Proposed Tree Removal in LaVern M. Johnson Park Recommendation Statement

February 1, 2021

The Lyons Ecology Advisory Board (EAB) recognizes the important ecological value of the "damaged" or dead trees across the St Vrain from LaVern M. Johnson Park that are under consideration for removal. The EAB is not able to determine the possible hazard to river recreation or flooding associated with the location and condition of these trees. However, the EAB advocates that dead trees within this strip of riverine forest opposite the Park provide ecological functions and are vital to many terrestrial and aquatic species. Where possible, this Park like the others should be managed to preserve natural resources as well as for recreation; thus, such trees should remain wherever possible. They provide critical habitat and serve as an essential component in what is left of the riparian and forest ecosystem in Town of Lyons.

We note that in other heavily used town parks, such habitat is being locally protected by discouraging public access: even though at these locations too, some trees will die and branches may fall into the waterway. Though such fallen debris is beneficial to the trout fishery, where it poses an evident hazard to recreational use such as tubing and kayaking, we understand that it may need to be removed from the water way. In such cases, it should be left nearby and not removed from the area.

With the balance of safety and habitat in mind, the following course of action for the damaged trees, some on County land and some within town limits, at Lavern M Johnson Park is recommended: no action at all, unless absolutely necessary for public safety.

Additionally, any trees that are deemed absolutely necessary to remove should be replaced at a 1: 1 value per the Town of Lyons tree ordinance (ORDINANCE NO. 2020-1077 Sec. 7-4-100 (b) (2)). For proper establishment of new vegetation, a 3-5 year temporary watering system should be included in the design of any plantings.

Attached in a following page is a useful reference written for the public, with some quotes.

Ecology Advisory Board Members: *Steve Simms (Chair), David Batts, Kurt Carlson, Carse Pustmueller, Bob Brakenridge, Kate Zalzal*

From: https://www.thewildlifenews.com/.../the-ecological.../....

“One of the few ways that dead trees are appreciated by most people is their wildlife value. Think woodpeckers. But most people have no idea how many species actually depend on dead trees and down wood.”

“Pound for pound, ton for ton, there is probably no more important habitat element in western conifer forests than large snags and large down logs.”

“Upwards of 60% of species that nest in severely burned forests use only snags for nest sites. As many as 45% of all North American native bird species rely on snags for at least a portion of their life cycle”

“So important are dead trees to wildlife that researcher Timothy Kent Brown estimates that two thirds of all wildlife species use dead trees or down wood during some portion of their life cycle. Among Pacific Northwest vertebrates, 69 species depend upon cavities for shelter or nesting, while 47 other species are strongly associated with downed wood. And it’s not just the obvious species like woodpeckers. Many bat species, for instance, hide in cavities in dead trees or under the loose bark of dead and/or dying trees.”

“Our focus on the big and flashy species often causes us to ignore the small cogs that drive the ecosystem. One of the small cogs is ants, and down logs are their preferred home. Ants are among the most common invertebrate in forest ecosystems and, not surprisingly given their abundance, are critical elements in forest ecosystems.”

“The most obvious value of ants is as food for many species, from birds like flickers to much larger animals like bears. In fact, research suggests that ants are among the most important food for bears in Oregon in June and July, as well as later in the summer if the berry crop fails. Another British Columbia study found that grizzly bears relied upon ants for food late in the fall when berries were unavailable. Reducing the number of dead trees, and thus ants, has a direct consequence for bear survival.”

Ants are also major predators on insects that attack trees. For example, studies in Washington and Oregon discovered that ants accounted for an 85 % reduction of pupae of two tree defoliating moths.”