



Forestry and Fire

BOULDER COUNTY

2019 ANNUAL REPORT

2019 STAFF:

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2019 Highlights

- ◇ At the inaugural public holiday tree sale at the Reynolds Ranch property, we sold 81 trees.
- ◇ We finished prescribed fire application at Rabbit Mountain Dowe Flats in order to prepare the area for a more diverse native seed mix.
- ◇ We held an all-staff work day at Hall Ranch to move logs on two acres while building 45 slash piles.
- ◇ We finished moving material from Walker Ranch, completing the final 25 acres of an 87-acre project.
- ◇ We finished the remaining 19 acres of the 47-acre Reynolds Ranch aspen enhancement contract, providing 660 tons of biomass to our heating facilities.
- ◇ We continued the Williams Merlin project, which has provided biomass for our heating systems at the Open Space and Transportation Complex (OSTC) and the Boulder County Jail, and fencing and other material for other Parks & Open Space projects.
- ◇ Our Community Forestry Sort Yard Program diverted ~1600 tons of biomass from the landfill.





Forestry Planning

In 2019 our forestry planning group completed forest inventory work on 154 acres of the Caribou/Sherwood property, finishing the data collection on a 241-acre area. The work was done in preparation for a Forest Restoration and Wildfire Risk Management (FRWRM) grant that we received in 2019 to complete work in 2021–2022. We also wrote our Forestry Resource Action Plan (FRAP) for this area, which covered the above 241 acres.



“Planning begins in the office, but it succeeds in the forest.”

— S. Golden



We surveyed 126 acres at the Caribou/Sherwood property (112) and Hall Ranch (14) to identify legacy trees.

Legacy trees can be rare in many forests because of past timber harvests, uncharacteristically severe wildfires, and, increasingly, climate change. Legacy trees provide unique structural, ecological, scientific, and aesthetic value missing in forests containing only younger trees. The forestry group desires to know the location of legacy trees in order to prepare forestry management prescriptions that can help preserve these trees while balancing the need for forest management.



We completed unit preparation work on 176 total acres for the Lichen Loop project at Heil Valley Ranch (162) and for the work at Hall Ranch PA & U5 (14).

This work entails marking boundaries of a project area to ensure both contracts and work plans can be clearly followed. Additionally, these areas were marked using individual tree marking (ITM) to mark whether or not a tree is cut or left. ITM is used to ensure that contractors or work crews know exactly which trees are desired for removal or retention in order to meet a written prescription. This minimizes the possibility for mistakes that cannot be fixed.





Patch cut at Williams Merlin. Material is left onsite to provide a seed source for a new age class of trees.

“Don’t cut it until you know how to remove it, because every time you touch it, it’s time and money”

Boulder County Youth Corps piling slash at Hall Ranch. Their work helps finalize many of our projects.



Forestry Operations

Williams Merlin PA1U1:

We continued to complete cutting work at the Williams Merlin property. This project is creating 12 acres of patch cuts in order to promote age class and size class diversity on the landscape, while also providing an area for aspen to establish. In 2019:

- ◇ Four acres were felled and processed in the field.
- ◇ 120 tons of product were winched, forwarded, hauled, sorted, delivered, and decked for fence rails and biomass material.
- ◇ 52 tons were delivered to our biomass facilities.
- ◇ 808 fence rails were delivered to various volunteer projects.
- ◇ 100 fence rails were sorted and staged.



Walker Ranch PA1U2:



Our in-house operations crew completed the Walker Ranch project which was started by the Boulder County Sheriff's Office (BCSO) in 2016. A total of 87 acres were treated to minimize fire risk and spread, and to help buffer private lands to the east.

- ◇ 25 acres of firewood-sized material removed from surface.
- ◇ 89 loads of firewood loaded onto forest UTV and trailer.
- ◇ 90 cords of firewood decked and sold at two firewood sales.

Hall Ranch PA7U5:

BCSO began work at Hall Ranch focusing treatment on 14 acres of work east of the Nelson House. The work was designed to continue ponderosa pine restoration efforts in the western portion of Hall Ranch.

- ◇ 14 acres of trees felled and processed.
- ◇ 207 slash piles built by Youth Corps, 20 piles built by volunteers.
- ◇ 20 cords moved to landing to prepare for 2020 firewood sales.



Contracted Forestry Operations

- ◇ Remaining 19 acres of a 47-acre aspen stand enhancement project was completed.
- ◇ Whole tree removal, with trees chipped for our biomass facilities.
- ◇ Completed by Rocky Mountain Resource Protection Enterprises.
- ◇ \$168,275 total for the project at approximately \$3,500 per acre.
- ◇ Work started Oct. 15, 2018, and finished March 19, 2019.
- ◇ A total of 73 total truckloads (with 28 in 2019), for approximately 560 tons.
- ◇ Youth Corps built 42 slash piles and rehabilitated 1.5 miles of skid trails.



BEFORE

AFTER



Prescribed Fire



Slash pile burning at Hall Ranch.

Fire is an ecological process in many fire-dependent ecosystems. Fire exclusion has led to unhealthy forest, woodland, and rangeland conditions. Prescribed fire can be used by land management agencies to alter, maintain, or restore vegetative communities.

Prescribed fire is a very important tool that we use at Boulder County Parks & Open Space (BCPOS). We complete pile-burning to remove slash material produced from forestry treatments, complete ditch burning to maintain conveyance of water for agricultural

purposes, and complete broadcast burning to achieve multiple ecological objectives. These objectives can include fuels reduction, overstory removal, grassland rejuvenation, and process reintroduction.

