Alamosa City Ranch Master Plan
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Background

Brief Background and History of the Alamosa City Ranch

The City’s acquisition of North Thomas Ranch is well documented. Suffice to say that the 1,300 plus acre property was purchased for two primary reasons: to obtain the water rights associated with the land; and, to use a portion of the ranch as a source of soil and aggregate necessary for the Army Corp of Engineers to construct the levee on the west side of the Rio Grande.

Since the land was purchased by the City of Alamosa in 1997, there have been four documented studies examining use and management of the ranch: *The Alamosa Comprehensive Plan*, *The Alamosa City Ranch Management Plan, August, 2012; Draft Alamosa City Ranch Grazing Management and Recommendations; and, the Alamosa Community Trails and Cross Country Master Plan Final Report*. *The Alamosa City Ranch Management Plan, August, 2012* was the only plan adopted by the City Council.

Historic uses of the property are primarily agricultural aside from some areas close to the Rio Grande which have been more or less retained as wetlands. The soils on this property, like those of the region, are often poor and require irrigation and nutrient input to be productive pasture. Cattle production is common in the area as it requires less input. Over the last century the Alamosa City Ranch has supported row crops, hay, dairy, and cattle production - common uses of land in the San Luis Valley.

The Alamosa City Ranch has two sites of historical interest. The first site is a 19th century stage coach stop which is associated historically with Alamosa’s early trapping and outfitting period. This building, known as Wayside, is the oldest freestanding structure in Alamosa County. Only a hundred or so feet away, and of near equal importance, is an old dairy barn and hot water artesian well.

Figure 1 - Vicinity Map
After acquisition, the City entered into a lease agreement with a local ranching operation. This lease agreement provides the City a source of income to partially offset the costs of the operation and care of the property. These ranching practices continue the historic use patterns of the property and maintain the beneficial use of the associated surface water rights.

**Existing Conditions**

**Location**

The Alamosa Ranch is located on the northern side of the city and is separated from the urban development of the city by the Rio Grande. The ranch surrounds the Cattails Golf Course on three sides. North River Road bisects the ranch. Colorado Highway 17 partially borders the ranch on its east side.

The Ranch is bisected along the western boundary by the Rio Grande. The riparian corridor of the river as it crosses the Ranch provides a significant habitat for avian and terrestrial wildlife. The Ranch is also bisected by North River Road. On the east side of North River Road between Cottonwood Drive, on the south, and its T-intersection with County Road 6 South, is Blanca Vista Park. At approximately 35 acres, the pond at this park was created when soil and aggregate were excavated for construction of the levees along the Rio Grande.

The Ranch is generally flat to gently rolling with a grade that slopes from northwest to southeast toward the river. The Ranch is predominantly covered with flood irrigated pasture with pockets of irrigation-induced wetlands.

The riparian corridor along the river connects higher elevation ecosystems to the west to lower elevation ecosystems east of the Ranch and provides abundant water, food, cover, nesting and denning sites with the deciduous tree over story and shrub and herbaceous understory for a variety of wildlife. The Ranch setting is a mosaic of wooded areas, wetlands and flood irrigated meadows and pastures that provide diverse habitats.

**Irrigation and Water Rights**

Alamosa has a cold desert climate with long, cold winters, warm summers and dry weather year-round. Precipitation averages 7.25 inches per year. This type of climate makes irrigation a vital part of the operation of the ranch. The native woody species of Chico or Black Greasewood (Sacrobatus vermiculatus), Fourwing Saltbrush (Atriplex canescens) and Rubber Rabbitbrush (Chrysothamnus nauseosa) and grasses like Western Wheatgrass (Pascopyrum smithii), Indian Ricegrass (Achnatherum hymenoides) and Blue Gramma (Bouteloua gracillilius) among others,
would soon reclaim the Ranch without irrigation. The current and historic agricultural uses of the Ranch have been reliant on irrigation water.

There are two irrigation ditches that serve the Ranch: The Independent Ditch and the Excelsior Ditch. The City of Alamosa owns an approximately 90% undivided interest in the Independent Ditch, and owns 5.5 shares in the Excelsior Ditch Company, less than 10% of the Company. One of the original reasons for purchasing the ranch was to acquire its water rights for conversion to future municipal use. In the interim, the City exercises its rights by irrigating the pastures at the ranch to raise forage for the cattle operation.
Soils Characteristics

Soils Map

Figure 3 - Soils Map
Table 1 - Soils Suitability

### Soil Suitability for Agriculture and Construction

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Suitability for Agriculture With Irrigation (IRR)</th>
<th>Suitability for Agriculture w/o Irrigation (NON)</th>
<th>Suitability for Residential Foundations (RES FOUND)</th>
<th>Corrosiveness (may negatively affect some infrastructure (COR))</th>
<th>Shrink/Swell (may negatively affect roads and foundations (S/S))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamosa Loam</td>
<td>IIIw</td>
<td>Vw</td>
<td>Severe</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Alamosa Loam, Saline</td>
<td>IIIw</td>
<td>Vlw</td>
<td>Severe</td>
<td>High-Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Arena Loam</td>
<td>IIIsw</td>
<td>Vlw</td>
<td>Moderate</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Graypoint</td>
<td>IVs</td>
<td>VIIw</td>
<td>Slight</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Sandy Alluvial</td>
<td>IVs</td>
<td>VIIw</td>
<td>Severe (fl)</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Vastine</td>
<td>IIIw</td>
<td>V</td>
<td>Severe (fl)</td>
<td>High-Moderate</td>
<td>Moderate-Low</td>
</tr>
<tr>
<td>Wet Alluvial</td>
<td>IIIw</td>
<td>Vlw</td>
<td>Severe (fl)</td>
<td>High-Moderate</td>
<td>Moderate-Low</td>
</tr>
</tbody>
</table>

### Soil Suitability for Recreation

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Playgrounds</th>
<th>Camp Areas</th>
<th>Picnic Areas</th>
<th>Paths and Trails</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamosa Loam</td>
<td>Moderate</td>
<td>Severe (flid)</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Alamosa Loam, Saline</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Slight</td>
<td>Moderate</td>
</tr>
<tr>
<td>Arena Loam</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>Graypoint</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Slight - Moderate</td>
</tr>
<tr>
<td>Sandy Alluvial</td>
<td>Moderate</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>Vastine</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
<td>Moderate</td>
</tr>
<tr>
<td>Wet Alluvial</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
</tr>
</tbody>
</table>

Source: USDA, Soil Survey of Alamosa Area, Colorado, 1973

Notes: With any soils, specific site evaluations must be performed to verify the exact conditions and characteristics of soils.

AG: the agricultural suitability of a soil is indicated with irrigation (IRR) and without (NON). Residential foundation (RES FOUND) is a general indicator for bearing characteristics for smaller buildings. Some infrastructure may be affected by the corrosiveness (COR) of native soils and, therefore, may require us of alternate materials of installation practices. S/S is a measure of shrink/swell potential; the greater the severity of S/S, the greater the potential for negative impacts on foundations and roadways.

The recreation suitability index is heavily influenced by the presence of water, either by periodic natural flooding or irrigation.
Capability Grouping – Capability grouping shows in a general way, the suitability of soils for most kinds of farming. The soils are grouped according to their limitations when used for field crops, the risk of damage when they are farmed, and the way they respond to treatment. This classification is not substitute for more extensive studies based on proposed uses that may fall outside of the traditional row crops or may include extensive changes to the landscape.

CAPABILITY CLASSES, the broadest groups, are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations and narrower choices for practical use, defined as below. Show here are only the classifications that are applicable to Alamosa Ranch:

- Class III soils have severe limitations that reduce the choice of plants, require very careful management, or both.
- Class IV soils have very severe limitations that reduce the choice of plants, require very careful management, or both.
- Class V soils are subject to little or no erosion but have other limitations, impractical to remove, that limit their use largely to pasture, range, woodland, or wildlife habitat.
- Class VI soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture, range, woodland, or wildlife habitat.
- Class VII soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture, range, woodland, or wildlife habitat.

