

October 2005

## **RUBY RANCH FIRE MITIGATION PLAN**

The purpose of this plan is to provide guidelines for Ruby Ranch owners, and steps to be taken by the Owners Association and the Metro District Board to mitigate fire risk and improve forest health on the Ranch. This plan complements the Ruby Ranch Emergency Action Plan.

We all choose to live in Summit County with both its wonders and its inherent risks. Many of us chose our home sites in Ruby Ranch because of the forest's beauty and solitude. We wish to preserve this beauty for the future by being thoughtful about forest health and fire mitigation.

This year, Mother Nature has been kind to us in terms of snow pack and precipitation. However, the ongoing effects of past drought conditions in Colorado together with years of neglect in forest care continue to pose wildfire and forest health risks around Ruby Ranch. Ruby Ranch and its owners have already taken significant steps, at relatively low cost, to mitigate these threats: clearing downed trees and slash on some lots and spraying against pine beetles and removing infected trees. More progress can be made near term by making our homes more fire safe and by continuing to remove slash and dead trees from both owner and common lots.

While some areas on the Ranch are at low risk to wildfire, all of us benefit from a long-term and community-wide commitment to preserving the unique environment that surrounds us. We can't eliminate all risks. However, we can mitigate fire risks and improve forest health by working together. Both of these are multi-year efforts and, because environmental conditions change, this plan will need to be revisited and updated over time.

This plan includes the following sections:

- I. Situation at Ruby Ranch***
- II. Guidelines for Owners***
- III. Steps to be Taken by Owners Association***
- IV. Recommendations for Investment by the Metro District***
- Appendix: Background on Achieving Forest Health***

This plan can also be found on the at [www.rubyranch.com](http://www.rubyranch.com) web site.

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### ***I. Situation at Ruby Ranch***

Ruby Ranch is a Rocky Mountain neighborhood of just under 500 acres containing dense pine forest, aspen groves, open meadows, and steep slopes in unincorporated Summit County, Colorado. Ruby Ranch directly abuts the Eagles Nest Wilderness Area, the White River National Forest, County Open Space, and the Town of Silverthorne. There are currently 42 homes on the Ranch.

The Ranch and the surrounding wilderness are typical subalpine forests, consisting largely of lodgepole pine, Engelmann spruce and subalpine fir. We ordinarily do not face a significant fire danger because we generally have snow on the ground for eight months with rain in the later summer months. The last major wildfire in our area was over 120 years ago. Although there is controversy among the experts the U.S. Forest Service suggests that major natural forest fires in our area probably occur at 100 to 300 year intervals. The U.S Forest Service also tells us that although the Silverthorne area is classified as an urban-wildland interface community at high risk from wildfire, the condition of our forests as well as the topology and weather patterns in the mountains west and north of Ruby Ranch make our area less susceptible to widespread fire disasters than, for example, the front range near Denver.

The nature of the fire risks we face changes over time. In 2002, we encountered the worst drought year in over a century, following three to five years of increasingly dry conditions. The drought continues and it is not clear when it will end. Once over, it may take years to overcome the effects of this drought even if we have above-average snow fall. Drought and years of forest neglect have increased not only the risk of fire, but have also damaged the health of our forests. Our lodgepole forests are dense, robbing potentially healthy trees of needed sunlight, water, and nutrients as well as making the trees more susceptible to disease and insect infestations. Slash and dead trees cover portions of our forest floors. For example, we have experienced a dramatic increase in the number of Mountain Pine Beetle infested trees on the Ranch and in the Wilderness in the last several years.

As a reminder, Ruby Ranch's policy is to identify Mountain Pine Beetle infested trees throughout the Ranch, inform owners if they have infected trees on their lots, and ask that owners pay for their removal. The Metro District pays to remove infected trees on common lots.

Fire mitigation and forest health go hand in hand. Fire mitigation steps can help slow a fire by decreasing fuels and increasing the health of the forest. However, fire mitigation and forest health approaches must be carefully tailored so as to achieve meaningful reduction in fire risk without compromising the beauty, wildlife values, and solitude which brought us all to Ruby Ranch.

