

TARRYALL CREEK RANCH EASEMENT MANAGEMENT PLAN

THIS EASEMENT MANAGEMENT PLAN (“Management Plan” or “Plan”) is entered into this day ____ of _____, 20__ (the “Effective Date”), by and between the **BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF PARK** whose mailing address is P.O. Box 1373, Fairplay, Colorado 880440 (hereinafter referred to as “Landowner”, “Grantor” or “COUNTY”), and the **STATE OF COLORADO** acting by and through the **DEPARTMENT OF NATURAL RESOURCES** for the use and benefit of the **DIVISION OF WILDLIFE** and **WILDLIFE COMMISSION**, whose address is 6060 Broadway, Denver, Colorado 80216 (“CDOW”).

A. WHEREAS, Landowner intends to grant an Easement in Gross (Including Conservation Easement and Access Easement) to the CDOW, encumbering approximately 1,635 acres of real property located in Park County, Colorado (hereinafter, the “Property” or “TCR”) further described in **Exhibit A** (Legal Description) and depicted on **Exhibit B** (Property Map) of the Easement in Gross (“Conservation Easement” or “Easement”), for the purpose of forever conserving the Property’s **Conservation Values** as those are defined herein, below;

B. WHEREAS, the Property remains in a substantially undisturbed, natural state, and therefore in addition to its agricultural value, has significant public values, including, but not necessarily limited to, values for hunting, fishing, recreation, wildlife habitat and open space that are of great importance to the residents of Park County and the People of the State of Colorado (hereinafter the “**Conservation Values**”); and

C. WHEREAS, the purpose of a Management Plan is to provide management direction to maintain the Conservation Values of the Property as they exist at the time of the placement of the conservation easement; and

D. WHEREAS, Paragraph 4.B of the Easement references and incorporates a “Management Plan” developed by the Grantor and the CDOW; and

E. WHEREAS, if the Easement is conveyed from Landowner to the CDOW, then this document shall constitute the Management Plan referenced in it, which is hereby approved, dated, and signed by the parties hereto.

NOW, THEREFORE, the parties hereto agree that, if the Easement is conveyed from Landowner to the Grantee, then the Property shall be managed in accordance with this document.

The Management Plan should be used in conjunction with the Baseline Report, which indicates the Present Conditions of the Property to be protected at the time of the placement of the conservation easement. Any conflict between the Management Plan and the terms of the Conservation Easement shall be resolved in favor of the Conservation Easement.

The Management Plan is based on the best available information, and provides a foundation for long-term adaptive management of the property and its resources. It is a working document which will change and evolve with the Property and should be updated at least every five years. As recommended actions are implemented, and as objectives change, the Management Plan should reflect these changes.

INTRODUCTION

The Property is approximately 1 mile north of the Town of Como, Colorado. The Property is surrounded by private property and is bordered by US Highway 285 on the southeast, providing excellent public access. The Michigan Creek/Teter State Wildlife area is approximately 1 mile to the northeast. United States Forest Service property is adjacent to the northwest corner of “Ranch 2,” formerly known as the Campling property. The Property is one of the critical pieces providing important big game transition range and winter range in mild winters. The Property includes a diverse mix of habitats consisting of riparian, aspen/coniferous stands, native grasses and hay meadows. Numerous acres of hay meadow still exist and receive sub-irrigation from Tarryall Creek and historical water rights (which are not used on the Property). There is one pond on the Property, commonly referred to as “Long Pond,” located in the old rock tailings above Tarryall Creek. All habitat types are subject to the provisions included in this Management Plan. TCR is generally flat, with the exception of a bench south (above) Tarryall Creek, with an approximate elevation of 9,800 feet above mean sea level. The Property was historically used for livestock grazing, hay production, hunting and fishing.

OVERALL MANAGEMENT GOALS

The goal of this Management Plan is to protect in perpetuity, and enhance the habitat within TCR for the benefit of wildlife, while allowing the flexibility necessary to maintain a sustainable agricultural/recreational operation.

