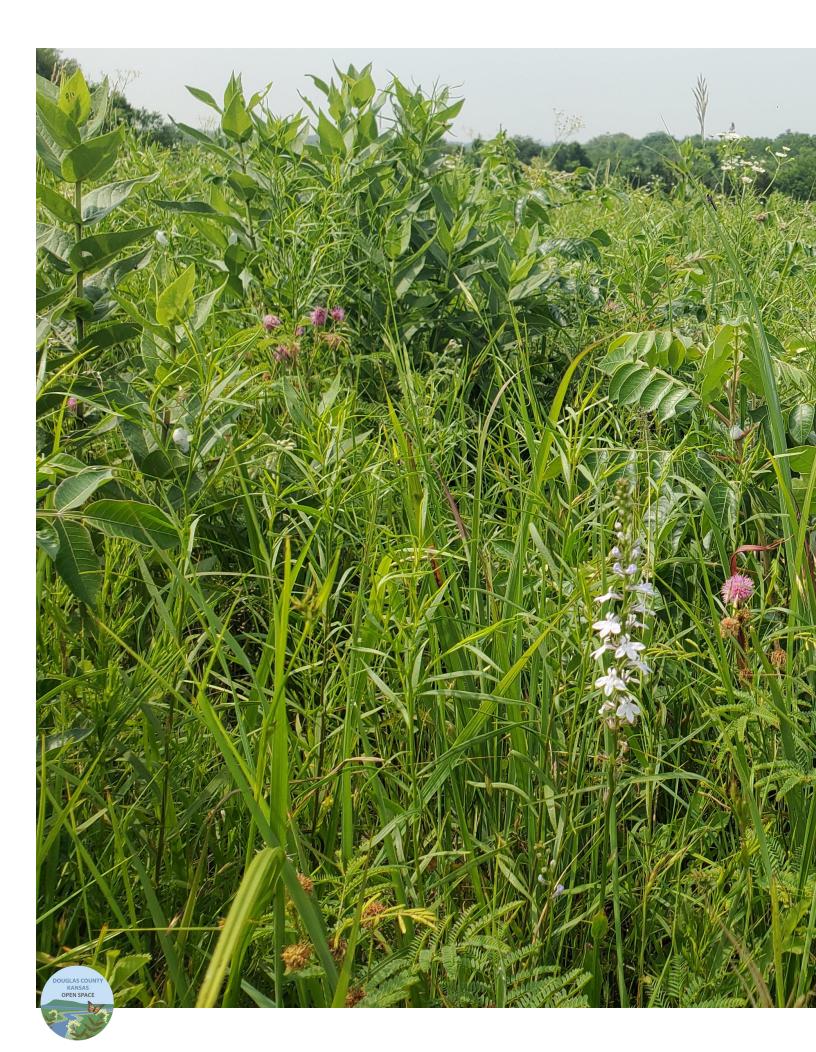




Douglas County Open Space Plan

Preserving Douglas County's Future Together

Adopted April 3, 2024



The Open Space Plan provides guidance on the conservation of natural lands and cultural sites in Douglas County, Kansas, a place that is and has been home to Indigenous peoples from time immemorial.

Douglas County honors and acknowledges the original stewards of the land that makes up the County, including the Kaw/Kansa, Wazhazhe (original tribal name, Ni-U-Ko'n-Ska)/Osage, and Shawano/ Shawnee peoples.

Douglas County recognizes the foundation of current land use and land access is inextricably tied to the forceful removal of Indigenous communities, cultures, and their lifeways from the land. The removal and relocation of Native American Tribes has resulted in fundamental ecological changes and systematic oppression that continues to impact Douglas County's human and non-human community members.

Through the development of this Open Space Plan, Douglas County aims to recognize these inequities, create space for partnerships and collaboration, and elevate Indigenous wisdom and leadership in open space protection and stewardship.

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All photos in this plan are sourced from the Project Management Team and Advisory Committee, unless otherwise noted.

vi

PROJECT MANAGEMENT TEAM

The project was facilitated by a Project Management Team, which included multiple Douglas County Departments.



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SPECIAL THANKS!

Our sincere appreciation and special thanks to the Advisory Committee and all community members for their commitment to articulating guiding values for this plan, sharing lived experience and diverse perspective, and refining these recommendations.





