



Landscape Vision

“True Colorado Living”

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Prepared by: Atkinson Design Group

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Purpose

The purpose of this Landscape Vision is to facilitate a more consistent and attractive landscape throughout Ken-Caryl Ranch; increase environmental stewardship on community-owned and privately owned lands; and reduce water usage.

Introduction

The Ken-Caryl Ranch Community possesses a rich history dating back to 1859. The original ranch welcomed respected native and country leaders. The ranch was frequented by these leaders as a destination for its natural beauty and scenic vistas. Over the years, the ranch was transformed into a working dairy and cattle farm. In the 1900's, the farm experienced transition as a result of the Great Depression and experienced significant change by new property owners.

The significant change provided for community and neighborhood development of the ranch in the 1980's and 1990's. The design for the community was to maintain an emphasis on the natural aspect of the valley, the surrounding 5,000 acres throughout the valley and its neighborhoods. The sustainable design of the community was a primary theme while preserving prominent archaeological features and views along the foothills corridor.

Education

Sustainability and Stewardship

The overall design intent of the community landscape is to provide sustainability, reduce water usage and increase environmental stewardship within the community. Over the years, as development has occurred in the community, water consumption has increased in landscaped areas. Recent drought periods have reduced availability of water resources for landscape uses and compromised the appearance of irrigated areas. The combination of the increased water demand and reduced availability has led community leaders to explore sustainable options for management of community parks and greenbelts and increased the awareness of environmental stewardship throughout the community. This effort has been ongoing since 2002 but as water shortages become more prevalent we need to develop a plan that evaluates our entire community approach toward sustainability and environmental stewardship.

What are we doing?

Our process began in 2011, when community leaders decided to develop a strategic plan for the future of Ken-Caryl Ranch. The strategic plan was called the KC2020 Plan and included a series of formal and informal surveys, focus group meetings and working sessions to identify Ken-Caryl's Strengths, Weaknesses, Opportunities and Challenges. In 2012, the KC2020 Plan included a comprehensive formal community. Following extensive analysis and evaluation, community leaders used the results to offer the option of bonds to pay for needed improvements. This option was approved in a community vote in the spring of 2014.

As a result of the KC2020 process and subsequent efforts of the Community Planning Committee, we are studying all of the community greenbelts and parks to better understand what spaces are active and passive recreation areas. This evaluation will ultimately help guide the creation of an overall Landscape Vision for Ken-Caryl Ranch.

What can the community do to help?

As we evaluate our 107 acres of irrigated greenbelt and park areas to better identify opportunities for improved sustainability and environmental stewardship, we encourage the rest of the community to evaluate their own landscaping. We estimate that the total landscaped areas (lawns, gardens and landscape beds) throughout 3,216 private single-family lots is approximately 300-350 acres. We are basing this estimate on the assumption that the average lot size in Ken-Caryl Ranch is 1/3 of an acre. Within that 1/3 acre median lot size, we are assuming that an average of 1/3 or less of the total lot would include landscaping. This totals roughly 300-350 acres.

If we all work together as a community, collectively we make a much greater impact than the 107 acres within the irrigated greenbelt and park areas. We encourage families to attend future Landscape Vision meetings which will also include opportunities for residents to ask questions about their own properties and how our planning efforts can help educate them in their landscaping too.

Landscape Aesthetics and Consistency

Style and Consistency

The intent of the landscaping is to embrace what we believe Ken-Caryl Ranch is best known for: our physical and visual connection to the foothills that creates a true Colorado living environment. Our goal is to create an improved landscape appearance including more consistency in our plant varieties and materials. The landscape shall reflect the built environment while integrating a plant palette that blends with our natural environment primarily using reduced water usage species to provide a transition to undisturbed open space areas. This consistency in landscaping will enhance the visual experience and help connect the Valley, Plains and North Ranch communities.

Recommended Plant Palette

The plant palette for the community greenbelts shall be defined based on active and passive recreation areas. Active recreation areas should contain practical ornamental plantings and turfgrasses for high athletic activity and pedestrian use. Plant varieties and cultivars shall be proven to Colorado and contain reduced maintenance and water requirements. Passive recreation areas should contain accent ornamental plantings and dryland grasses for minimal athletic activity and pedestrian use. These plant varieties shall require minimal water and seasonal maintenance.

Future plantings in each recreation area should be designed and planted in random, natural patterns to mimic undisturbed areas. Shrub and perennial accent areas should incorporate drought tolerant, reduced maintenance species that blend with the natural foothills environment. Planting designs should include a massing approach to blend existing and future plantings with the surrounding natural areas. Turf and dryland grass varieties shall be selected to allow maintenance practices to be altered based on periods of excessive moisture or drought.

Signage and Fencing

Community signage and fencing should provide for a Colorado vernacular reflecting local traditions, while preserving the heritage of Ken-Caryl Ranch. Signage and fencing materials shall be locally or regionally sourced and provide accent and transition to surrounding landscape.