This Management Plan will ensure that TCR remains a mix of native habitats and a riparian system that continue to support a variety of wildlife species, such as elk, moose, antelope, mule deer, black bear, mountain lion and possibly mountain plover in the short grass habitat. The following strategies will be used to accomplish the goals of the Management Plan and include:

- No loss or degradation of riparian habitat.
- Maintaining the ability of elk and mule deer to migrate through TCR between summer and winter ranges.
- No loss or degradation of calving areas.
- Conduct livestock grazing and all recreational activities in a manner consistent with maintaining the conservation values of TCR.

In addition, the Management Plan should allow for sustainable agricultural operation(s) while providing habitat for Mountain plover, big game and other wildlife species.

ECOLOGICAL LANDSCAPE

Forested Community. The forest community consists mostly of aspen (*Populus tremuloides*), Engelmann spruce (*Picea engelmannii*) and some bristlecone pine (*Pinus aristata*). Most of these species occur on the bench on the south side of Tarryall Creek. With the exception of an extensive riparian willow community along the Tarryall Creek flood plain, there is a very limited shrub community on the Property. The aspen stands do show some sign of browsing but are not in bad condition. Aspen regeneration is minimal. Treatment and fencing could benefit these stands.

Grasses and Forbs. Native grasses and forbs are found on the bench south of Tarryall Creek. They are a vital component to healthy wildlife and livestock populations. Managed livestock grazing is an important management tool to help make the Property more attractive to big game and Mountain plover. This community may need some type of treatment (fire) to stimulate growth and improve habitat for wildlife.

Riparian, Stream, Ditches and Ponds. Approximately 2 miles of Tarryall Creek meanders through the Property. The Tarryall Creek riparian area is in excellent condition with thick tall willow (*Salix* spp.) stands. There are currently water rights held on the Property but not by CDOW or the COUNTY. The Leon Crane Ditch head gate is near the stone house and delivers water to landowners east of the Property. A second ditch, the Slater Ditch delivers water from the upper reach of Tarryall Creek to Long Pond. Approximately two miles of ditch transverse the Property.

Long Pond is located on top of the bench south of Tarryall Creek. It is fed by a ditch from the west side of the Property. The water in Long pond is currently owned by third parties. The pond is located within old rock mining tailings. They are hard to see from most of the Property. It is not known what type of fishery currently exists in Long Pond. Exclusion of livestock may help the area around the pond re-vegetate quicker. Any pond or water storage facility development or modification to the riparian area must have the approval of CDOW and the COUNTY. Last year (2010) Long pond breached slightly on the north side. Temporary repair with sandbags was accomplished. A permanent repair should be completed immediately by the water rights holders. If not completed there could be large sediment loads carried down onto the Tarryall Creek fishery, which could have severe negative impacts to the Property and downstream.

Noxious Weeds. Noxious weed surveys have not been completed. Canada thistle (*Cirsium arvense*), Yellow toadflax (*Linaria vulgaris*) and Oxeye daisy (*Chrysanthemum leucanthemum*) are all found in adjacent areas. Noxious weeds should be identified and treatments started immediately to reduce the prevalence and spread. Treatments should include chemical, biological and mechanical. “Noxious weeds” shall be defined pursuant to the Colorado Noxious Weed Act, C.R.S. 35-5.5-101, et. Seq., as amended or as may be amended (including, without limitation, any amendments to such statute or under any similar statute which is subsequently enacted).

Hay Meadow. There are two major sections of sub-irrigated hay meadow on the Property. The hay meadows have not been mowed/hayed or grazed in the past two years. These areas had been grazed historically by livestock. To the extent necessary and practicable, there should be an

effort to keep the meadows productive by the following management: seeding, interseeding, mowing, raking, baling, removal of hay and/or grazing.

Riparian Vegetation. Riparian management is critical for protection of the fishery. By maintaining and improving deep rooted herbaceous and woody riparian vegetation, expected results will be maintaining and/or improving water quality, stream bank integrity, undercut banks, overhead cover, shading, and terrestrial insect food source. By accomplishing the above, it will also help prevent the spread of shallow rooted herbaceous and woody plants (noxious weeds) in the riparian corridor. In addition, there should be a strong effort to prevent the spread of non-native aquatic vegetation and other aquatic nuisance species (ANS) by posting signs educating anglers of the potential impacts and how to properly decontaminate waders, boots and other fishing equipment.

