The Liverpool Metro District Board recently decided <u>not</u> to mow the majority of the Piney Creek Open Space Area this year. While the area has traditionally been mowed for hay, or as wildfire mitigation, Board Member Jessica Parker, a resident in the Estates at Greenfield and PhD candidate, argued that the detrimental effects of mowing were damaging Piney Creek's natural grass ecosystem. A copy of her report to the Board is below. An approximate 15' swath will continue to be mowed immediately adjacent to individual homes' property lines and/or fences, as well as adjacent to the concrete path on the north side of Piney Creek. If you have questions about this, please call Mike Kosdrosky, 303.779.4525.

The Detrimental Effects of Mowing the Open Space

- I. Reduces the number of native plant species
 - a. Blue grama grass (Bouteloua gracilis)
 - b. Side oats grama (Bouteloua curtipendula)
 - c. Prairie rose (Rosa arkansana)
 - d. Dwarf rabbit brush (Chrysothamnus depressus)
 - i. Critical food sources for wildlife species including birds, small mammals, and butterflies which all support a larger food web
- II. Increases invasive/noxious weeds
 - a. Invasive weeds are pioneer species that quickly colonize an area after a disturbance like mowing
 - b. Mowing over the past few years has dramatically increased noxious weed species in the open space
 - i. Cheatgrass (Bromus tectorum) List C species
 - ii. Musk thistle (Carduus nutans) List B species
 - iii. Canada thistle (Cirsium arvense): List B species
 - iv. Myrtle spurge (Euphorbia myrsinites) List A species
 - v. Russian Olive (Elaeagnus angustifolia) List B species
 - c. The presence of noxious weeds could result in costly eradication efforts if the weed populations are observed by the Colorado Noxious Weed Management Board
 - d. The Colorado Noxious Weed Act requires that local governments must develop and utilize a noxious weed management plan in order to control the invasion and spread of weeds
 - i. Mowing is only encouraging the spread of these plants and in the future, Greenfield may face penalties if the noxious weeds continue to spread
 - e. Native plants, if allowed to grow, will outcompete invasive plants and eliminate the need for spraying and other costly management actions
 - f. Mowing also increases the threat of fire ants which have become very prevalent in the open space after colonizing the bare areas created by mowing
 - i. Fire ants are a serious threat to children and pets

III. Reduces food and cover for wildlife

- a. Our greenbelt is an important corridor for wildlife moving between the shortgrass prairies of eastern Colorado and Cherry Creek State Park
- b. Healthy open spaces with food, water, and cover provide wildlife with everything that they need, reducing the likelihood that wildlife will turn to humans for these needs
 - i. Reduces the aggressiveness of coyotes and foxes in the area
- c. Mowing also kills many wildlife species; many dead snakes, small mammals, and even birds have been found after mowing due to contact with the sharp blades
- d. Many residents of Greenfield enjoy wildlife watching in the open space
 - i. Birds of prey including great horned owls, Swainson's hawks, sharp-shinned hawks all nest in the open space along with many native songbirds

IV. Reduces the aesthetic value of the open space

- a. Mowing results in unsightly bare patches that erode quickly after summer rain resulting in mud covering many of the sidewalks and high levels of sediment in the creek
- b. The drainage flow at the base of the hillside to the southwest of the duckpond is often stagnant due to the high levels of sediment from erosion on the banks after mowing
 - i. Stagnant and still water breeds mosquitoes and has a foul odor
- c. The thin weedy grass layer that is left after mowing contrasts vividly with the lush undergrowth of the open space
 - i. Residents have commented on how the bare areas from mowing reduce the privacy of houses, especially from the traffic on Arapahoe
 - ii. Plants form a sound barrier that blocks the flow of noise from busy roads and makes residential living more pleasurable

V. Recommendations

- a. Mow the grassy strips along the sidewalk early in the growing season (May) in order to prevent noxious weeds from going to seed and give warm weather grasses a chance to grow
 - i. Mowing early removes the seed heads and rosettes from noxious weeds, preventing them from reproducing and spreading
- b. Eliminate mowing in the large meadow across from Arapahoe and the hillside to the southwest of the duck pond.
- c. Allow the open space to return to a semi-native state in order to benefit native plants, wildlife, and our community