Introduction

Source: Jordan Olsen; Wheat field north of Worden

What is Open Space?

Open Space can be...

- » Grasslands
- » Public Parks
- » Farmland
- » Private Conserved Land
- » Cultural Sites
- » Wetlands and Floodplain
- » Trails
- » Historic Features
- » Old Growth Forest
- And other recreational spaces or sensitive ecosystems

Chapter 3 goes into more detail on these existing features throughout Douglas County and Chapter 4 describes the vision and considerations for decision making of each of the Conservation Criteria.

Introduction

This Open Space Plan provides guidance and a path forward for the conservation, enhanced partnerships, and experience and enjoyment of natural and heritage resources found in unincorporated Douglas County. This Plan identifies and elevates the County's diverse land assets and opportunities, and recommends best practices for public land development, private land conservation with willing landowners, and collaborative stewardship with countywide partners.

The Open Space Plan is a new tool for the county government to intentionally work with public, private, and community partners on shared priorities for future land use and preservation. It is intended to serve both as a broad policy guide and as a roadmap for implementing specific open space enhancements by current and future generations in Douglas County.

The Open Space Plan identifies landscape scale Conservation Criteria, as well as a menu of solutions for how to protect Douglas County's most valuable natural resources while identifying best practices for land conservation. This Open Space Plan was developed through a community-driven process that aligns with the goals set forth in the Douglas County Comprehensive Plan 2040.

WHY THIS PLAN NOW?

Douglas County currently does not have a comprehensive open space conservation tool or strategy. Comprehensive plans, which are discussed in more detail in Chapter 3, for Douglas County, Lawrence, Baldwin City, and Eudora all highlight the importance of open space preservation to their communities. The County needs additional tools to further evaluate existing open space, guide partnership efforts, and protect it against various pressures.

Current pressures include:

- Destruction of important natural and historic features, including the loss of cultural sites, sensitive lands, and ecosystems, due to land use changes and encroachment of invasive species;
- Increased occurrences of severe weather patterns, such as flooding; and
- Agricultural economic pressures of a changing climate, volatile commodity crop prices, and aging farmers without succession plans.



BENEFITS OF OPEN SPACE

Protected open spaces, public parks, farmland, sensitive lands, and private conserved lands provide proven and substantial economic, environmental, and public health benefits. This Open Space Plan articulates how residents envision open spaces being used in ways that benefit the entire community.

Benefits of open spaces, as outlined in the Charter for the development of an Open Space Plan (2019), include:

- Promotion of a high quality of life, including recreational opportunities for active, healthy lifestyles.
- Controlling flood damage, sustaining stormwater management and resilience.
- Maintaining rural character, including thriving agricultural sectors.
- Enhancement of ecological integrity, preservation of native landscapes, and improvement of wildlife habitat.
- Preservation of community history, fostering intergenerational, multi-cultural legacy of place.

Public health studies have demonstrated that access to open spaces and parks are essential to the physical, social, and mental development of children and equally important to the health and wellness of adults. During the COVID-19 crisis, many communities turned to parks, trails, lakes, and natural areas like never before for fresh air, safe space, exercise, meditation, and much needed peace— a trend that is likely to continue.

The physical and mental health benefits that accompany proximity and use of outdoor space may include: lower blood pressure, healthier body weight, lower blood sugar, decreased stress and anxiety, and reduced ADHD symptoms - especially in children. Access to and time spent in nature may also assist with treatment for depression, anxiety, PTSD, and other traumatic events.

The Economic Benefits of Open Spaces & Trails:

Agriculture. Working farms and ranches are a cultural and economic cornerstone of Douglas County.

Economic development. The high quality of life provided by open space amenities attracts and retains the best and brightest companies and employees.

Proximity. Being located near parks and open spaces raises property values.

Recreation and tourism. Visitors spend money at local businesses.

Direct use value. Residents save money by using the natural areas at no- or low-cost instead of having to pay to participate in these activities elsewhere.

Ecosystem benefits. A healthy ecosystem can help pre-treat stormwater, mitigate floods, lower ambient temperatures, sequester carbon, and reduce soil erosion. These services provided by nature lessen costs to treat water, recover after floods, cool homes, and restore soil-eroded lands.