WILDLIFE VALUES

Mountain Plover. The Mountain plover (*Charadrius montanus*) which is a migratory shorebird does occur in the South Park basin. The Mountain plover is a species of special concern in Colorado. The Colorado Division of Wildlife (CDOW) and Colorado Natural Heritage Program (CNHP) have done extensive work in South Park to improve biological and habitat information as well as determining their breeding status. According to the CDOW, over 50% of the continental population of Mountain plover breeds in Colorado. Mountain plover prefer upland habitats with bare ground or sparse vegetation, using short-grass habitat in South Park. The Tarryall Creek Ranch (TCR) has not been surveyed for the existence of Mountain plover, but the large upland, south of Tarryall Creek is potential habitat.

Big Game. Big game wildlife, particularly elk (*Cervus elaphus*), pronghorn (*Antilocapra americana*), moose (*Alces alces*) and mule deer (*Odocoileus hemionus*) are of significant intrinsic, economic and recreational benefit to the State of Colorado and local communities. Throughout much of western Colorado and the western United States, big game transition range and winter range is disappearing at an alarming rate. TCR is an important transition range and can be used as winter range in mild winters. Typically the upland and hay meadow remains open when strong winds blow snow off. TCR is bisected by Tarryall Creek which provides fresh water for wildlife. The surrounding public and private lands near TCR can hold year round populations of elk and moose.

Fisheries. This reach of Tarryall Creek contains a naturally reproducing brown trout (*Salmo trutta*) and longnose sucker (*Catostomus catostomus*) populations. The numerous run, riffle, and pool sequences provide habitat for all different life stages of these species. The extensive beaver pond complexes create additional adult, overwinter, and overhead cover. The unaltered riparian habitat provides additional overhead cover for adults by providing undercut banks and canopy cover, shading, and produces numerous terrestrial insects which act as an important food source for brown trout.

PROPERTY'S WILDLIFE VALUES RELATIONSHIP TO THE GEOGRAPHICAL AREA

Mountain Plover. TCR is located approximately 1 mile northwest from a tract of Bureau of Land Management (BLM) property, where mountain plover reproduction has been documented

by CDOW personnel. The historic cattle and horse use of the property, particularly the upland, is an area of TCR which could be excellent habitat for Mountain plover.

Breeding Habitat. In South Park, Mountain Plover arrive to breeding grounds in mid-April. Egg laying occurs May through July. One to 2 clutches are typically produced per year. Typically clutch size is 3. Incubation is approximately 29 days. Chicks fledge in approximately 33 – 34 days after hatching. In South Park, post-breeding flocks begin forming in July, peak in August and leave by early September (Wunder, unpublished data).

The habitat on TCR discussed as potential Mountain plover habitat, has also been identified as potential habitat for Gunnison's prairie dog (*Cynomys gunnisoni*). This is another species currently under Federal review for possible listing. In some areas, Mountain plover depend heavily on prairie dog activity, for habitat manipulation in keeping vegetation grazed to low levels.

Big Game. South Park is a critical wintering area for resident big game as well as elk that migrate from Summit County and the Mount Evans Wilderness Area. TCR is an important transition range, used during early winter and spring green-up, which allows big game to move to near-by State Wildlife Areas. Migration to the James Mark Jones SWA is essential for CDOW in keeping game damage complaints to a minimum. The lack of winter time recreation makes TCR an even more important parcel in accomplishing this transition for wildlife.

Summer and Breeding Habitat (May – mid September). Big game typically begin moving from winter range to their summer habitat and production areas during spring green-up. As parturition nears, big game species depend on high quality forage throughout transition ranges to assure adequate body condition after the winter. Most big game species in South Park will give birth in June. TCR is mapped as a priority habitat and summer concentration area for moose. The Property provides summer and winter range for mule deer. Pronghorn antelope use has increased on TCR over the past few years with fawns being observed this summer for the first time. TCR provides elk winter range as well as summer concentration areas. Elk calving has also been observed in the willows along Tarryall Creek. Tarryall Creek and the associated ditches on the property provide excellent sources of water for all wildlife. The heavy concentration of willows also provides excellent cover during the summer and provides thermal cover for elk during the extremely cold and windy winter months.