CAPABILITY SUBCLASSES

w- shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage).

s- shows that soil is limited mainly because it is shallow, droughty, stony.

Habitat Assessment Based on Soil Survey

Based on the soil survey, all of the soils found on the Alamosa Ranch carry the same ratings for habitat for all identified species (see Appendix C). Actual ratings would vary based on the amount and type of cover found in stands of trees and taller brush. The Graypoint and Sandy Alluvium soil regimes provide the valuable wildlife habitat when compared to agricultural productivity (and the associated limitations for agricultural uses). The Alamosa and Arena soils provide suitable livestock and wildlife habitat. A key differentiation is in the amount of available irrigation and exposure to flooding. Generally, with irrigation, the lands are suited to raising forage crops; without irrigation, they are better suited to grazing.

Flood Plain Assessment Based on Soils Survey

The location of the 100-year (floodway and flood plain) was changed by the construction of the levee system by the City of Alamosa. Several of the soil types have more restrictive limitations when flooded (or flood irrigated). These limitations, in most cases, are significantly reduced when the flood conditions are removed. To fully evaluate locations for various uses in
relationship to soil type, it is important to consider whether the soil type at a given location is a result of natural flooding or irrigation activities.

**Wetlands**

According to the Army Corps of Engineers, there are no known existing wetland delineations on the property.

**Management**

The Alamosa City Council oversees the management of the Alamosa Ranch. The Parks and Recreation Department staff conducts the day-to-day supervision the Ranch with the assistance and advice of the City’s Community Recreation Advisory Board and in conjunction with the property lessee. They act in accordance with the Code of Ordinances and use the *Alamosa City Ranch Management Plan*, to guide Ranch lessee’s operations.

**Current Uses**

Ranching is the primary use of the Ranch and encompasses approximately 1,018 acres of the 1,300-acre property. The bulk of the land is leased to a local rancher who uses the land for cattle grazing and hay production. Other portions of the Ranch are used for wildlife viewing, trails, river put-in/take-out, fishing, limited parking and a 27-hole disc golf course. The Blanca Vista Park was acquired prior to the City’s purchase of the Ranch; however, it visually functions like a de facto part of the Ranch. The historic Maddux Dairy acts as the staging area for the current ranching operations. The Maddux property is also the location of Wayside – a historic stage stop and the oldest building in Alamosa County.

**Other Planning Efforts**

**Alamosa Comprehensive Plan**

The Alamosa Comprehensive Plan (Comp Plan) notes that since the Ranch was acquired, the City has developed trails, the Oxbow Recreation Area, and Blanca Vista Park on the land. The majority of the property (1,018 acres) remains an active cattle ranch. The ranch showcases the agricultural history of the San Luis Valley with its active cattle operation and the historic dairy complex. It presents an opportunity to preserve this history as well as accommodate the city’s future needs.

The following goal that pertains to the Ranch and land adjoining the Ranch has been excerpted from the Comp Plan:
GOAL CSI.9 – INCREASE OUTDOOR RECREATION OPPORTUNITIES IN ALAMOSA.

**Strategy A** - Expand and improve trails and outdoor recreation amenities along the river corridor.
- Acquire public access easements
- Trail extension/continuity
- River/water access
- Improve vegetation
- Visibility, signage, trailheads

**Strategy B** – Expand trails system accessible from in-town.

**Strategy C** – Pursue continuous public access and a trail along the full length of the Rio Grande levee through the city and along the north side of the river.

**Strategy D** – Build another pedestrian bridge across the Rio Grande.

**Strategy E** – Work with land management agencies to establish public recreation trails from the city to the Alamosa National Wildlife Refuge along the Rio Grande River and to design environmentally friendly trails within the refuge.

**Strategy F** – Develop a funding strategy and timeline for Cattails Golf Course irrigation replacement for the front 9 and eventually the back 9.

Community feedback received during the drafting of the Comp Plan regarding the Ranch is as follows:

- “Want formal preservation of The Ranch”
- “A few years ago it looked like the rec center was planning an expansion of the trail system into the Alamosa Ranch area, including a bridge over the river. What happened to that?”
- “Would like to see the Alamosa Ranch put in permanent protection, so it is available for recreation and scenic beauty without the risk of future commercial development.”

**Alamosa City Ranch Management Plan, August 2012 (rev.)**

The *Alamosa City Ranch Management Plan* was developed to promote and manage an active cattle ranching operation and provide exceptional outdoor recreation and education opportunities while protecting its natural, historical, and agricultural resources.

The Goals of the plan are:
- Manage selected units to support an active cattle ranching operation.
  - Maximize browse, forage, and pasture yields utilizing grazing guidelines
  - Institute grazing guidelines
  - Increase diversity and forage quality and quantity
- Minimize drought effects on soil and plants
- Maintain or improve water quality

- Maintain flexibility for use of the property to be able to meet future economic and civic needs to include providing the residents of Alamosa with a supply of water for future use.
- Preserve elements of Alamosa’s ecological and cultural heritage for the benefit of future generations.
- Provide continued and increased recreational opportunities on the property including: trails, wildlife viewing, fishing, camping, and environmental education.

Table 2 - Ranch Management Units

<table>
<thead>
<tr>
<th>Unit Name</th>
<th>Acres (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>117</td>
</tr>
<tr>
<td>2-3</td>
<td>162</td>
</tr>
<tr>
<td>4</td>
<td>102</td>
</tr>
<tr>
<td>5</td>
<td>57</td>
</tr>
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<td>6</td>
<td>57</td>
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<td>7</td>
<td>103</td>
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<td>11B</td>
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<td>75</td>
</tr>
<tr>
<td>14</td>
<td>60</td>
</tr>
<tr>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>A - Disc Golf/Oxbow</td>
<td>105</td>
</tr>
<tr>
<td>B - Dairy</td>
<td>12</td>
</tr>
</tbody>
</table>

The 2012 Ranch Management Plan had created management units, shown on the map and table below, that consider recommendations made by USDA and the Natural Resources Conservation Service (NRCS) other plans submitted to the then constituted Ranch Board. Units 1-15 are identified for use by the cattle ranching operation, unit A as recreational, and unit B as historical. Additionally, the boundaries for units 1-15 have been typically identified by using existing fence lines, irrigation ditches, and incorporating the need for better grazing management through the establishment of smaller and consistently-sized units. These units can be consolidated or divided as needed to meet future management goals or as new situations arise. The acres of land for each of the management areas listed below are approximations.

Draft Alamosa City Ranch Grazing Management and Recommendations

The Draft Alamosa City Ranch Grazing Management and Recommendations report was developed by Cynthia Villa, Range Specialist for the NRCS in October, 2011. The purpose of the report was to provide grazing management guidelines for agricultural and ecological values of the Ranch. The objectives were as follows:

- Operate for ecological and economic sustainability
- Improve wildlife habitat
- Maximize, browse, forage and pasture yields
- Increase diversity and forage quality and quantity
- Minimize drought effects on soils and plants
- Maintain or improve water quality
- Improve aesthetics for the community and visitors
- Increase opportunity for recreation and education
Figure 4 - Management Units

Source: Alamosa City Ranch Management Plan, August 2012 (rev.)
The document has numerous blank underscores reserving space for data. There is no evidence the document was ever completed.

Alamosa Community Trails and Cross County Site Master Plan Final Report

The *Alamosa Community Trails and Cross County Site Master Plan Final Report*, dated November 27, 2012, prepared by Loris and Associates was never adopted by the City Council. The purpose of the project was to develop a plan for a multi-use path and amenities located in the Alamosa City Ranch located east of the Rio Grande, north of the Cattails Golf Course (see graphic below). The project was funded by a $75,000 Great Outdoors Colorado (GOCO) planning grant with the City contributing $25,000 for a total project cost of $100,000. The project goal was to develop the plan to provide direction and cost estimates from which additional construction funding could be obtained.

The Loris Plan includes design concepts for trails, (NCAA specification) cross-country training facilities, signage and wayfinding, landmark art, interpretation signage and site features like shelters/pavilions, restrooms, information kiosk and race award podiums. The Parks and Recreation staff continue to use the document as a reference manual.

