



LYONS

C O L O R A D O

Wildfire Mitigation Update

October 17th, 2022

Summary

Significant preparations have been made to address Wildfire Event concerns in the Town of Lyons in 2022. These preparations include limb pickup and drop-off events, goat grazing services, mowing and trimming of flood buyout properties, and relationship building between the Town of Lyons, Boulder County, the Lyons Fire Protection District, HOA's and residents.

As we move into 2023, lessons from 2022 should be considered in conjunction with efforts to find additional funding to have larger collaborations with Boulder County and the Lyons Fire Protection District to leverage funds and complete projects.



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Martin Parcel Update

In May of 2022, former Lyons Fire Department Wildland Coordinator Emily Gubner, identified town-owned parcels that were prioritized for mitigation work. These parcels included the areas near Ewald Street, Horizon Drive, Longs Peak and Park Street.

At that time, the Martin Parcel was not acknowledged as high risk due to recent mowing in the area by town staff, vegetation, and nearby fire breaks on the east by an irrigated park and a river to the west.

As of October 2022, the Lyons Fire Protection District is in a hiring phase for Wildland Coordinators, Staff, and Wildland Management.

Recent hires, Nicole and Rich Palestro, are new Wildland Coordinators that will be available to further conduct Lyons property assessments. Nicole and Rich will be conducting a new assessment of the Martin Parcel, based off recent activity in the area.



Tree Limb Curbside Pick-up Event, Week of May 16th

Starting on Monday, May 16, 2022, Baer Forestry provided 3 Laborers, 1 Chipper, plus trucks and trailers for hauling extracted materials for Town of Lyons residents.

- Primary focus of event was chipping and disposal of all piles of limbs/brush left out by town residents that follow requested specifications.
- Area of coverage began north of US36/Hwy66 at Stone Canyon and worked west to the Eagle Canyon neighborhood, continuing south of Main Street in the Ewald/Confluence neighborhood, then east and finishing at the McConnell neighborhood.
- Approximately 135 cubic yards of mulch was created over 15 dump loads, equaling 3 loads per day for 5 days

(Each large dumpster, like the one near Bohn Park and the Botanical Garden is considered a 30-yard dumpster. Therefore, 4.5 of those dumpsters were filled to 100% capacity with chipped limbs).



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Tree Limb Drop-Off Event Recap, June 25th, 2022

- Approximately 107 households participated in the event
- Over 160 loads were dropped off
- 70% of the households participating were Town of Lyons residents.
- Many people made multiple trips/loads – the highest included 8 loads from several households
- Next highest participation came from Apple Valley Neighborhood, Blue Mountain, and Steamboat Mountain, Old South St Vrain and Lyons Park Estates/Red Gulch Rd areas.
- People cited the town eblast, utility bill insert, Nextdoor, Facebook (Lyons Happenings) and the newspaper as their source of information on the event.
- Volunteers: Dave Hamrick, Barney Dreistadt, Jon Corson-Rikert, Mark Browning, Steve Lang, Gayle Gordon, Ken Feldman, Smita Skrivanek, Candace O. Major, Mike Jackson, Kristen Johnson Westhoff
- Overwhelming support for having this event at least 2 times per year

The cost was \$1,340 for two invoices to date. (\$1,060 and \$280).

The number of yard/limbs dropped off and chipped and taken to A-1 was **13.93 tons**



Confluence Buyout Tree Removal and Fire Mitigation Services Request for Quote-Posted October 2022:

- Town staff has identified the below parcels for removal of several dead trees, dead fall/dead wood removal and hazard reductions on trees of limbs 4" or greater



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Confluence Buyout Tree Removal and Fire Mitigation Services Request for Quote-Posted October 2022:

- Project Schedule:
 - 10/11/2022 RFQ Posted to BidNet
 - 10/19/2022 Pre-Proposal Meeting
 - 10/21/2022 Deadline for Questions
 - 10/24/2022 Questions and Answers Posted
 - 10/28/2022 Quotes Due
 - 11/07/2022 Recommendation to BOT
 - 11/08/2022 Anticipated Award of Project



Operation Mighty Goats, September 2022

Two goat herding services, **Firehouse Farms** and **Goat Mowers LLC**, were hired to mitigate Lyons-owned properties that were susceptible to wildfire activity and invasive weeds. These properties were supported by the Lyons Fire District. Both services performed well in reducing the potential for a high rate of spread during a wildfire event.

Considerations regarding first use of goat services in Town of Lyons

- While researching goat services, the town was advised that goats will not eat as effectively during high temperature days. While assuming this risk, the temperature during both scheduled services was unforeseeably high, and this may be one primary reason the goats did not eat as expected.
- Despite providing pictures of both parcels to both herding groups, each herding group owner said they were surprised to see each parcel's type of vegetation, variety of fuels, and thickness of unmitigated areas.
- Time of year plays a large factor in the taste and tenderness of plants and leaves for the goats. As the seasons change, so does the sugar content and greenness of the plants. For example, Rabbit Brush will be "tastier" to the goats in Spring versus Summer and Fall.