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Some steps make sense for virtually all private and common lots on Ruby Ranch, e.g., making your home fire safe, and cleaning up slash and fallen and standing dead trees if they serve no special role as wildlife habitats or unique specimens. Other steps such as selective thinning of green trees (whether healthy or sick) must be evaluated on a case-by-case basis and, per Ruby Ranch Covenants, requires Architectural Review Committee approval. If done improperly, thinning of lodgepole pine forest areas can leave the remaining trees vulnerable to blow down in heavy winds. Thinning of living aspen trees is generally not advisable. If owners determine that thinning of evergreen trees is appropriate for portions of their lots, such efforts are best done gradually over several years. If done thoughtfully, selective thinning can improve forest health and create shaded fuel breaks that may help bring a wildfire to ground, making it easier to fight. Shaded fuel breaks do not need to be uniform or continuous and can be designed to alternate with areas of very dense trees. Ruby Ranch roads also act as fuel breaks.

Contact Pat or Doug Tormey if you have questions about the following fire mitigation steps on your lot.

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### *II. Guidelines for Owners*

In the event of a wildfire possibly threatening the Ruby Ranch see the Ruby Ranch Emergency Action Plan for emergency suggestions.

The guidelines below are for consideration prior to a wildfire event and are presented in order of suggested priority. The priorities for your home may differ depending on the condition of your home and lot, work you may already have done towards fire mitigation, and your personal priorities regarding how you wish your property to look. It may require several years to complete all the steps you decide to take for your home.

The guidelines below are good places to start in making your home fire safe. Any owner can also contact the Lake Dillon Fire and Rescue community officer, currently Patti McGuire, or the Colorado State Forest Service if you'd like fire experts to visit your home and make tailored recommendations. Owners may also engage private forest consultants to assess risks on their lots. If desired, Doug and Pat Tormey will also meet with owners on their lots and provide suggestions.

Because actions you may take may impact other owners, consider speaking with your adjacent neighbors about your plans and theirs. Per the Ruby Ranch Covenants, several of the actions listed below also require approval of the Architectural Review Committee (ARC).

These guidelines should be viewed as an annual Spring/early Summer fire safety checklist.

1. Assure you and your family and guests are familiar with the Ruby Ranch Emergency Action Plan and hold emergency exit drills for your household.
2. Make your home fire safe
  - a. Choose and install fire resistant roofing materials. The U.S. Forest Service and other experts say a non-flammable roofing material has the greatest impact in making a home more fire safe. Fire resistant siding, windows, and doors can also make a difference. For more information see "Firewise Construction: Design and Materials", a brochure from the Colorado State Forest Service, and available at <http://www.ext.colostate.edu/PUBS/NATRES/06304.html>, 06305.html, and 06306.html.
  - b. Consider placing shutters, fire curtains or heavy drapes on windows.
  - c. Clear gutters and roof of all debris.
  - d. Remove branches which overhang roofs and decks.
  - e. Install chimney and vent screens around house.
  - f. Clear debris and flammable material around decks, balconies, and

- wooden fences that extend out over slopes or into heavily vegetated areas.
- g. Place gravel or rocks around the base of the house for 3 feet, under decks, and screen decks with metal screening to keep out firebrands.
  - h. Keep fire extinguishers in working order.
  - i. Store propane and other flammable containers at least 50 feet away from your home and remove vegetation around them.
  - j. Have water hoses with trigger nozzles available for each outside faucet.
  - k. Have a ladder and fire extinguisher available.
  - l. Make sure the address signs for your home are clearly visible from the road.
  - m. Install and test all smoke detectors.
  - n. Maintain garden equipment and practice safe refueling to prevent equipment fires.
  - o. Consider whether fire retardant sprays or gels and/or fire wrap would be an appropriate fire fighting tool for your home. If you obtain such materials, contact Don Samuels at [don@snowedunder.com](mailto:don@snowedunder.com) who will make sure the information is given to fire fighting groups. See further information in the Ruby Ranch Emergency Action Plan.
3. Create a minimum 30-foot wide defensible space around each building by removing all fire fuels, and maintain this space annually.
- a. Clean up all slash, debris, needles, leaves, twigs, fallen branches, dead sage and dried grasses from your home's perimeter.
  - b. The 30-foot space is measured from the outside edge of the home's eaves and any decks. If you keep trees within this space, consider them part of the structure and extend the distance of the defensible space accordingly.
  - c. Prune tree(s) within the defensible space to at least 12 feet above ground to remove ladder fuels.