Reduced Turf Areas

Historical Water Use

Historically speaking, when the Ken-Caryl Ranch community was originally designed and during the first few years of operation, the majority of the irrigated greenbelt corridors were not intended to be irrigated and/or maintained as turfgrass environment. The areas were intended to be native grass, recreating the natural environment of the original Ken-Caryl Ranch. In the 1970's and 1980's, water conservation was not publicly viewed as a sensitive concept or critical to the overall health of our environment. The lack of perception regarding water conservation and environmental sustainability by the community pressured past Boards and staff to abandon existing dry land areas and convert many of these areas into maintained turfgrass areas. The majority of these turf grass conversions occurred in the "Plains" portion of Ken-Caryl Ranch.

The reality of drought periods and water shortages throughout the western United States, including Ken-Caryl Ranch, is well documented today. As water demand is increased and supplies are reduced, we must do our part to protect this natural resource. The "Water" line item costs represent the largest single line item in the Ken-Caryl Ranch Metropolitan District's \$3.3

million annual budget for general operations. In the past 10 years the average annual water consumption has been nearly 56 million gallons at an average cost of nearly \$250,000. Water usage over the history of Ken-Caryl Ranch is listed below:

KEN-CARYL RANCH METROPOLITAN DISTRICT
ANNUAL WATER COST AND USE
2003-2014

YEAR	COST	GALLONS	COST PER 1000 GALLONS
1985	\$ 85,771	43,842,000	\$ 1.96
2003	\$ 192,986	52,632,000	\$ 3.67
2004	\$ 135,918	35,260,000	\$ 3.85
2005	\$ 246,737	59,528,000	\$ 4.14
2006	\$ 298,016	69,426,000	\$ 4.29
2007	\$ 232,676	52,389,000	\$ 4.44
2008	\$ 226,503	60,345,000	\$ 3.75
2009*	\$ 193,022	46,846,000	\$ 4.12
2010*	\$ 271,452	62,350,000	\$ 4.35
2011*	\$ 262,483	61,324,000	\$ 4.28
2012*	\$ 274,890	62,288,000	\$ 4.41
2013	\$ 265,155	47,952,000	\$ 5.53

* Reflects rebates from Ken-Caryl Ranch Water District used for installation of new and more-efficient sprinkler systems.

Note: Water usage varies considerably based on the amount of rainfall during the calendar year.

Passive vs. Active areas

Active recreation areas include spaces such as athletic fields, tennis courts, pools, playgrounds, high use areas around community buildings for youth camps, and general circulation. These recreation areas require intensive development, management and increased budget costs. Passive recreation areas include spaces such as multi-use trails, picnic and seating areas as well as landscaped areas adjacent to the various community entrances and collector roads. These recreation areas require reduced development, management and reduced budget costs to provide a more natural open space appearance. In addition to defining each type of recreation area, we are studying these spaces to identify opportunities for possible new community gathering and open spaces. Upon defining each recreation area, this will dictate plant palettes, landscape enhancements and management practices for each area.

Operational efficiency

Long term savings

The overall projected Ken-Caryl Ranch Metropolitan District Park's Department maintenance budget is approximately \$1.6 million. As previously mentioned, the "Water" line item represents the largest single line item in the Metropolitan District's \$3.3 million community budget, as well as the largest single line item in the Metro District's \$1.6 million Parks maintenance budget.

Since the early 2000's, the Ken-Caryl Ranch landscape management staff has implemented a landscape maintenance philosophy to reduce overall maintenance and water use in areas of turfgrass that is not actively used. This is a positive step in environmental landscape management. As we continue to evaluate our community greenbelts, parks, common area landscape and use of each space, there will be additional opportunities for maintenance and water reduction. It is our goal to achieve some long-term savings with our overall use of fuel, chemicals, fertilizer, and water. **These "savings" may or may not include actual monetary reductions. Instead, "savings" could mean reduced consumption of water resources, wear and tear on equipment and reduced maintenance on infrastructure items such as irrigation systems, community fencing, and plant material replacements.**

Suggested Best Management Practices

In an effort to provide long-term sustainability within the community, best management practices should be implemented community wide to achieve sustainability goals. The following are suggested best management practices. Additional practices will be added as this Landscape Vision is further developed:

- Evaluation of community landscape water usage over the past 5 years. Additional review of consumption during drought, normal and excessive rainfall seasons. Review and comparison of budgets, water usage and plant material replacement and sustainability.

- Community outreach, education and response regarding current and past residential water usage to identify trends. Provide community education materials and workshops to provide resources for reduced water usage, suggested plant materials and maintenance practices.
- Provide guidelines for water efficient landscape design, installation and management. Guidelines are to be based on proven practices, community responses and involvement and surveys.
- Evaluation of irrigation usage in community parks, athletic fields, common areas and irrigated greenbelts. Generation and implementation of efficiency standards for irrigated areas. Periodic review of systems to monitor irrigation efficiency.