

Addendum #1
To the
Perry Park Ranch Gateway Land Stewardship Plan
March 2020

Vision and Mission Statements

The following Vision and Mission Statements shall replace the original statements as transcribed in the Perry Park Ranch Gateway Land Stewardship Plan.

Vision Statement:

Preserve and enhance the functionality, quality and visual aesthetics of this unique ecosystem to the benefit of native species conservation and the enjoyment of Perry Park residents.

Mission Statement:

To provide funding for and diligently manage the natural land, vegetation, aquatic resources, and the adjoining built environment to the achievement of the Vision Statement in accordance with the Deed of Conservation Easement.

Prologue

To implement the mission in aspiration of the vision, there must be an understanding of what it is that we as a community are trying to manage. Concepts that will influence the management considerations for the Gateway lands are those of life zones and ecosystems.

Within Colorado it is recognized that there are five primary life zones. These life zones are generally defined by the environmental influences and terrain attributed to broad brush elevation assignments that also vary with latitude. These life zones are generally categorized in ascending elevation as Plains Short Grass Prairie, Foothills Scrub, Montane Conifer Forest, Subalpine Forest, and Alpine Tundra.

The Perry Park environment is unique, but similar to several other Front Range environments as it sits within the transition area of three life zones. Within the boundary of Perry Park there is a blending of the Plains Short Grass Prairie, Foothills Scrub and Montane Conifer Forest life zones and Perry Park has elements of all three life zones.

Further, unique microclimates can occur throughout these general life zones due to latitude, geologic/topographic features, weather patterns, hydrologic features, soils and human intervention that may further shape the life zone character at a particular location. Vegetation and wildlife species can vary within these microclimate areas as compared to the general norm of the life zone.

The lands incorporated into this management plan can be further classified into ecological units called ecosystems. A good definition of an ecosystem is put forth by John W. Marr in his white paper entitled “Ecosystems of the East Slope of the Front Range in Colorado” which is included with this addendum as “Attachment A”.

“An ecosystem is an ecological unit, a subdivision of the landscape, a geo-graphic area that is relatively homogeneous and reasonably distinct from adjacent areas. It is made up of three groups of components - organisms, environment factors, and ecological processes. The *organism* category includes both plants and animals. *Environment factor* is used here in the broad sense of almost any physical substance, force, or condition; time, latitude, altitude, fire, and exposure, for example, are environment-factors along with soil moisture, air temperature, and so on. The *ecological processes* are interactions between organisms, between environment factors, and between organisms and environment factors. Since ecosystem is a category of things, and the term can be applied to areas of any size, such as a small meadow or the extensive grasslands of Central North America, a classification of ecosystems is essential.” “This classification is as simple as the need permits and will require elaboration, as individual units are worked on more intensively and larger regions are encompassed.” (1)

The following thoughts from the white paper entitled “Riparian Zone / Riparian Vegetation Definitions: Principles and Recommendations” and included with this addendum as “Attachment B” have value for guiding the management considerations for the riparian portions of the Perry Park Gateway properties.

“Riparian vegetation corresponds to all vegetation units along river networks, regardless of their physiognomy or origin, and is functionally related to other components of fluvial systems and the surrounding area. It belongs to the riparian zone, which is a landscape unit that is open (to fluxes to and from river systems and uplands) and co-constructed (i.e. driven by natural and social processes). The land alongside fluvial systems influences, and is influenced by, the river and associated processes. The structure and ecological functioning of biotic communities in this zone are variables along the four dimensions of the fluvial system (longitudinal, lateral, vertical and temporal). This variability is driven mainly by bioclimatic, geomorphological and land-use conditions, which change over time under the influence of natural and human drivers. This variability influences the ways in which riparian vegetation is identified, named, delineated and studied. From a functional perspective, the delineation needs to be adapted to the functions targeted. Thus, inadequate or overly narrow delineation can cause some functions associated with riparian vegetation to be excluded. Conversely, keeping delineation wide would help to consider and manage the riparian zone using a real integrated process able to combine most of the issues related to riparian vegetation and its associated stakeholders.