Introduction



OPEN SPACE PLANNING HISTORY

Efforts at prioritizing open space conservation in Douglas County date back several decades. The ECO² Commission, established by joint resolution of Douglas County and the City of Lawrence in 2003, was rooted in pioneering efforts to convene consensus on future economic development and open space land needs.

In 2007, this Commission brought forward the ECO² Plan: The Exponential Benefits of Economic Development and Ecological Preservation, a robust report of considerations and menu of potential tools for maintaining balance between these two immense priorities. The collaboration of these diverse perspectives paved the way for establishment of Lawrence Venture Park and elevated conservation priorities of the Baldwin Woods.

Over time, economic development efforts in the County have shifted away from industrial development toward a focus on entrepreneurial and small business support. The shared community values of both a healthy economy and thriving ecosystems remain. The Open Space Plan builds on this leadership, with a focus on conserving land and access for the future of Douglas County.

In May 2019, the Douglas County Commission adopted the Open Space Plan Project Charter as a guiding framework for developing a countywide Open Space Plan and program. The charter adoption represents commitment to a multi-year community planning effort, resulting in the development of this Plan.

Horizon 2020 (1996)	This early effort at identifying what open space means for Douglas County included spaces providing "relief from the built environment" and "passive recreational opportunities," as well as "environmentally sensitive areas."
ECO ² Commission (2007)	The ECO ² Commission brought attention to agricultural lands, historic sites, and lands with the potential to link significant parcels and attract economic development.
Plan 2040 (2019, as amended)	Plan 2040 identifies the creation of an Open Space Plan as a priority.
Open Space Charter (2019)	Douglas County commits to developing an Open Space Plan.

Open Space Program History



PLANNING PROCESS GOALS

The Open Space Plan complements existing community plans

and works to complete some of the action items identified in Plan 2040. The goals set at the start of this planning process included:

- Setting shared community vision and priority outcomes for environmentally sensitive, agricultural, cultural, historic, and passive recreation lands.
- Conducting geospatial analysis of unincorporated landscapes to identify priority conservation areas.
- Identifying funding sources and recommendations for implementation.
- Suggesting regulatory and operational changes.
- Establishing a sustainable framework for ongoing collaboration and coordination among county residents, local governments, public agencies, businesses, and community organizations.

Most importantly, the planning process facilitated dialogue between rural residents, cities, townships, and special interest groups, resulting in a collaboratively designed plan that can be utilized across the community—including those with potentially differing priorities but shared interests in a healthy and sustainable Douglas County.

What is the Study Area?

The planning effort focused on the conservation potential of open lands in unincorporated Douglas County. Valued

lands may be public or private, however, conservation collaboration would only occur at the initiative of a willing landowner. The Open Space Plan considers:

- » Natural resource areas and wildlife habitat
- » Active and passive recreational spaces
- » Historic and cultural sites
- » Agricultural lands
- » Climate resilience and ecosystem services





Community Engagement

Source: Leigh Khandro Baker

Community Engagement

Community input has shaped the vision and recommendations of the Open Space Plan. A deliberate and sustained effort was made to fully understand community interests across Douglas County. Outreach for this planning effort encouraged meaningful community involvement through multiple opportunities for sharing input, listening, and learning. The open space team gathered insight from groups and individuals across the County on the value, opportunities, and context of interconnected issues impacting open spaces. The following section summarizes the public engagement activities and feedback that provided direction for this Plan. See the Engagement Appendix for an in-depth summary of the public engagement process.

PLANNING PROCESS SCHEDULE AND OUTREACH EVENTS

Dec 2022 - Feb 2023

- » Convene Advisory Committee
- » Project Website
- » Study Sessions
- » Review Existing Plans

PHASE 2: COMMUNITY VISIONING

PHASE 1:

PROJECT INITIATION

PHASE 3: PLAN DRAFTING

PHASE 4: PLAN ADOPTION

IMPLEMENTATION

Feb 2023 - July 2023

- » Community-wide Questionnaire
- » Focus Groups & County Tour
- » Community Meetings
- » Photo Contest
- » Existing Conditions Analysis
- » Advisory Committee Meetings