The final report was submitted to Heinz Bergann, Park and Recreation/Library Director on November 27, 2012. There is no record of the plan being adopted by the City Council.

Planning Process

The creation of this Alamosa Ranch Master Plan involved a planning process consisting of several steps, including meetings with staff, reviewing feedback from Council worksessions and community meetings reviewing the proposed Rio Bravo Recreation Vehicle (RV) park (involving a proposed swap of land along the river in the Cattails subdivision for land in the Alamosa Ranch), internet surveys, comments submitted to the City web page, review of other planning efforts, and public meetings.
Staff Input

Staff input on the project involved staff from the City Manager’s office, Parks and Recreation, Public Works and the Planning Division. Initial meetings involved goal setting (what do we want to achieve with this project?), determining methods of community outreach and defining target dates for community meetings and adoption hearings. Two main goals for the project were identified: the plan should include feedback received from a broad cross-section of the community; and, the plan must provide decision making criteria on which the current and future City Councils could base informed decisions about the ranch.

Public Process

The public process related to this planning effort attempted to reach as many residents as possible by using social media, newspaper notices and articles, radio interviews, comments posted on the City’s web page and two community meetings on consecutive evenings. Thirty people attended the first community meeting and twenty attended the second meeting.

Those attending the public meetings were presented a series of maps illustrating current pasture management areas, wetlands and riparian habitat, trails, exiting development sites and soils information. This information was synthesized into an Opportunities/Constraints map. The intent was to provide the public with information on the location of activities on the ranch that would influence where they would direct various uses and activities. The maps can be found in Appendix B.

Those in attendance at the community meetings were asked to provide their thoughts about existing uses of the ranch; open space preservation, recreational opportunities that could be expanded or newly developed; areas of the ranch that should receive enhanced conservation or protection efforts; and, areas of the ranch that might be suitable for future economic development. In addition, attendees were asked to use markers on maps of the ranch to specifically identify areas of concern or locations for new trails or other activities.

The preservation/conservation of the ranch was a popular response. Several of the participants wanted complete preservation of the ranch as it exists today; however, there were some attendees that felt that the portion of the ranch along Colorado Highway 17 was suitable for some type of economic development. Many believed continued recreation activities at the ranch were important. Expanded recreation activities were supported provided they were low impact and had little or no visual impact to the ranch. There was support for continuing the ranching operation at the ranch. Some of commenters suggested “holistic ranching” or similar sustainable land management techniques be used to manage the pastures. Other suggestions
included using some of the ranch ditch rights to flood pastures to restore old wetland areas to create additional wildlife habitat.

Based on the feedback received from community meetings and the City’s web page, it was apparent that an active and involved contingent of the community wants to see the Ranch “stay much the way it is,” while another contingent that is less organized or vocal seems to want the Ranch property to be conserved much the way it is with some level of new recreational and some reasonable, low impact economic development provided there is some public benefit from those uses. There is no strong advocacy for a particular new recreational or economic development use at this time, only a desire to allow the options to remain open.

Findings

Land Use

Staff used the feedback from the community meetings and the web site comments to formulate a Land Use Area map. This map is a consolidation of the maps prepared at the public meetings, comments received from the community and comments received from City staff. The map illustrates four (4) land use area or zones:

- Protection Overlay
- Working Ranch
- Special Events/Developed Recreation
- Economic Development Opportunity

The map also illustrates the location of Blanca Vista Park, the Rio Bravo RV Park site and the property known as “The Exchange Parcel.”

The areas identified on the map are not meant to be exact to surveyor precision. The broad lines depicted on the map that separate the zones are approximately 75 feet wide at the scale of the map. The boundaries are advisory only and may be moved based on more detailed field investigations and additional study. The Land Use Areas may grow or shrink based on more detailed research and study.

**Protection Overlay (approximately 170 acres):** The Protection Overlay area is the portion of the Ranch that borders the Rio Grande and contains the most significant wildlife habitat found on the Ranch including the riparian corridor along the river, wetlands and Cottonwood galleries. This area also includes most of the trails at the Ranch and the Oxbow Recreation Area that includes the disc golf course, a parking area and a raft/canoe/paddle board put-in take-out and a portion of the levee.
**Working Ranch (approximately 940 acres):** The Working Ranch Area is based on current pasture configurations, availability of water and quality pasture production as determined by the 2012 Ranch Management Plan. This area also includes the Maddux homestead which is used for the ranch staging area.

**Special Events/Developed Recreation (approximately 115 acres):** This portion of the Ranch has high groundwater, areas of saline and alkali soils and is not very productive pasture land. The events that have historically occurred and the events the City would like to promote are outgrowing the capacity of Cole Park. Therefore, the City needs to find a site for large scale events and activities. This site appears to fulfill those needs. Like the other Land Use Areas identified in this plan, the area needs additional study before committing to a use or uses for the site.

**Economic Development Opportunity (approximately 75 acres):** The Economic Development Opportunity area is bounded by a major highway and is adjacent to existing commercial and
industrial development. This portion of the Ranch could be used for a variety of low intensity uses that provide revenue to the City through property and/or sales taxes. The ranch operations would continue on the property until such decisions are made.

Conservation

As noted previously, the feedback received from community meetings and the City’s web page made it clear an active and involved contingent of the community wants to see the Ranch “stay much the way it is.” This group was vocal about using conservation easements to protect the ranch from residential and commercial development. The City originally had concerns a conservation easement may not offer the flexibility the community may want over the long-term management of the Ranch. A conservation easement, no matter how lenient or restrictive gives control to a third party. Conservation easements are typically an instrument that offers little or no opportunity for amendment and run with the land in perpetuity.

City staff had proposed creating a land use designation (similar to a zoning district) that would be brought before electors to be incorporated into the City Charter and require a vote of the citizens to amend. This places control with the citizens of Alamosa and not a third party. The intended result is to adequately conserve the property, while providing the community with a mechanism for amending decisions made in 2018 the community may want to change many years in the future.

Discussions with staff at the Rio Grande Land Trust provided some insight into how the City may structure a conservation easement that balances the flexibility City staff desires and protection of the land the community desires.

Preliminary estimates for the sale of a conservation easement vary significantly depending on the intrinsic value of the protected habitat and the acres of open space protected. Some of the benefits of a conservation easement are:

- The ability to generate capital needed for future recreational facilities like public restrooms, pedestrian bridges and similar expensive improvements;
- Rigorous protective measures for the riparian corridor along the Rio Grande requested by the community;
- The ability of the City to continue and expand low impact recreational trails and activities; and,
- The opportunity to continue the sustainable ranching operation on land that has traditionally supported agricultural activities.
Any conservation easement would need to allow for dry-up of irrigated lands under the Independent Ditch in amounts sufficient to replace post-pumping depletions in the context of the City’s contemplated augmentation plan. The plan would rely on accretion credits generated by pumping of the City’s wells to replace injurious depletions to surface streams, but if well pumping ceased, those accretion credits would also cease, while injurious depletions would continue for up to 20 years, requiring a source of water to offset them. The historical consumptive use under the Independent Ditch provides an ideal source.

The placement of a conservation easement on the ranch may also be affected by a financial encumbrance. As Figure 7 illustrates, a significant part of the land area of the ranch was used to guarantee the financing of additional water rights. The unencumbered portion of the ranch is primarily the river corridor and the riparian vegetation along the river.

Revenues generated from the sale of a conservation easement should be placed in an account earmarked specifically for the use of recreation improvements at the ranch.

Recreation projects should focus on connectivity, river access, and sanitation. A pedestrian bridge over the Rio Grande connecting the Ranch with the Adams State University campus, the Chefas Wildlife Park or a suitable location in this proximate area should be the top priority. The parking lot at the Oxbow Recreation Area/disc golf course/archery range would be an ideal location for public restrooms.
Recreation

As previously noted, the Parks and Recreation Department is aware that there might be a need for a large scale events/activity space in the City. Cole Park has served the City admirably in providing a venue for the various, shows, exhibits, concerts and other activities; however, some of the more popular events like the Early Iron Car Festival or Show are rapidly outgrowing the space. The Ranch could be a likely place to put such a venue.

