger*

## Closing Thoughts:

*In 2018, the CFSY program was very successful and well received by Boulder County citizens and neighboring county users. Noxious weed collection keeps gaining momentum, twice the volume and cost from the previous year. Both yards had an additional 40 yd. roll-off which was filled with noxious weeds. Besides a place for foothill residents to bring their woody biomass, the CFSY program continues to educate the resident on forest health, defensible space and other forestry management practices; the web site has links to addition Boulder County and CSFS references.*

*As stated in the opening paragraph in this report, volumes are approximate. The only true way to get accurate volumes is to run all vehicles across scales entering and exiting the yard, which is not currently an option. However we feel that the estimates have been close to accurate.*

*Appendix A contains more detailed information on transportation cost and tip fees for 2018. Appendix B contains budget information. Appendix C contains direction of travel information for the Nederland Yard. Appendix D contains a detailed load count for each year.*

*This was the sixth year that user I.D.'s have been assigned at the yards, there are now 3083 user I.D.'s assigned. The user I.D. is currently based on the physical address not the user's name. We are changing the User I.D. to Property I.D. in 2019. Since the I.D. # is tied to the physical address, not the home owner's name. The system has been fairly smooth, but sometimes a second I.D. is assigned to the same property. The Nederland CFSY had county Wi-Fi installed in the spring of 2018. This made it easier for the yard technicians to look up addresses. The Meeker Park still has WI-FI through Century link. The data is cleaned up looking for properties with more than one number assigned and other inaccuracies before the numbers are run for the end of year report.*



**Figure 6 : Left Picture-Meeker Park CFSY, Right Picture- Nederland CFSY**



## Appendix A

Appendix A, demonstrates operational costs for grinding at both yards for 2018. This past year, slash was ground and loaded directly into live floor vans; thus removing the need to have a loader on site. An average load weighs 22 tons.

### Mulch Processing Cost\*

**2018**

<i>Yard</i>	<i>Hauling Cost</i>	<i>Tip Fees</i>	<i>Other Cost</i>	<i>Number of Truck Loads</i>	<i>Tons Based on 22 Tons per Load</i>	<i>Invoice Total</i>
<b>Meeker Park</b>	\$17,080.75	\$7,408.50	\$0.00	27	594	\$24,489.25
<b>Nederland</b>	\$27,456.25	\$12,207.25	\$0.00	41	902	\$39,663.50
<b>Totals</b>	\$44,537.00	\$19,615.75	\$0.00	68	1496	\$64,152.75

\* This does not count fuel and salaries to transport/mobilize the Boulder County grinder and excavator, equipment operational costs, or repair costs.

## Appendix B

### Community Forestry Sort Yard Budget

**\$90,000**

<i>Yard</i>	<i>Total Spent</i>	<i>Percent of Budget Spent</i>	<i>Percent of Yearly Load Count</i>	<i>Percent of Yearly Woody Biomass</i>
<b>Meeker Park</b>	\$38,897.51	44.0%	39.0%	37.4%
<b>Nederland</b>	\$49,584.26	56.0%	61.0%	62.6%
<b>Grand Total</b>	\$88,765.11	100.0%	100.0%	100.0%

<b>Break Out of Budget Items</b>		
<b>Vendor</b>	<b>Service</b>	<b>Total Spent</b>
<b>Renewable Fiber</b>	Transportation & tip fees ground mulch/ pine needles	\$64,152.75
<b>Western Disposal Services</b>	Transportation of noxious weeds roll-offs	\$5,415.00
<b>Meeker Park Debris Clean Up</b>	Yard cleanup	\$5,057.50
<b>Mountain View Welding</b>	Static screener for the yards	\$4,995.00
<b>Coal Creek Station 2 LZ Mulch removal</b>	Transportation of ground mulch from the CCC station 2 LZ to the Nederland CFSY	\$2,274.26
<b>General Operating Supplies</b>	Items for day to day operations	\$1,930.70
<b>Fire Hose Direct Total</b>	Replacement of worn fire hose for the yards	\$1,723.56
<b>Apple Twenty Ninth Street Total</b>	2 new I-pads for the CFSYS	\$1,598.00
<b>Air-O-Pure</b>	Rental/ cleaning Pot-o-Potties	\$1,335.00
<b>Community Forestry Sort Yard Total Spent</b>		<b>\$88,481.77</b>

**Appendix C**  
**Direction of Travel for Nederland CFSY 2018**  
*Summary of traffic flow on Ridge Road leading to the sort yard*

Week	Dates	East (Turned right into the yard)	West (Turned Left into the yard)	Grand Total	Notes
Week 1	May 3-6	19	101	120	Opening Week
Week 2	May 9-12	29	169	198	
Week 3	May 16-16	22	108	130	
Week 4	May 23-26	29	208	237	
Week 5	May 30- June 2	42	173	215	
Week 6	June 6-9	34	127	161	
Week 7	June 13-16	23	183	206	
Week 8	June 20-23	41	173	214	
Week 9	June 27-30	39	227	266	Busiest Week and Day (June 30)
Week 10	July 4-7	44	157	201	Closed July 4
Week 11	July 11-14	32	170	202	
Week 12	July 18-21	42	182	224	
Week 13	July 25-28	29	151	180	
Week 14	August 1-4	49	118	167	
Week 15	August 8-11	12	112	124	Last week of summer break for BVSD
Week 16	August 15-18	31	109	140	
Week 17	August 22-25	43	146	189	
Week 18	August 29- Sept 1	16	104	120	
Week 19	September 5-8	22	107	129	
Week 20	September 12-15	19	118	137	
Week 21	September 19-22	26	107	133	
Week 22	September 26-29	20	132	152	
Week 23	October 3 -6	39	151	190	
Week 24	October 10 -13	27	137	164	Last week
	May 3- October 14	30	61	91	Contractor Chip Loads
Grand Total		729	3470	4199	

➤ Note: Wednesday thru Saturday operating schedule, open 9 am -5pm.

**Appendix D**  
**Yearly Load Count**

Year	Operational Days	Load Count	Daily Average
2008	52	1309	25.1
2009	130	2991	23
2010	102	2747	26.9
2011	118	3521	29.8
2012	119	6585	55.3
2013	112	3424	30.6
2014	187	4722	25.3
2015	187	4688	25.1
2016	192	6509	33.9
2017	169	6945	41.1
2018	174	6878	39.5
Totals	1542	50319	32.6
Yearly average	140.2	4574.5	32.6