All prescribed fire projects are vetted by an interdisciplinary team from across BCPOS and BCSO. Projects are approved only after resource impacts have been minimized. We work closely with our partner, BCSO, to safely implement prescribed fire projects on Program Open Space (POS) lands.

Fire Planning

- ◇ Six project request forms (PRFs) written for ditch burning (Josephine Roche, Jim Henry, Pella, Gaynor Lake, Wambsganss, and Wittemyer properties).
- ◇ One PRF written for a special burn project at Heil Valley Ranch to address cattails (Frog Pond).
- ◇ Burn-pile mapping was completed on the 14-acre Hall Ranch project to identify locations for possible burn days.
- ◇ BCPOS sponsored three staff for S-130/S-190 Wildland Fire Fighter training.
- ◇ 31 additional BCPOS staff maintained their red cards by participating in the annual refresher and completing the necessary work-capacity tests.
- ◇ Two staff participated in national dispatches with the Boulder County Hand Crew. One spent five days on the Shawnee Peak fire in Colorado, and one worked 11 days on the Walker Fire in California.



Prescribed fire briefing for Wittemyer and Dowe Flats.

Fire Implementation

- ◇ 50 acres of broadcast burning.
- ◇ 35 acres at Dowe Flats (Rabbit Mountain) were completed to remove a monoculture of slender wheatgrass and to prepare the area for seeding with a more diverse native grass mix.
- ◇ 10 acres at Arapaho (Rabbit Mountain) as a grassland broadcast burn.
- ◇ Five acres at Wapiti (Heil Valley Ranch) as a training burn for an ignitions class.
- ◇ 1,064 piles burned across three properties (Walker Ranch (378), Reynolds Ranch (40), Hall Ranch (646)).
- ◇ 20,000 linear feet of ditch burning on the Wittemyer Property.



Dowe Flats prescribed fire at Ron Stewart Preserve at Rabbit Mountain.

Community Forestry Sort

The Community Forestry Sort Yard (CFSY) program is now in its 12th year. In 2019 there were 178 operational days. The Nederland CFSY was opened from May 2 through October 19, and the Meeker Park CFSY was opened from May 15 through October 12.

A total of 6,176 loads were received at the yards, making it the fourth straight year with over 6,000 loads. 1,543 tons of biomass were collected and diverted from the landfill. The table below breaks down the different types of material collected.

In addition to woody biomass material, we have been collecting both pine needles and noxious weeds at our sort yards for the past five years. Pine needle removal from the home ignition zone is an important part of maintaining defensible space for mountain properties. Noxious weed removal from the properties helps keep these weeds in check. These collections have increased yearly and are a popular use of the sort yards.

Yard	Slash Tons	Wood Tons	Chip Tons	Noxious Weed Tons
Nederland	752.9	154.6	96.8	45.2
Meeker Park	360.1	78.6	28.2	26.6
Totals	1113.0	233.2	125.0	71.8

Outreach is an important part of the CFSY program. We have been hosting Wildfire Awareness Days for the past few years, and this year we had one on May 11 at the Nederland CFSY and one at the Meeker CFSY on June 8. These events allowed for local organizations that participate with firefighting and fire mitigation efforts to interact with the public users of our yards.

In addition to providing education and outreach materials at our yards for visitors, we also continued our monthly newsletter in 2019, providing the public with educational materials dealing with forestry issues.

We continue to participate in community grinding events. Both the Town of Lyons and the Lake of the Pines subdivision grinding events are reoccurring events. Approximately 120 cubic yards of slash totaling approximately 25 tons was collected at these events.

Additionally, we assisted the Wild Tiger Fuels Reduction Project by providing grinding services and bringing this material to our Nederland CFSY for disposal. A total of 28 tons of material was diverted.



Unloading slash at the Nederland CFSY.



Noxious weed collection.



Grinding woody biomass at the Nederland CFSY.

Public Participation and Engagement

Volunteer Projects

- ◇ 20 volunteer projects.
- ◇ 160 volunteers with 584 hours.
- ◇ 555 burn pile scars restored at Hall Ranch (50) and Walker Ranch (505).
- ◇ 22 burn piles built at Hall Ranch (16) and Walker Ranch (6).
- ◇ 8 cords of wood consolidated at Walker Ranch.
- ◇ 650 linear feet of fence construction to protect the Schoolhouse Spring at Reynolds Ranch (*photo, top right*).
- ◇ 118 acres of limber pine mapping (including dwarf mistletoe and white pine blister rust occurrences) across 4 properties: Reynolds Ranch, Minnick, Grassy Top, and the BLM Exchange Ward.



Sustainably Harvested Holiday Trees and Firewood

- ◇ Public holiday tree sale on December 7 and 8 (*photos, bottom left and bottom center*).
- ◇ 100 holiday tree permits issued, 91 permits paid for, and 81 permits redeemed.
- ◇ 219 people attended the event with 13 staff members assisting over two days.
- ◇ County Building Holiday Trees on December 3 and 4.
- ◇ Three holiday trees delivered to the County Courthouse, 45 trees collected and handed out to various departments.
- ◇ 94 cords of firewood sold to public during multiple sales.



All-Staff Work Day

- ◇ 25 staff members on October 16 (*photos, middle right and bottom right*).
- ◇ Built 45 slash piles and moved logs on two acres.





**Resource Management
Forestry and Fire**

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