A consistent theme throughout the community outreach meetings was the desire to continue or expand low impact recreation at the Ranch. Low impact recreation and facilities includes, but are not limited to, the following:
• Non-motorized trails (walking and biking)
• Boardwalks
• Wildlife viewing
• Wildlife blinds
• Rafting/canoeing/paddle boating/inner tubing
• Nordic skiing
• Primitive camping
• Disc golf

A more complete description of low-impact recreation can be found in Appendix E - Low-Impact Recreation Management Practices.

As part of the public outreach efforts, the City received feedback requesting equestrian trails at the Ranch. This input requires additional research and planning to determine if an appropriately sized area could be dedicated for such use. The parks and Recreation Advisory Board noted that mixing pedestrians, cyclists and horses may not be appropriate until suitable trail etiquette protocols can be implemented.

Public restrooms, pedestrian bridges and wildlife blinds are some the structures permitted in the Conservation area. One or two additional boat ramp staging areas may also be installed. These ramps will require the acquisition of Army Corp of Engineers Nationwide Permit 36 to ensure that the boat ramp facilities are not considered fill or require mitigation for the disturbance of wetlands along the river.

Levee Reconstruction

In the fall of 2017, the Federal Emergency Management Agency (FEMA) notified the City that the levee along the Rio Grande needed to be brought up to current Army Corps of Engineers specifications. An engineer was hired in the spring of 2018 to begin the process of redesigning the levee system. The reconstruction of the levee will require a source of soil and aggregate. As previously noted, structural fill materials for the original levee construction came from the ranch. The soils most suitable for structural fill material appears to be in Units 4, 5 and 15. Additional studies will be required verify soil suitability for the reconstruction activity.

The excavation of soil and aggregates should be coordinated with the NRCS to ensure the remediated land is restored as a viable wildlife habitat and fishery. Any spoils from the levee reconstruction should also be put to beneficial use as new recreation facilities, trail surfacing, or similar uses.
Water Management

Colorado uses a system of water allocation known as the Prior Appropriation Doctrine. Under this doctrine, the first appropriator of water has a senior right to that water, and that right must be satisfied before any subsequent rights junior to that right can receive water. The Division of Water Resources administers all surface and ground water rights throughout the state and ensures that this doctrine is enforced.

One of the reasons the City acquired the Ranch was to supplement its portfolio of water rights. The Ranch uses decreed groundwater wells for stock watering and decreed surface water from the Rio Grande for irrigation. Any change in the use of water requires the permission of the Courts. The Excelsior Ditch rights are further limited by Ditch Company bylaws that restrict the use of the Excelsior Ditch to agricultural purposes on specifically identified lands.

For the City to convert irrigation water to other uses it must get the permission of the Courts through approval of an application for change of water right. This is referred to as an “adjudication.” Water rights must also be “exercised.” This means they must be put to beneficial use or the right is subject to a declaration of abandonment by the Courts. The City currently exercises the Ranch water rights by irrigating pastures through the lease agreement. As the City’s needs change there may be a time when the City might want to use the water for other purposes and will need to request the Courts to convert some of the Ranch irrigation rights to the other uses. These changes would also need to be consistent with ditch by-laws. If these irrigation rights are converted the previous use of the water must be terminated.

During the public meetings, suggestions were made that the City resurrect some historic wetlands at the Ranch by using irrigation water to flood these areas and allow the wetlands species to re-establish themselves. Using irrigation water for the creation of wetlands will require an adjudication to get the Court’s permission to modify the water use.

Rio Bravo/Exchange Parcel

A 325 space recreation vehicle resort tentatively named the Rio Bravo RV Resort, was originally proposed for construction on a portion of the Cottonwood Subdivision adjacent to the golf course. During a series of worksessions and community meetings held by the City Council and the developer it became apparent the community was concerned about a portion of the proposed development that encompassed a Cottonwood gallery that was popular for wildlife and bird watching. This site also included a popular trail along the river. Not wanting to completely deny the developer and the City of this economic development opportunity, several
people in the community suggested the developer trade the Cottonwood gallery for a portion of the Ranch that was not a wildlife habitat.

A 70-acre parcel across Maddux Road (the road out to the disc golf/archery parking lot) from the original development site was identified by the developer. An exchange was proposed to swap the parcel with the wildlife habitat (aka The Exchange Parcel) for the 70-acre parcel. The contract for the exchange restricted use of the property to those land uses permitted in the City Agriculture zoning district. The agreement went on to further restrict any extractive or noxious uses normally permitted in the Agriculture district. The agreement was approved by City Council on April 18, 2018. The agreement was to be consummated at the time the development group demonstrated to the City they had the financial capacity to complete the project. As of the writing of this document (November, 2018) the development group has not reported back to the City.

If the exchange is completed and the RV resort is not constructed, there is a chance there will be a 70-acre privately owned parcel at the edge of the Ranch adjacent to the golf course. The absence of the RV resort may result in the construction of two 35-acre homesites/ranchettes. This would likely have a negligible impact on any ranching or conservation efforts at the Ranch.

**Ranching**

The cattle operation is currently leased on a year to year basis. The revenue from the lease funds the annual improvements required at the ranch. The current lessee uses the *Alamosa City Ranch Management Plan, August 2012 (rev.)* (Management Plan) as a baseline for the land management of the Ranch. The Management Plan offers the best management practices (BMPs) the City currently has for running the cattle operation at the Ranch. The management objectives of the plan can be found in Appendix B.

Parks and Recreation staff do not have the expertise to determine if the Ranch lessee is following the Management Plan as prescribed. Future leases should include periodic inspections by local NCRS staff to evaluate the lessee’s performance and compliance with the terms of the lease.

A few members of the community encouraged the City to change from the current pasture rotation style of management to ‘holistic’ ranch management.

The idea of holistic planned grazing began in the 1960s when Allan Savory, a wildlife biologist in Southern Rhodesia, set out to understand desertification. Savory was influenced by the work of André Voisin and the ineffectiveness of mainstream rangeland science of the time. Savory concluded that the spread of deserts, the loss of wildlife, and the human impoverishment that
always resulted were related to the reduction of the native herds of large grazers. Livestock could be substituted to provide important ecosystem services like nutrient cycling when mimicking the relationship of native grasslands with native grazers.

Regional land managers had found that while rotational grazing systems can work for diverse management purposes, scientific experiments had demonstrated that they do not necessarily work for specific ecological purposes. Basically, large numbers of cattle were placed in small pastures where for short periods so that cattle hooves could break up the soil in integrate the concentrated manure into the soil matrix and making forage growth more productive

A common criticism of holistic grazing is that while farmers and ranchers around the world believe that it works for them, most range scientists have not been able to experimentally confirm that intensive grazing systems similar to those at the center of holistic management show a benefit and claim that managers' reports of success are anecdotal. There are a few holistically managed ranches in the region: The James Ranch in La Plata County (just north of Durango), the Whitten Ranch in the north end of the San Luis Valley and the Zapata and Chico Basin Ranches near Colorado Springs. Further investigation and consultation is necessary to determine if the Alamosa City Ranch should be converted to this style of land management.

Until that investigation is complete, the traditional management of the Ranch should continue as currently practiced in consultation with the NRCS. Alternative ranch management practices, such as Holistic Ranch Management may be discussed with future lessees of the Ranch in consultation with the NRCS and land owners experienced with these management practices.

**Community Farming Reserve:** The Recreation Advisory Board suggested that an area be set aside for community farming. The intention is not to compete with the Alamosa Farm Park, but to reserve a small amount of land for the local production of vegetables. The community farm site would serve as an adjunct to the Farm Park as it nears its capacity. This site should be selected based on suitable soils types or soils that can be amended to provide a suitable growing medium for produce. The site should also have access to irrigation. Any conservation easement placed on the ranch should include provisions for community farming as a permitted use of the land.