Main recommendations:

1. Recognize riparian zones as co-constructed socio-ecological systems driven by natural AND human processes that follow complex trajectories over time

2. Consider riparian vegetation as an open system (i) related to the channel, the surrounding area, the upstream watershed, the atmosphere and the substrate and (ii) connected to these components through bidirectional fluxes
3. Promote the use of a definition/delineation that integrates and maximizes all functions within the socio-ecological system (i.e. supporting, provisioning, regulating and cultural ecosystem services)
4. Develop examples and tools to promote good practices in the application of riparian zone delineation
5. Clarify knowledge that is site-specific and knowledge that is transferable (e.g. minimum riparian zone width necessary for a given function, effectiveness of given topographic index in delineating the riparian zone)”

Lay of the Land

West Plum Creek flows through the Gateway properties and this riparian ecosystem is the primary ecosystem characteristic of the Gateway properties. When the Perry Park subdivision was initially developed, the construction of Red Rock Drive formed a low wall dam that impounds West Plum Creek creating a small open water pond with outlet flow over a concrete spillway. The terrain upstream from the dam is relatively flat and supports a marsh and riparian wetlands which were enhanced by the impoundment of the creek flow by the roadway dam and by natural beaver dams constructed further upstream.

Downstream from Red Rock Drive, the creek narrows and passes through an area of water flow cut embankments. It is likely that the massive flooding that occurred in this area during a 1965 storm that produced 14 inches of rain within 4 hours was responsible for much of the downstream cut bank erosion as it exists today. The wetlands in this area are limited to narrow areas adjacent to the creek channel limited by the high cut stream banks. All the riparian and marsh wetlands adjoining West Plum Creek transition into grasslands and grasslands with mixed brush and tree species.

Property Management Accomplishments to Date

Annually, there are the normal maintenance objectives of roadside mowing along Red Rock Drive to reduce the wildfire hazard and risk of tall, fine fuels along a traveled way and the upkeep of the landscaped entry feature to Perry Park.

Several years ago, various native tree species were planted near the entry feature and along Red Rock Drive on both side of the roadway. Establishment of these trees has been difficult due to the lack of an irrigation system to provide water on a regular basis through the plant establishment time frame, contamination of the soil by roadway salts used during winter maintenance operations, and other soil conditions.

The first major property management action since acquisition of the Gateway parcels by the Perry Park Metropolitan District occurred in the late winter and early spring of 2019. The Perry Park Metropolitan District in partnership with Douglas County and in consultation with the Douglas Land Conservancy, Perry Park Water and Sanitation

District, and Colorado Parks and Wildlife executed a project to increase the depth of the Gateway Pond located on the upstream side of Red Rock Drive.

This project was accomplished to remove sediments that had accumulated in the pond over a period greater than half a century. This project utilized the elevation of the existing pond bottom at the deepest portion of the pond (approximately three to four feet below the top of outflow spillway) as the base depth for the excavation of sediment. The excavation was limited to the open water portion of the pond and stopped short of the existing cattail vegetation. This project was designed to limit further cattail intrusion into the shallow open water portion of the pond in order to maintain a balance between open water and marsh environments. Also, this project was designed to provide an area of overall greater depth to the open water area of the pond for the environmental enhancement of aquatic species. With these objectives of the project, came an important side benefit of preserving the diversity of the visual aesthetic for the residents of Perry Park and all who visit our community and pass by on Perry Park Road.

Property Management Considerations Moving Forward

1. Establish a baseline inventory of vegetation and wildlife, including migratory species, as a foundation for developing appropriate actions to achieve management plan.
 - a. Contact local volunteer experts that worked on the Sandstone Ranch Open Space biological inventory to see if they would like to participate.
 - b. Compare inventory to Sandstone Ranch Open Space biological inventory to determine similarities and possible unique species.
2. Seek the knowledge of subject matter experts in the development of management objectives regarding the documented vegetation and wildlife.
3. Develop the scope and nature of allowed human interactions with the site as compatible with the ecosystem management and the Deed of Conservation Easement.
4. Develop a strategy for prioritizing and integrating the natural and human components of the management plan when known and identify where outside consultation is prudent.
5. Develop priorities for the actions needed in implementing the management objectives.
6. Identify actions by needed frequency of occurrence, i.e.: seasonal, annual, every several years, or one-time actions.
7. Identify the monitoring needed to determine and adjust the frequency of actions.
8. Develop general costs for those actions.
9. Establish a projected budget for annual, 5 year and 10 year time frames.
10. Have the PPMD show commitment to the management plan and funding the implementation of the management plan by resolution.