Transitional Habitat (mid September – November and April – May). Big game movement is generally triggered by photoperiod and temperature changes. After the breeding season (August – November), body condition becomes particularly important, as animals prepare for winter. This Property provides for food, water and protection from bad weather as migration movement occurs from higher to lower elevations. The forage quantity and quality is a critical component for the health of big game herds during these periods.

Winter Habitat (December – February). Winter range is the primary limiting factor for big game throughout the State of Colorado. Depending on the severity of the winter, use of TCR can vary. Moose use the Tarryall Creek drainage year-round and can be found on TCR during the winter months. TCR is identified as winter range for elk and deer, as well as providing access to near-by severe winter range for both species.

Fisheries. This reach of Tarryall Creek and riparian corridor appears to be in an unaltered state (at least in recent history) which is rare for South Park stream reaches. This corridor could serve as a “reference reach” for other similar but degraded streams in South Park in which the CDOW or other parties may decide to restore. The brown trout fishery in this reach seems to be at or near carrying capacity. This population does increase brown trout numbers in less suitable habitats both upstream and downstream.

VEGETATIVE MANAGEMENT

Objectives:

Vegetation management is an important component of any Management Plan. The Property consists of aspen, scattered conifers, native short grass and sub-irrigated hay meadows. Specific seasonal habitats are not addressed individually in this document, but all management should be designed to improve the various seasonal habitats for all wildlife species. By maintaining high quality habitat, all wildlife species will benefit.

See Section on Ecological Landscape and Section on Monitoring.

Actions:

Management actions for the Property may include, but are not limited to: livestock grazing, reseeding, fertilization, physical manipulation, or other common practices. Spraying of noxious weeds will be a vital part of the vegetation management of the Property.

Nothing in this Management Plan shall prohibit the Landowner from participating in any State, Federal or private enhancement programs (such as EQIP, WHIP, and Partners for Fish and Wildlife, etc). However, the CDOW shall be involved in any enhancement planning on the Property, and the enhancements shall not violate this Management Plan or the Easement.

See Section on Ecological Landscape and Section on Monitoring.

In the event of a catastrophic event such as range fire, flood, or other acts of god that require reseeding, the development of a reseeding plan shall be required. Landowner and the CDOW shall jointly agree in writing on the reseeding plan; however, reestablishing the native communities shall be a priority.

AGRICULTURAL FEATURES AND OPERATIONS

Objectives:

Livestock management objectives will be directed towards the overall health that helps maintain healthy big game and fishery habitat while still supporting livestock. Stable and healthy vegetation communities decrease water runoff and erosion, provide for sustainable and

productive grazing systems, provide good herbaceous understories and maintain a healthy riparian community. Range health is influenced by many factors beyond grazing practices, these factors include but are not limited to weather, especially precipitation amounts, and big game utilization. When grazing occurs, a grazing system should be guided by timing, utilization and distribution with a pasture rotation system.

Vegetation management is crucial to protecting and maintaining conservation values of TCR. It will be imperative to manage cattle grazing in the riparian areas. Moderate livestock grazing is generally compatible with the maintenance of perennial grasses and forbs. It is not desirable for a pasture to be grazed at the same time year after year. It is best to impact (graze) plants at different developmental stages year after year. Multiple pastures increase flexibility for grazing management. There may be a need for temporary or new interior fences to accomplish this. The CDOW and COUNTY will review any plan for new fence construction.

Occasionally it may be necessary to treat the riparian area with some form of grazing. This may be necessary for forage management and/or noxious weed control. The type of treatment will vary depending on the time of year. CDOW and COUNTY will review any plan for riparian treatments.

The perimeter of TCR is currently fenced with a 4 strand barbed-wire fence. There are still a few old stack yards and small sections of fencing located around the Property. A majority of the old woven wire and barbed-wire were removed by the previous owner. Fencing can be an important management tool. New and additional fencing may be necessary when a livestock management plan is initiated. Fencing can also be detrimental to wildlife and their movements. All fencing activities, whether new or repairs will be in accordance with the CDOW's "Fencing with Wildlife in Mind" manual or some other "wildlife friendly" design. CDOW and COUNTY will agree to work together on all fence projects.

Management Actions:

Development and implementation of a coordinated, rotational grazing plan that incorporates current best management practices.