**Economic Development**

The City does not currently have plans or prospective candidates for economic development of the Ranch. The primary intent is to reserve some City owned property for an economic development opportunity that may present itself in the future.
Economic development opportunities commonly present themselves when you least expect them to happen. Reserving some land for development allows the City to respond quickly when the opportunity is presented.
Appendix A
Land Analysis Mapping

ALAMOSA CITY RANCH MASTER PLAN
ALAMOSA RANCH
ALAMOSA CITY RANCH MASTER PLAN
RV PARK AND EXCHANGE PARCEL
ALAMOSA CITY RANCH MASTER PLAN
OPPORTUNITIES/CONSTRAINTS
Appendix B

Alamosa City Ranch Management Units

Unit 1 (117 acres)

This parcel is the farthest from the City of Alamosa, has medium pasture value and low habitat and cultivation value. If irrigation were removed from this parcel it would revert to upland habitat supporting some native shrubs and grasses, but not suitable for grazing. Historic use included alfalfa production, but the acreage has been converted to native grasses. Current uses are grazing and haying. Due to the extensive salt meadow on east side, this unit could be dried up if the need arises.

- Unit 1 has a single 50 GPM well (artesian, no pump).

Unit 2 – 3 (162 acres)

Vast meadow that is probably one of the best tracts on the ranch for grazing purposes with ample water sources. Historic usage includes hay production, grazing, and spring calving. This is the only ranch unit that has access to the Rio Grande River. The river makes a large bend in the southwest corner of the tract. The far west portion of this unit has been identified to be suitable for recreation purposes (trails, cross-country track).

- Unit 2 - 3 has a single 50 GPM well (non-functioning, no pump, pipe severely bent above ground).

Unit 4 (102 acres)

Part of a vast meadow subdivided to create smaller grazing units with ample water sources. Used exclusively for grazing. In addition to supporting cattle ranching operations, a portion of this unit has been identified to be suitable for recreation purposes (trails, cross-country track, parking, restroom facilities).

Unit 5 (57 acres)

Located north of the golf course driving range and the Cottonwoods subdivision. Currently used for grazing and haying. Includes a borrow pit that provides fill material when needed. Some of the best native and non-native grasses are grown on this tract. The outer portion, closest to the golf course is not as productive as the inner portion. Portions of this tract that border the golf course are quite scenic and usually harbor several varieties of wildlife. Water for the stock tank
comes from across the road at the dairy and during the winter this is the only source of stock water on this unit.

**Unit 6 (57 acres)**

This parcel is one of the farthest from the City of Alamosa, most suited for pasture use with low habitat and cultivation value, though evidence of a previous alfalfa field remain. If irrigation were removed from these parcels they would revert to upland habitat supporting some native shrubs and grasses, but not suitable for grazing. Improvements could be to enhance the grazing potential.

- Unit 6 has a single 50 GPM well (arterian, no pump).

**Unit 7 (103 acres)**

Part of a larger meadow subdivided to create smaller grazing units with ample water sources having shallow sloughs that fill with irrigation and snow melt, peppered with salt and wet meadows and upland Chico outcroppings. This unit has historically been used exclusively for pasture.

**Unit 8 (85 acres)**

Part of a larger meadow subdivided to create smaller grazing units with ample water sources having shallow sloughs that fill with irrigation and snow melt, peppered with salt and wet meadows and upland Chico outcroppings. This unit has historically been used exclusively for pasture.

**Unit 9 (45 acres)**

Part of a larger meadow subdivided to create smaller grazing units with ample water sources having shallow sloughs that fill with irrigation water and snow melt, peppered with salt and wet meadows and upland Chico outcroppings. Used exclusively for grazing.

- Unit 9 has a single 50 GPM well (non-functioning, no pump, pipe broken off).

**Unit 10 (15 acres)**

This parcel is a good stand of grass and is a major staging area during calving season. Unit is also grazed in the summer. Depending on the availability of other grazing areas and the projected value of hay, this acreage is cut for hay and pastured early in the fall. It has been cultivated in the past and irrigation ridges are in place. The field is next to an active well and livestock are easily watered here. One of the more productive forage units.
Unit 11A (north – 36 acres) and Unit 11B (south – 21 acres)

Historically irrigated farm ground, these units are currently the only parts of the ranch that are under cultivation for alfalfa. Unit 11B has been identified as being under-productive even when irrigated and could be dried up if the need arises. Along the north and east boundary of this tract is a drainage ditch. The ditch serves two primary purposes:

1) Allows for the removal of tail water after flood irrigation. Tail water is diverted south under the North River Road into another drain ditch and is transferred back to the river.
2) Captures sub water from the Excelsior Ditch. If drain ditch is not maintained, sub from the Excelsior will drown the existing alfalfa crop and make summer fieldwork nearly impossible.

Unit 12 (60 acres)

This parcel appears to have fair grazing capacity and is suited for forage production. It is relatively flat with little variation in vegetation, has year-round water, and good fencing. Functions well as habitat for water fowl and other wildlife. One important feature of this tract is the drainage ditch that borders the tract on the north and the east. This ditch has multiple functions:

1) Allows for the flooding of the meadow and the immediate removal of irrigation water and returned to the Rio Grande River.
2) Transfers tail water from alfalfa field to the north as well as drain water from the dairy stock tanks.

Unit 13 (75 acres)

This unit sits along the Highway 17 frontage, just south of Splashland and has been utilized for pasture and haying. This unit was altered under the direction of the U.S. Fish and Wildlife Service to create two shallow ponds fed by irrigation water from the Excelsior ditch for the purpose of creating nesting habitat for waterfowl. The agreement was entered into in April 2004 for 10 years. The USFW service did all the earthwork, installed water structures and new fencing in this mutual agreement. To date, the project appears to not have met its intended goals.

Unit 14 (60 acres)

This unit is a highly visible area from Highway 17 with trails running adjacent to the south and east borders. Well water run- off from Splashland runs through the sloughs in the meadows, empties into an old river course pond and finally into the Rio Grande. This water is relatively
warm and flows through the Commons all year round. This water pools up in a stream bed pond between the levee and the Rio Grande. Half of this pond is on the ranch and the other half is on Farm Park property.

**Unit 15 (23 acres)**

This grazing unit lies between Blanca Vista Park and the Rio Grande River. There is a strong native vegetative presence that is sustained by sub water and run off from the park ponds. The acreage has been used for grazing purposes only as a pasture for yearling bulls. There is good fencing around the entire tract. It is highly visible from both State Avenue and the heavily used trail system along the Rio.

**Unit A (105 acres)**

This unit is a natural riparian area that contains several cottonwood groves, Chico and brush uplands, a deeply trenched river oxbow remnant, and wetlands along the Rio Grande which runs on the west boundary. This area could be considered as a future city park similar to Unit C. There is a seasonal oxbow lake on this tract with standing water only during the irrigation season. The Excelsior Ditch allows for the diversion of Excelsior water into the oxbow. The lake can reach a water level where it does eventually return flow back to the river. The lake and the surrounding cottonwood stands offer the best resources for wildlife habitat and management. With the decline of the cottonwood groves recognized in 2001, a portion of this unit was restricted from grazing. At that time, the City entered into a USFWS agreement to curtail grazing in the fenced-off area to stimulate cottonwood regeneration by safeguarding young tree shoots.

New boundary fences were erected by the USFWS which assisted the city in defining the ranches western and southern boundaries. Grazing on a limited basis may be a viable option in the future.

This unit is appropriate for low impact recreation, interpretive signage and habitat improvements. Disc golf and trials (walking/running) are the primary uses for this area.

**Unit B (dairy site – 12 acres)**

Also known as Wayside, the grouping of buildings is the remnant of a thriving dairy complex and before that, a stagecoach stop. The Maddux family was the original settler for much of what is now the Alamosa City Ranch.
Wayside is registered with the state of Colorado as a Centennial Farm meaning that it has been in the same family for over 100 years. Although the brick house is gone, the front yard and back fence are still highly visible. Other structures are a square hewn log cabin, the dairy itself, an old scale house and the other structures, all in need of repair.

This unit lends itself for a historical and interpretive focus that could honor the agricultural heritage so important to the San Luis Valley. The unit has access to power and water and could be expanded in amenities to include restrooms in the future.

