

February 6, 2019

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Dear Wildwood Townhomes Association,

On Wednesday January 23rd, 2019 a re-inventory of all mature trees within the Associations common ground was conducted by the Colorado State Forest Service's Urban and Community Forester and ISA Certified Arborist, Vince Urbina, as well as Gunnison Field Forester, Mike Tarantino. This acted as a follow up inventory initially conducted by the Colorado State Forest Service in 2014. During the January 23rd, 2019 inventory the assessment of 68 living narrowleaf cottonwood, one living Englemann spruce, one living blue spruce, one living willow, and one dead narrowleaf cottonwood was conducted. Every tree was assessed a hazard rating through the Colorado Tree Coalition's Tree Risk Assessment Rating System (please see the attached spreadsheet and map for individual hazard ratings, also attached is a glossary defining the CTC Tree Risk Assessment Ratings). Note that trees with more significant hazard were given a higher prioritized rating.

Listed here is a summary of observations noted during the 2019 Tree Inventory conducted at the Wildwood Townhomes Association:

Narrowleaf Cottonwood Observations-

- Tree #1, a 38" diameter standing dead tree, has been recommended for removal. This tree is dead with decay making the likelihood of failure imminent and due to the trees location at the entrance of the community it would have a target in a very high use area. This individual received the maximum CTC Hazard Rating of 144.
- Prune dead wood. A majority of the mature narrowleaf cottonwood within the Wildwood Townhomes Association had a significant amount of overhanging dead wood. On many of these trees, the dead wood was overhanging high use areas. The most common mitigation action recommended during the assessment was defective pruning to remove dead wood that is creating an overhead hazard.
- Ten individual cottonwood trees that were inventoried have codominant stems. Trees with codominant stems have two or more leaders (main stems) that emerge from the same location on the trees trunk. When the branch angles between these stems are narrow and the union of the two stems is in the shape of a "V" the likelihood of failure is increased. Codominant stems with this narrow branch angle have less structural holding wood due to an inhibition of proper form development, there is usually included bark, and this union has a predisposition to decay. Trees with codominant stems can be managed through cabling or bracing the multiple stems to increase support, or by the removal of all but one main leader through pruning. It is important to note that on mature trees the pruning of large diameter codominant stems could lead to

large wounds that are susceptible to decay or may result in an unbalanced crown that could lead to structural failure.

- Although decay on the mainstem of any of the trees within the community was not noted to the point that exceeds a safe shell limit, it is very likely that there is compartmentalized decay in all of the narrowleaf cottonwood in the Wildwood Community. Unlike animal tissue that is regenerated after an injury, a tree compartmentalizes an injury under subsequent growth. If a fungal or bacterial infection is introduced into this injury, rot and decay will persist in this compartment. Previous pruning cuts that did not heal within the community are all likely to have some level of compartmentalized decay, which could lead to structural failure. Injuries from pruning cuts that are likely to have decay are trees that have been top pruned, have had large diameter branches pruned, or trees that have had poor pruning cuts which were not flush with the branch collar. Trees that have been pruned inside the branch collar have damage to their branch protection zone and pruning cuts outside the branch collar leave stubs, both of these pruning cuts can prevent pruning injuries from healing and can provide an entry point for disease.
- Seven trees were observed with heavy epicormic branching. Overpruning of live branches can stimulate a tree with strong vigor to generate numerous new stems. This regeneration of stems, known as epicormic branching, can lead to structural vulnerabilities if the branching is heavy.
- There is a universal presence wetwood infection in cottonwood throughout the City of Gunnison. This symptom can be host to various bacteria, and can be easily identified as a white crust around previous pruning cuts. In conjunction with the bacteria colonizing wetwood, adjacent sapwood can be killed. Although tree mortality is unlikely the impacts on adjacent sapwood can prevent injuries from healing over, offering an entry for decay.

Spruce Observations-

- No visible sign of disease or decay was noted on the spruce within the Wildwood Townhomes Association that would indicate a hazard, but it is important to note that this species has a shallow root system. These trees are vulnerable to whole tree failure when the ground is saturated.

Resources

Listed below are additional resources that can be beneficial to the Wildwood Townhomes Association while managing trees within the community-

Colorado State University Cooperative Extension Gardening Series- Bacterial Wetwood
https://static.colostate.edu/client-files/csfs/pdfs/bacterial_wetwood.pdf

Colorado State Forest Service Presentation- Basic Pruning Techniques
https://csfs.colostate.edu/media/sites/22/2017/03/ECCFC_LVDIST_2017_d1.pdf

Colorado State University Extension Colorado Master Gardener- Pruning Cuts
<https://static.colostate.edu/client-files/csfs/pdfs/613.pdf>

Colorado State University Extension Colorado Master Gardener- Pruning Mature Shade Trees

<https://static.colostate.edu/client-files/csfs/pdfs/616.pdf>

University of Tennessee Extension- Cabling, Bracing and Other Support Systems for Trees

<https://extension.tennessee.edu/publications/Documents/SP659.pdf>

If you have questions or would like additional information on forest management, please contact the Gunnison Field Office at 970-641-6852.

Sincerely,

Mike Tarantino

Forester

Colorado State Forest Service

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