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The details of creating a defensible space from fire around a home can be found in several links on [www.firewise.org](http://www.firewise.org), and at [www.ext.colostate.edu/PUBS/NATRES/06302.html](http://www.ext.colostate.edu/PUBS/NATRES/06302.html). In general, the principles are to have a zone 1 space that extends from your home (and decks) to at least 30 feet if your house is on level ground, and could extend to 100 feet or more if the house is on a hill. This space should be cleared of fuels as indicated above. Beyond zone 1 is a zone 2 space that could extend another 100 to 300 feet. Zone 2 requires less clean up but removal of slash and dead trees that do not provide a special wildlife or aesthetic value should be pursued along with consideration of selective thinning and removal of ladder fuels with greater attention near zone 1, and less as you approach zone 3. Zone 3 is the natural forest that should be managed for purposes of forest health.

- d. Remove tall plants within 3-5 feet of structures. Do not plant directly beneath windows or next to foundation vents. Low plantings are generally safe around a home.
  - e. Keep grass and ground cover cut short. Clear sagebrush within your home's defensible space as it highly flammable.
  - f. Move all woodpiles including firewood piles outside the defensible perimeter and uphill of your home.
  - g. Remove or spray for noxious weeds that may rob water from desirable plants and trees
4. Remove branches overhanging your driveway and, in conjunction with the ARC, trees along your driveway that could block fire fighters from reaching your home. In a fire situation these branches and trees can catch fire and trap you or firefighters.
  5. Remove slash, old stacks of wood, and fallen dead trees from your lot. Burning of slash wood can be conducted at certain times of the year with proper permits. Contact the Lake Dillon Fire Rescue for more information.
  6. Remove standing dead trees from your lot with the exceptions of dead trees that provide important wildlife habitats or are visually unique.
  7. Spray desirable pine trees annually against pine beetle; spray other trees annually as needed against other infestations. The approximate cost of spraying is \$ 10-30 per tree. The cost of removal can be significantly higher.
  8. Prune and remove ladder fuels outside the Zone 1 defensible space. Ladder fuels up to at least 8 feet should be removed.
  9. If you decide that selective thinning of green trees in Zones 2 or 3 (whether healthy or sick) is right for your lot, do so in conjunction with the Architectural Review Committee.
    - a. Requires ARC approval.
    - b. ARC will ask you to tag those trees you wish to remove and allow adjacent neighbors to comment.
    - c. Talking with your neighbors first about your plans and theirs can help the process. Keep in mind that you and your neighbors appreciate the seclusion and privacy which trees offer, that trees are important wildlife habitats, and certain trees have historical value or are uniquely attractive.
    - d. Before planning to do this visit the "Background on Achieving Forest Health" document at [www.rubyranch.com](http://www.rubyranch.com) for guidelines to consider when performing selective thinning.

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### *III. Steps to be Taken by Owners Association*

1. Continue to share this Ruby Ranch Fire Mitigation Plan as well as the Ruby Ranch Emergency Action Plan with all owners, and continue to post these plans on the rubyranch.com web site.
2. Be available to assist owners in making their homes fire safe and create adequate defensible space around their homes.
3. Per the priorities on the Ruby Ranch Fire Mitigation Status and Priorities Map, encourage owners to follow fire mitigation guidelines on their lots.
4. Continue MPB program by ensuring that MPB trees are promptly identified and removed; encourage MPB preventive spraying and investigate the feasibility of coordinating MPB spraying among all interested owners
5. Architectural Review Committee to work with interested owners to identify and approve selective tree thinning consistent with the Ruby Ranch Covenants
6. Continue to explore the pros and cons of obtaining Firewise certification for Ruby Ranch
7. Continue development of the shaded fuel break demonstration project across lots 35, 36, 37, and common tract S.
8. Work with owners, the Forest Service, the Friends of Eagle's Nest Wilderness, and expert forest consultants to understand the nature of the fire risk along Ruby Ranch's boundary with the wilderness, National Forest, and County Open Space. Understand what steps, if any, can be taken to reduce risks identified. Report findings and recommendations to Metro District Board during 2005.
9. Investigate grant opportunities to help fund forest cleanup within the Ranch

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### *IV. Steps to be Taken by Metro District*

1. Maintain funding levels for the cutting and removal of mountain pine beetle infested trees from common areas
2. Maintain funding levels<sup>2</sup> for clearing of dead trees and slash from common areas following priorities on Ruby Ranch Fire Mitigation Status and Priorities Map. Top priorities in 2005 include common lots R, E and W.
3. Contribute to the demonstration project of a small shaded fuel break on the Ranch by paying for work done on common tract S.

<sup>2</sup>2005 Metro District budget includes \$15,000 for MPB and fire mitigation efforts on common lots if matching grant funds are received; otherwise the budget is \$8,000.