- Unit B has a single 350 GPM well (functioning with pump). The well is shared with Jean Maddux, who resides in a house adjacent to the property, by a long-standing agreement formalized in 2007

**Management Intensive Rotational Grazing (MIRG)**

A grazing system in which herds are regularly and systematically moved to fresh pasture with the intent to maximize the quality and quantity of forage growth. The herds graze one portion of pasture while allowing the others to recover. The length of time a pasture is grazed will depend on the size of the herd and the size of the pasture. Resting grazed lands allows the vegetation to renew energy reserves, rebuild shoot systems, and deepen root systems, with the end result being increased quantity and quality of forage.

MIRG limiting factors:

1) Cross-fencing. Complex pasture shapes often make the subdividing of pastures difficult and expensive.
2) Water availability. Since adequate drinking water is needed to meet the animal's daily requirement as well as serving as a mechanism for moderating body temperature, each pasture must have accessible water.
3) Availability of labor. Steady labor supply will also be needed to routinely rotate the animals to new pastures.

**Management Recommendations**

NRCS has provided their recommendations on several issues pertaining to the ranching operation. When possible, these recommendations should be incorporated into the ranch lease.
Animal Unit (AU) = 1 mature cow of approx. 1,000 lbs. dry or with calf up to 6 months old, or their equivalent based on a standardized amount of forage consumed.

a. Grazing
Managing one cattle herd and allowing plants on the landscape adequate restoration time will significantly improve this ground and provide a chance to reach its higher potential. The ranch at its highest potential can support 600 AUMs, including wildlife.

Using temporary electric fence or installing permanent barb wire fence to break in half the five 100+ acre meadows to increase plant restoration periods is highly recommended. Halving the five 100+ acre meadows will allow for at least 2 extra weeks of growth on the meadows when they are not being grazed. If this is not an option, then the lease needs to be amended to a lesser carrying capacity of 375 AUMs.

A grazed grass plant takes 7-10 days to recover lost root reserve and to put out new leaf growth to begin growing more leaf matter without sacrificing the root system for growth. If the opportunity is available, a grazing animal will revisit a previously grazed plant within this 7-10 day recovery period and regraze the succulent growth on that same plant over and over to the detriment of the plant and subsequently, the plant community. Healthy, vigorous plant growth and development are dependent upon a strong root system, which provides the means to gather nutrients and water. When roots are healthy they enable the plant to withstand stress from drought, cold, heat, and grazing as well as providing a highly competitive edge on weeds.

Therefore, maintaining one cow herd outside of the breeding season is highly recommended and imperative to ecological and economic sustainability. The herd needs to be moved through the management units (with gates kept closed) on a rotational basis allowing at least 70 days of restoration and regrowth between grazing events. Livestock need to be moved from one pasture to another versus allowing them to drift from one pasture to another. Allowing cows to drift will not accomplish the desired movement or vegetation response. Maintaining closed gates is essential for plant restoration after herd is moved out of a management unit. This will help fulfill the objective for increased diversity and forage quality and quantity.

Management needs to use a different pasture each year to begin the growing season grazing rotation; do not use the same pasture at the same time of year two years back to back. Do not graze a pasture in spring and fall of the same year. Grazing cool season plants in the early spring and again in the late summer/early fall during their critical growth cycles is detrimental to the health and vigor of many
of the desirable plants of this ranch.

Place salt and mineral blocks in areas cattle do not naturally move to and away from water sources or loafing areas; this will allow for better distribution of cattle across the landscape.

Management needs to be flexible to adapt to wet or droughty periods, depletion of forage supply by livestock, wildlife, or insects and any other rapidly changing environmental conditions.

Allow residual forage to accumulate for winter feed in all areas and where water is available, continue rotating cattle throughout winter. Do not winter feed in the same pastures year after year - rotate winter feeding grounds. Developing water facilities to support a winter rotational grazing program is highly recommended.

If the riparian corridor is grazed, the lessee will need to monitor this area closely to prevent cattle from browsing cottonwood seedlings, saplings, and willows. If cattle begin to browse on cottonwood seedlings and saplings and/or high seral willows within the gallery forest they will need to be moved or temporary electric fence can be erected to protect the woody species.

In order to reach the management objects of ecological sustainability and to improve wildlife habitat on the ranch at the current stocking rate the herd will need to be moved through the ranch on a deferred grazing rotation. Deferred grazing from August to mid-May every few years in units designated for wildlife and/or grazed units with wetlands will allow for grasses and forbs to produce seed and increase vegetative growth to supply nesting areas and materials for waterfowl and shorebirds.

b. Irrigation

Avoid grazing cattle in fields as they are being irrigated or wet and allow management unit time to dry before turning cattle into an area. If water is available, irrigate unit when cattle move out of grazed area.

To support and improve wildlife habitat:

- Apply irrigation water to wetland sites as early as possible to promote the growth of desired wetland plant species and to make flooded habitat available for early migrating water birds.
- Begin slow drying of portions of wet meadows in June and July of each year. Drying of wetland areas serve to concentrate food resources for water birds, promote the growth of a diversity of desirable wetland plant species and provide for the operational needs of the manager (cattle grazing and haying operations).
- Leave a minimum of 35 acres of wetland habitat flooded during the
summer months (June through August) as dictated by water availability, to provide brood habitat for young water birds. Flooded sites can be alternated annually to minimize the establishment of cattail and maintain high wetland productivity.

- Begin flooding of wetland areas in August to provide habitat for fall migrating water birds and to encourage vegetation growth post-haying/graing. Slow flooding of multiple wetland areas can be alternated to provide habitat throughout the fall migration period.

c. Pasture
Fertilization of hay meadows will provide an extra edge to desirable grasses to compete against undesirable forbs. Renovation and reseeding and/or brush management in native meadows which are not cultivated for hay can be conducted with a Lawson aerator. Renovating and or reseeding and fertilizing these meadows could increase hay production by approximately 300 tons.

Planting a diverse cover crop of small grains (oats, winter rye) with legumes (sweet clover, sweet pea), and radishes and/or turnips following chemical management for weedy species, if needed, will vastly improve soil health in one cropping season, particularly if this cover crop is grazed.

The cover crop mix can be grazed in dormant season of the year planted, overwintered, and grazed again the following spring, thus extending the grazing season on the ranch which equates to less money spent supplementing with hay. An alfalfa/grass mix can be planted directly into the mixed species cover crop residue in early summer following spring grazing. Leaving grain on the ground will also help attract wildlife species such as sandhill cranes.

Richard Sparks, NRCS Agronomist, suggested the following pasture management guidelines when dealing with wild iris. There are limited solutions to managing wild iris populations so it will take an integrated pest management approach combining herbicide application followed by mowing and proper grazing management to restore infested meadows. The ranch does not have a wild iris problem to the level of renovation, reseeding, and using herbicides but, keep in mind, if the meadows are continuously grazed or grazed while the soils are wet or management doesn't hay, wild iris will most likely become problematic.
1. **Prevention:**
   - Do not graze meadows continuously during the spring or during irrigation. Late summer, fall or winter graze can be beneficial as long as the grass is not hit too hard. Irrigate iris intermittently, rather than allowing water to stand continuously on the field. Drying up the fields a little by intermittent irrigation will help with control, especially in early spring.

2. **Grazing:**
   - Keep grazing periods in the spring short and intense, and on soil that is not excessively wet. Allow adequate rest between grazing events so the grass can replenish root reserves before grazing again. Keeping the grass healthy and vigorously growing is critical. Cattle may cause mechanical damage to the iris with intensity; with light intensity grazing, they will just walk around the plants.

3. **Renovate and Reseed:**
   - If the field can be tilled, disc and chisel meadow in the fall and leave it dry overwinter. Disc again in the spring before it gets too wet then seed with alsike clover along with Garrison creeping meadow foxtail, meadow brome, and orchard grass. If foxtail and weeds are a problem, pre-irrigate and use 2-4,D and glyphosate prior to seeding in June. Fertilize the grass in early summer before haying; this will allow grasses an edge to outcompete the iris. Defer grazing on a newly planted pasture for two growing seasons.