Recommended grazing practices include:

- 1) Manage livestock distribution in order to control the amount of time livestock are in a particular pasture.
- 2) Move livestock through the pastures based on yearly range conditions and forage availability.
- 3) Rotating the time of year that livestock move through pastures.

Please see above and Monitoring Section. Any activity should not impact wildlife or their habitats.

RECREATION MANAGEMENT

Objectives:

The CDOW and the COUNTY have discussed the opening of the Property to limited public fishing and hunting. Hunting opportunities on TCR help to obtain big game management objectives in the area. COUNTY has expressed an interest in possibly providing some additional limited recreational activities, such as (but not limited to) wildlife viewing, hiking, equestrian activities and dog trails. Both entities agree that these activities should be conducted in ways not to impact wildlife or their habitats. There have also been discussions regarding the renovation of the existing historical stone building and the possible future construction of an indoor shooting range.

The CDOW and COUNTY will limit the amount of vehicular and public access to minimize the amount of impact to habitat and wildlife. This will also be important, when a grazing system is initiated on the Property. All access should be limited to times when weather conditions will minimize road and land impacts. The property is used by moose year round. Elk and deer use is during a majority of the year. Due to this the CDOW and COUNTY will mutually agree to public access locations and parking areas. Public access will be limited to foot and horseback only.

Management of the fishery is critical to overall riparian health. It may be necessary to restrict the number of anglers per day and place restrictions on the time of year the Property is used. There may also be the need to restrict the type of terminal tackle used as well as possible restrictions on the trout bag and possession limits.

Currently there are some old livestock and big game trails on TCR. Any new trails should be constructed outside the riparian corridor as much as possible. Wetland and stream crossings should be minimized and constructed using raised platforms or bridges, but if necessary, they should be hardened. Trails that enter the riparian should be made of compactable material or hardened. It would be beneficial to have these trails run perpendicular to the stream. Any new trail will be mutually developed and agreed upon between CDOW and COUNTY.

Management Actions:

Please see above. Any activity should not impact wildlife or their habitats.

OTHER MANAGEMENT OPPORTUNITIES

Grantor and CDOW may consider other habitat management opportunities consistent with the terms of the Easement and this Management Plan and implement such opportunities upon mutual agreement.

MONITORING

TCR will be monitored by the CDOW (and COUNTY) annually. The goal of monitoring is to determine and evaluate long-term habitat trends and to identify changes to the property. The CDOW Easement Monitoring form will be used for this evaluation.

If a grazing management plan is initiated, it should be monitored annually. The type of possible grazing monitoring can be:

- 1) Photo points – At least 3 permanent locations should be established and recorded.
- 2) Utilization cages – The placement of cages can be used to assess the level of use during the grazing period(s).
- 3) Grazing Response Index – This index looks at the timing, intensity and duration of grazing during the growing season (Reed et al. 1999).

Changes in the properties habitat may be related to domestic or wild ungulate grazing and/or weather conditions. Modifications to improve effectiveness and efficiency of the Management Plan should be expected. It may be decided to conduct additional long-term vegetation monitoring at assess range health. Such monitoring could include trend transects, paired plots documentation of precipitation. Adjusting the plan will be done with mutual consent from the CDOW and COUNTY.

The Management Plan will be reviewed at least once every five years. The initial Management Plan review will occur on or before December 31, 2015. It will be jointly reviewed by the CDOW and COUNTY. If changes are necessary, it will be modified upon agreement by both entities. If changes cannot be agreed upon, the existing Management Plan will stay in place. However, if in the interim it is mutually determined that this Management Plan should be modified before that date, both parties can mutually modify it at any time. If the Property is transferred, the Management Plan shall be reviewed with the new landowners within one year of the conveyance.

WHEREFORE, the parties have agreed to this Management Plan for the Property on the day and year first written above.

Landowner:
Park County Board of County Commissioners

Attest:

By: Mark Dowaliby, Chairman

Park County Clerk or
Deputy Clerk

Date: _____

**THE STATE OF COLORADO, DEPARTMENT OF NATURAL
RESOURCES, DIVISION OF WILDLIFE AND WILDLIFE
COMMISSION**

By: _____
_____, CDOW _____ Regional Manager

Date: _____