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Operation Mighty Goats, September 2022

- 1) **Firehouse Farms Mitigation** (Cynthia & Don Koogle) provided 11 goats (one more than quoted, consisted of milk/meat/pet goats), fencing, and night-time goat pens.
 - Goats ate less than the expected 1 acre per week. Doug Miller, a nearby property owner, volunteered to provide assistance and watering monitoring.
 - Objective: Approximate Dates August 15th-September 15th (28 Days Total). The “Stacy” Parcel. Firehouse Farms (8/14-9/14) was utilized for this parcel that contains a combination of ladder and wildfire fuels as well as a high number of invasive weeds, including myrtle spurge, knapweed, and thistle.
 - By the end of the 28-day contract, the goats successfully mitigated for fire fuels and weeds across 3.0 acres of the 5.5-acre lot.
 - Predicted Cost: \$300 herd rental per week + \$300 per week for fencing management + \$100 total for fuel (\$2,500).
 - Total Cost Actual: \$2,100





From FHF: The goats ate all the thistles except scotch thistle. They ate the mullein, but not the milkweed (which is poisonous to them) or much of the myrtle spurge. They love the locust trees and the broad leaf grasses. What you noticed is they thinned most of the area but did not take anything to the ground.



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Locust tree stripping (invasive tree) prevents from surviving winter conditions.



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Operation Mighty Goats, September 2022



Left side of trail had goat mitigation, right side did not



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Operation Mighty Goats, September 2022

- 2) **Goat Mowers LLC (Kimberly Jones)** provided 36 goats (35-40 goats quoted, common “meat”/Boer goats), fencing, day/night shepherding. Goats ate up to 1 acre per day. Required 15 gallons of water per day.
- Horizon Drive Parcel, predicted dates Tuesday September 6th – Friday, September 9th (4 days total). Actual dates Tuesday September 6th – Saturday, September 10th (5 days total)
- Goat Mowers were assigned to 4.0 acres of this lot between Horizon Drive and Steamboat Springs Road. The goats ate fire fuels, vegetation, and ladder fuels from various trees in the area. On day 3 of 4, Goat Mowers requested an additional day of mitigation work and request was granted.
- By the end of the 5-day agreement, the goats successfully mitigated for fire fuels and weeds across 3.0 acres of the 4-acre lot.
- Predicted Cost: \$1500 per day + \$500 total for fuel (\$6,500)
- Total Cost Actual: \$7,500



Operation Mighty Goats, September 2022



From Kimberly Jones, Goat Mowers LLC: *The goats ate Native Grass, Cheatgrass, Ragweed, dead undergrowth of Yucca plants, Elm tree leaves, Rocky Mountain Sumac, Staghorn Sumac, Mountain Mahogany. The goats also ate some rabbit brush. *Unmitigated patch in foreground*



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Operation Mighty Goats, September 2022



Left side of tree has been mitigated, right side has not



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Operation Mighty Goats, September 2022



Tall grasses and ladder fuels have been removed



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Operation Mighty Goats, September 2022

Suggestions for future Goat Mowing Proposals

- Propose project by overall parcel size, independent of predicted number of days. This will reduce the potential for an incomplete project.
- Require active daily management from goat owners instead of utilizing volunteers.
- Accept goat herds that, on average, consist of fully grown, “adult” goats. Accept goat breeds that are known to be larger breeds.
- Schedule goat services for April/early springtime for better efficiency
- Confirm with other town staff availability to assist with providing water, emptying trash cans nearby, providing a daily observation, etc.



Town Flood Buyout Parcel Mowing

- Town of Lyons Parks and Public Works staff has scheduled the mowing of critical buyout parcels once during the months of March-May and once during the months of September-November, depending on weather.



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2022 Budget Recap and 2023 Rollover

- \$125,000 budgeted in 2022 for fire mitigation efforts
- \$8,600 spent YTD on goat grazing efforts with another \$1,000 anticipated
- There was \$9,500 budgeted in the general fund for limb pick up events. \$7,500 was utilized for the spring event and there is \$2,000 available for the Fall event scheduled for the week of November 14th. Assuming costs will be similar, an additional \$5,500 +/- will need to be approved from fire mitigation funding.
- An additional Limb Drop Off event has been scheduled for the weekend of Nov. 5/6. Should there be any associated costs with that event, they would need to be approved from fire mitigation funding.
- The Town of Lyons has issued a Request for Quote for Confluence Buyout Property Tree Trimming and Fire Mitigation Services on October 11, 2022. Quotes are due on 10/28/22 and staff will be bringing a recommendation to the BOT on 11/7/22. Funding for this project will be requested from the fire mitigation budget.
- Any remaining funds from the 2022 fire mitigation funds will be rolled over into the 2023 budget.



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2023 Proposed Fire Mitigation Projects to Date

- Goat Grazing services in April, 2023
- Curbside Limb Pick-Ups, May/October 2023
- Limb Drop Off Events, May/October 2023
- Electric underground mitigation study-HMGP Grant
- Townwide Wildfire Assessment-HMGP Grant
- Lyons Fire Protection District Collaborations-Public Education Campaigns/Messaging, Parcel Assessments, Mitigation Efforts, Evacuation Planning
- Boulder County Fire Mitigation Partnership Opportunities/Education and Mitigation Efforts
- Boulder County Noxious Weed Collaboration
- Town of Lyons Mitigation Efforts on Public Lands-I.e. Buyout Parcel Mowing, Tree Removals
- HOA partnerships



Lyons Fire Mitigation Education Priorities

- LFPD prioritizing hiring additional two Wildfire Consultants, Town-wide Evacuation Plans, collaborations with Town of Lyons-Spring, 2023
- LFPD to suggest adoption of 2021 IFC. Standing-by for State-level action on WUI Code
- Town-wide educational and preparedness campaigns



Possible Funding, Partnerships, Grants

- Tracy Sanders, Project Manager working on grant and funding opportunities related to mitigation and education
- Grant for consultant to complete a wildfire assessment for the Town that could assist in preventing or minimizing a wildfire
- Wildfire Partners Partnership-Organization available to assist in assessments and private landowners with matching costs for mitigation