4. **Herbicide approaches:**
   - Little success with herbicide is possible if grazing and excessive irrigation is continued uninterrupted. The traditional time to spray is just at late bud stage, before blooms open up. NEVER use glyphosate alone to control it; it has little or no effect, except to kill the grass growing with the iris. Eckert et al., reported an application rate of 2, 3, or 4 lbs/acre of 2,4-D in mid-June or 4 lbs/acre in early July gave 91 to 100% control of iris on a mountain meadow in Nevada (Eckert et al. 1973). Iris phenology at treatment ranged from late vegetative to late bloom stage.

d. **Monitoring**
   Short term monitoring will help explain changes measured during long term monitoring, including the lessee’s bottom line. A record of annual conditions, events, or management practices that have an influence on landscape conditions will allow for better adaptive management decisions.
Documentation:

- Timing of livestock movements from pasture to pasture throughout the year
- Annual hay production to measure increase/loss of productivity per hay meadow
- Timing of irrigation (water coming on/off)
- Weather events - particularly measurable precipitation
- Wildlife observations
- Yearly photo points
- Monitoring of vegetation - particularly key species and noxious weeds
- Utilization cages set up in management units at beginning of season then photographed and clipped at the end of the grazing season; need to be moved every year
- Placement of supplementation
Appendix C
Alamosa Ranch Observed Wildlife
Courtesy John Reeser

Oxbow Walk Bird List

House Wren (*Troglodytes aedon*)
Red-Winged Blackbird (*Agelaius phoeniceus*)

Yellow-Headed Blackbird (*Xanthocephalus xanthocephalus*)
American Goldfinch (*Sparus tristis*)

American Robin (*Turdus migratorius*)
Mountain Bluebird (*Sialia currucoides*)
House Finch (*Haemorhous mexicanus*)

Western Kingbird (*Tyrannus verticalis*)

Northern (Red-Shafted) Flicker (*Colaptes auratus*)

Tree Swallow (*Tachycineta bicolor*)

Green Swallow (*Tachycineta Thalassina*)

Red Tailed Hawk (*Buteo jamaicensis*)
Marsh Wren (*Cistothorus palustris*)

Coot (*Fulica*)

Mallard (*Anas platyrhynchos*)

Pied-bill Grebe (*Podilymbus podiceps*)

American Bittern (sound) (*Botaurus Lentiginosus*)

Sora (by sound) (*Porzana Carolina*)
White-faced Ibis (*Plegadis chihi*)

Mourning Dove (*Zenaida macroura*)

Song Sparrow (*Melospiza melodia*)

Bullock’s Oriole (*Icterus bullockii*)

Black Headed Grosbeak (*Pheucticus melanocephalus*)

American Kestral (*Falco sparverius*)

Great Blue Heron

Yellow Warbler
White-breasted Nuthatch (*Sitta carolinensis*)

Western Wood-Pewee (*Contopus sordidulus*)

Broad Tailed Hummingbird (*Selasphorus platycercus*)
Other Notable Oxbow Recreation Area Wildlife

Monarch Butterfly (*Danaus plexippus*) – It’s young caterpillars only feed on milkweed. Loss of milkweed due to human activity has greatly reduced the numbers of monarch butterflies.

Milkweed (*Asclepias*) for monarch caterpillars!!

Cottontail Rabbit (*Sylvilagus floridanus*)

White-Tailed Deer

Yellow Bellied Marmot (*Marmota flaviventris*)

Least Chipmunk

*Tamias minimus*
Appendix D
Alamosa Ranch Public Meetings

Meeting #1 8/6/18
Approximately 30 attendees

1. (All comments are quotes from the public unless otherwise noted)
2. Any further development that displaces deer (from the ranch) will be a problem for the city
3. Could the city trade any developable parcels for more riparian land north or anywhere?
4. How will Rio Bravo get water?
5. Would like to see a map that is “water-driven” (not soil type or ground water level). How will that affect the future of the property?
6. A city rep must attend the ditch company meetings. Out of state people are buying lands with ditches to try to get at the water.
7. Would like the city to adopt “holistic ranch management.” Build the soil, not erode it
8. Grazing rights should be put up for yearly bid
9. Value what we have very much: The disc golf course, protect the views, a convenient place to get close to nature. Please protect for our kids. Not asking for a wilderness area; limited use with trails and disc golf is great...
10. City could make a lot of money by putting an easement on the property and then selling it; happening all across the west
11. This is public land; the public should be allowed to vote on it
12. The Ranch is a unique asset with four sectors – Disc golf, ranching, habitat, and trails. Agritourism and Outdoor rec tourism are growing and have great potential for more growth – benefits our quality of life and economic development
13. Would like to see a conservation easement out of this process
14. Right now, decisions on the Ranch are decided by four people
15. Is the 2012 management plan being followed?
16. We could do a citizen-initiated petition (for a conservation easement)
17. Would a community survey be feasible?
18. Since money is not the goal, you should do your own conservation easement
19. Easements can contain development provisions
20. Should there be a development moratorium until city council can consider this (outreach process)
21. The decision to build the rec center was done in a sense of perpetuity (analogy to a conservation easement).
22. Is there a deadline for Rio Bravo to get their (act) together?
23. In a show of hands, super-majority of folks favored protection of the entire ranch property.
Meeting #2 8/7/18
Approximately 20 attendees

1. Is the Rio Bravo site the highest elevation parcel of the ranch? (no)
2. The now defunct Ranch Board recommended development be on the north east parcels
3. Can a municipality be a conservation easement “guardian?”
4. Early Iron has outgrown Cole Park; how about a large event space at the ranch?
5. Give the idea of putting before the voters a City-enacted “habitat protection area;” could that be for multiple years so that it was not put before the voters year after year?
Appendix E
Parks and Recreation Advisory Board Minutes

City of Alamosa
Recreation Advisory Board
Regular Meeting Minutes
10/9/2018
11:30am

I. Roll Call
Present: John Adams, Heather Brooks, Jon Brownell, Ty Coleman, Paul Duarte, Charlie
Griego, Rusty Johnson, Jesse Marchildon, Brian Pucrerella, John Reesor, Dan Vaughn.
Staff: Andy Rice and Jes Jolly.Absent: Martin Diaz.

II. Agenda Approval
Rusty moved to approve the agenda, seconded by Heather; vote was unanimous.

III. Approval of Minutes
Heather moved to approve the minutes from September, seconded by John Adams; vote
was unanimous.

IV. Public Comment (none)

V. Presentations
a. New Oxbow Trails Slideshow
   John Reesor directed the board to a slideshow for the work done on the trails and
   outdoor recreation. He and Brian hauled dirt from Friend’s Park to the pump track at
   Cole Park and created 3 new jumps while improving the shape and safety of the older
   jumps. John showed maps of about 4 miles of trail that was added at Oxbow Recreation
   Area and the installation of several gates for a couple ranch fencing crossings. Andy
   reported that the gates were pretty reasonable and were made for pedestrians and
   prevent livestock from escaping. John also built a database for birding, a program that
   became popular during Weekends on the Rio. The trails are used by walkers, bikers,
   disc golfers, and birders. He plans to open it up to mountain bikes, fishing, dog walkers,
   and ASU runners. He also mentioned the City will be buying winter trail grooming
   equipment provided by the Inspire grant. This would help improve the trails for fat tire
   bikes and cross country skiers. He mentioned that they need more signage in the area
   and hopefully they can work on connecting the trail system and adding a pedestrian
   bridge. He hopes to create an online app with QR codes to make people more aware of
   their surroundings.
   Charlie asked if they could add signs in town and Heather confirmed that it is included
   in their downtown plan. John and Jes announced that they are working with the Boys &
   Girls Club with a health and wellness project to use the outdoors as a prescription for
   health. Rusty asked if all the trails were shared and John said yes. Brian explained trail
   etiquette, horses and bikers yield to walkers and people going downhill should yield to
those going uphill. He stated they could find signs and John disclosed that they could
educate people through programs. Charlie asked if they allowed pets on the trail and John voiced that they already have
signs stating that pets should be on a leash. Brian conveyed that in other cities, visitors
must leash their pets while those who were trained locally could be without; Jesse stated
that they have an identifiable collar.

VI. Programs/Items
a. Final Ranch Plan Comments
Heather presented an updated map on an potential expanded conservation easement
parcel for the Ranch. She also mentioned a minimum of $100,000 have been mentioned
as potential revenue under an easement. Before Brian left, he expressed that he wanted
to conserve as much last as we can and would love to see a pedestrian bridge. He would
also like river put-ins but disagreed with horses using the same trails. Heather asserted
that they would carve out some space for horses, that the trails would not be shared.
Brian also thought they could use some of that land to dig up dirt for the levees. Charlie
asked about the space that is used for grazing and Heather revealed they would have to
write what they would allow at each location. Rusty was concerned about the land south
of the pond. He would like to not have it tied up and leave it open for recreation or
maybe even a pond expansion. Andy noted that they do use the pond for paddle
boarding when the river is low. He added that it would be used for low-impact
recreation; no motorized vehicles.
Heather voiced that with the larger area, an estimate of $450,000 was mentioned as
potential easement revenue. Jesse mentioned that they can specify what they want to use
the land for in an easement, that the Farm Park is mainly for agriculture but they added
that they wanted to add a couple small structures. Paul expressed they would need to
have the foresight and think it through extensively. Rusty asked if the money would go
to the general fund or recreation and Heather confirmed that they were specific that it
would have to tie back into the ranch.

Charlie claimed that the city does not oversee the grazing in the ranch. Heather
disclosed that she would have to get staff perspective or sign with an entity to oversee
it; Jesse suggested NRCS. He then brought forth the idea of a farm on the ranch that
would be maintained by a city employee to provide a source of quality food. Paul stated
that this would create competition with local stores and Heather revealed that they
would have to invest a lot of money in equipment and supplies. Andy asked if an
example or demonstration farm might be better than Jesse pointed out the Farm Park is
kind of already in that role and Heather mentioned that there are community gardens.
Jesse suggested leasing an area to farmers, that that could be added to the conservation.
Rusty was concerned that it would infringe on the grazing area but Heather confirmed it
would not encroach on the leasee. Andy asked about water rights regarding potential
farming and Jon suggested putting the water with the lease. Ty asked how many acres
that would be and Jesse estimated 10-20. Heather maintained they would have to look at
the topography; they don’t have to make a decision today. Heather conveyed that they
may have to adjust the number of days on the grazing area and Andy affirmed they would have to look at the lease terms. Charlie mentioned that Alan, who leases the grazing area, has improved the ranch and Andy added that he is good to work with. Heather said that she needs to add the comments to the plan and Ty asked if he could get a list of itemized things for the ranch property to go to council. Dan asked if the list should be things that can be funded and Ty answered a list based on priorities. Heather voiced with or without ASU, the community needs the bridge. Andy noted that the water component could help too. Rusty asked if the bridge was just for the river or if they would want one for the pond too. Andy said that for now it is only the river. Jesse moved to approve the ranch plans with the amendments discussed, seconded by Jon; vote was unanimous. Rusty moved to approve the conservation agreement for a minimum of $200,000 for the green area and $100,000 for the expanded blue section, seconded by Jesse; vote was unanimous. The price is set as a minimum, allowing council to accept more. Heather disclosed that the City can negotiate.

VII. Policy Discussion
a. Golf Course Trees/Debris Cleanup
Jon stated that the trees at the golf course whether due to the wind, drought or age have fallen or are in danger of falling and potentially causing damage. Paul asked about volunteers for the project and Jon expressed that he would support using the trees on the ground for mulch. Heather asked if they could use the Tree Board to help identify the trees that would need to be removed. She also mentioned partnering with the Golf Board to find a solution. Jesse liked the idea of chipping the fallen trees and keeping the organic material. Charlie suggested dividing the project into phases, as it would be overwhelming to take on the whole area at once.

VIII. Staff Report/Announcements
a. Multiuse Pavilion Update
Andy announced the changes to the ice rink from last season. Some walls were added to the north end of the facility, while garage doors and curtains were added to eliminate the amount of dirt coming in through the open sides. Public skating, however, will be suspended while the doors and curtains are closed. A ventilation fan is being added as well as signage in the front and a new paved parking lot. Rink maintenance has already begun prepping and will be making ice in about a week. He also noted that the Tree Board will be coming in to evaluate the area and suggest landscaping to help improve the accumulation of dirt.
Ty asked if they would be adding heating elements and Andy reported that they are currently looking in to that. Heat above the bleachers would help appease parents during hockey games, tournaments, and public skating.

b. Park Vandalism & 2019 Staffing
There have been many reports about vandalism in Zapata Park and Cole Park restrooms. The restrooms in Zapata Park are a combination of aging and vandalism. When porta johns were placed in the park, those too were vandalized to the point that the vendor refuses to supply any at that location. As the season wraps up, this will be something to focus on next summer. Cameras will be placed outside the restrooms and talks of a
neighborhood watch have come up, as local police cannot consistently monitor the parks. Heather added that the new fixtures will be vandalism proof. With the addition of Montana Azul next year, the parks department will be hiring another seasonal employee.

c. **Alamosa Riparian Park (Chefas/GOCO) Update**
   Staff hosted a picnic lunch for GOCO members, where they pretty much confirmed a $700,000 grant to contribute to the 200-acre acquisition with Western Rivers.

d. **City request to ASU for Levee Trail Parcel(s)**
   Charlie asked about the plan with ASU for a pedestrian bridge and Heather revealed that she spoke to them and though they still are interested, they didn’t offer any additional details. Ty asked about the estimated cost for the bridge. Heather noted that they talked about donating the levee or conveying it to the city, there are different opinions on what is should cost.

e. **Trails Showcase 10/29**
   The trails will be showcased on Oct. 29th at 4pm with a ribbon cutting at 5pm. Kristy Mountain Sports will provide bikes for city staff, the rec board, or council members who would like to ride the trails.

f. **Program/Activity Update**
   Youth basketball participation is about the same as last year with a few open spots for late registration. The Denver Nuggets Sills Challenge is set to take place on Dec.5th. Youth Hockey registration is open until Nov. 26th, which will also be the date for the equipment fitting and coach’s meeting. Women’s Basketball is going through Nov. 1st. This year the league switched back to a full court, 5-on-5 based on last year’s feedback. Men’s Basketball team registration is open until Oct. 22nd with games beginning Nov. 5th. The hours for the rec center will change on Nov. 1st to stay open later Mon.-Thurs., Saturday, and will then be open on Sundays from 12-6pm.

IX. **Board Comment**
   Andy and Dan floated the idea of snow-making during the winter months, since the temperature was optimal but the snow has been bleak. Dan reported that a used snow making equipment would run about $400,000. Paul asked for a schedule for the ice rink and Jes revealed they already have a pretty good template for public skating. Ice hockey practices will go from December-February limiting some of the public time. In November and March, the hours will be more open to the public.

X. **Adjournment**
   Next regularly scheduled meeting: December 11, 2018
Appendix F

Low-Impact Recreation Management Practices*

Low Impact Recreation

Specific Activities and Uses consistent with Conservation and Low Impact Recreation:

- Provide porous, soft-surface, non-paved recreation trails that complement the topography and resource management;
- Preserve and enhance key vistas through vegetation management;
- Selectively site and construct buildings like restrooms, a visitor’s center and interpretation and educational facilities;
- Provide spaces and opportunities for outdoor classrooms, parking areas, activity staging areas, wash stations and bathrooms;
- Identify and improve primary auto access roads through the property and deconstruct roads no longer needed. Limit motorized vehicle access;
- Provide interpretation and education opportunities for schools and universities;
- Use volunteers to promote community participation in education and to help restore natural communities;
- Provide outdoor research opportunities for ecologists, scientists and students;
- Develop a fishing piers, canoe/carry-in boat access, and picnic area where appropriate;
- Provide a multiple use trails connecting the Rio Grande, Oxbow Recreation Area, Ranch amenities, Blanca Vista Park and recreation amenities outside of the Ranch boundaries
- Remove any unwanted infrastructure, buildings or debris that remains on the property.

*Adapted from materials developed by the Recreation Division of the Wisconsin Department of Natural Resources.