August 2023 - Jan 2024

- » Public Input on Recommendations
- » Public Open House
- » Public Review of Draft Plan
- » County Commission Work Session
- » Advisory Committee Meetings

Feb 2024 - May 2024

- » County Commissioner Review
- » Advisory Committee Meetings
- » Funding Analysis
- » Final Plan Adoption

2024 and Beyond

- » Involve multiple partners and willing landowners in implementation
- » Some tools will require additional approvals and public processes



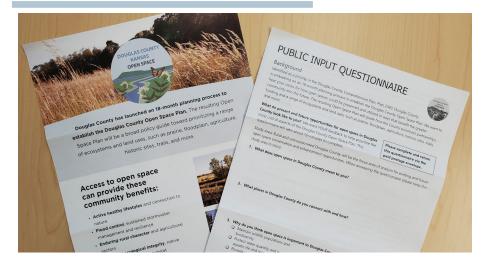
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The following engagement tools were instrumental in gathering community feedback:

Project Website (StoryMap)



Three Phased Community-Wide Questionnaires



Site Visits and Interviews



Telephone Hotline



Public Meetings

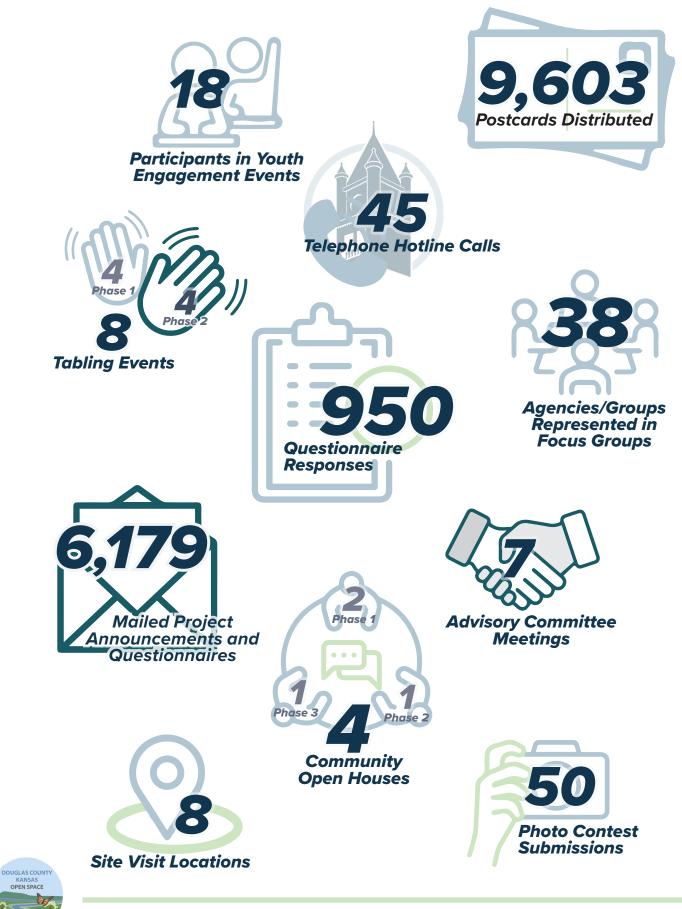


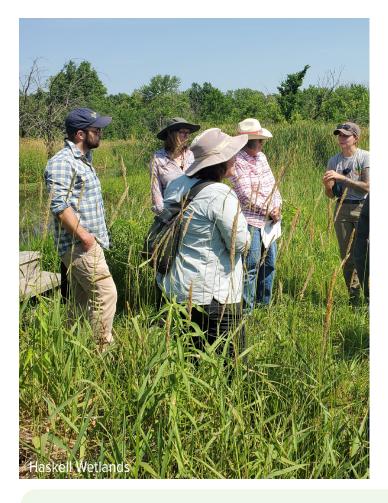


Photo Contest



Summary of Engagement Outreach





ADVISORY COMMITTEE

The planning process was guided by an Open Space Advisory Committee of local community members with diverse experience and interests. Their role was to provide recommendations and support throughout the development of the Open Space Plan. The Advisory Committee was selected to include, though not limited to, the following perspectives:

- » Historic and cultural heritage
- » Land conservation
- » Biodiversity
- » Watershed restoration
- » Agriculture
- » Rural landowners
- » Recreationists
- » Indigenous perspectives
- » Geographic diversity

"The term 'open space' means many things: trails to hike, run, and bike, plots of land to enjoy recreational activities that have minimal impact - disc golf and archery, places where children can experience nature safely, and places to simply sit and enjoy the natural beauty of our county." - Public Feedback Participant

> "Seeing agriculture lands being productive, seeing beautiful sunrises and sunsets over and through the trees and open spaces, witnessing thunderheads building in the west sky accompanied later by a thunderstorm, being able to enjoy the beauty of the Douglas County State Lake, Clinton Lake and walking and biking trails." - Public Feedback Participant



COMMUNITY QUESTIONNAIRE

To gather community feedback on the value of open space in Douglas County, the planning team developed a questionnaire that was completed by 950 people between April and July 2023. The question below demonstrates respondents' majority interest in maintaining wildlife populations and diversity, protecting water quality, and preserving agricultural heritage.

Overall, responses indicate a strong appreciation for open spaces, preserving natural environments, providing recreational opportunities, protecting agriculture, and maintaining a balance between economic development and environmental concerns. Respondents desire open spaces that are accessible and enjoyed by the public, while respecting private property rights and the area's rural character.

Why do you think open spaces are important to Douglas County?

n = 917

Maintain wildlife populations and biodiversity Protect water quantity/quality for aquatic life/recreation Preserve agricultural heritage and local food economy Preserve historic and cultural landmarks Provide water quality and quantity for local residents Provide access to natural areas for spiritual/psychological health Maintain and create multi-use recreation areas for healthy lifestyle Provide water availability for agricultural users Foster natural carbon capture through plant life Increase climate resilience to natural disasters Preserve recreation to support the economic benefits of tourism Provide and improve hunting access Provide and improve angler access Other 0% 20% 40% 60% 80%



FEEDBACK HIGHLIGHTS

The following section provides summarized narrative results of the questionnaire, focus groups, and public meeting responses held early in the process. Key themes conveyed by respondents include:

- Environmental and Wildlife Preservation: Open spaces are important for preserving natural landscapes, wetlands, woodlands, prairie, wildlife habitats, and biodiversity.
- **Recreation and Enjoyment:** Open spaces are valued as an opportunity for outdoor activities, connection with nature, relaxation, and leisure.
- **Protection of Agricultural Land:** Open spaces should preserve farmland, rural character, and provide opportunities for future generations of farmers.
- Stewardship Strategies and Collaborations: There is a need for trust-building with Indigenous communities, ongoing community engagement and leadership, and acknowledging layers of history and multifaceted perspectives on relationships with land.
- Immersion in the Outdoors: Tranquility, peace, and sense of freedom are offered in open spaces. Open spaces are seen as mitigating suburban sprawl and preserving rural landscapes.
- Balancing Economic and Environmental Concerns: While some acknowledge the economic benefits of open spaces, they also advocate for thoughtful use of resources and thriving ecosystems. Some respondents are concerned with rising property taxes, and the possibility of increased taxes.
- **Resistance to Certain Developments:** Many respondents express opposition to specific land use trends, such as large-scale industrial and utility developments, which they believe could disrupt the natural beauty, scenic views, and wildlife habitats of open spaces.
- Public Access and Community Space: Open spaces are considered valuable as public resources, even if not all open space is publicly accessible. Open space can be used for recreational, cultural, and educational purposes.
- **Historic and Cultural Preservation:** Preserving historic landmarks and cultural landscapes brings lasting value and meaning.

Community Engagement





Needs and Existing Conditions

Source: Courtney King; Haskell Wetlands

Needs and Existing Conditions

In addition to data on community values and needs collected during the public outreach process, a careful grounding in baseline conditions informs these recommendations. The following sections describe the existing conditions, challenges, and opportunities of current land management, growth, trails and corridors, as well as agricultural, historic, and natural resources. The narrative ends with a summary of current Douglas County operations and management of County resources.

CONSERVED LANDS

Map 1 presents a variety of existing land that has been formally conserved, including public lands and conservation easements that may or may not allow public access.

Existing Douglas County Parks and Open Spaces

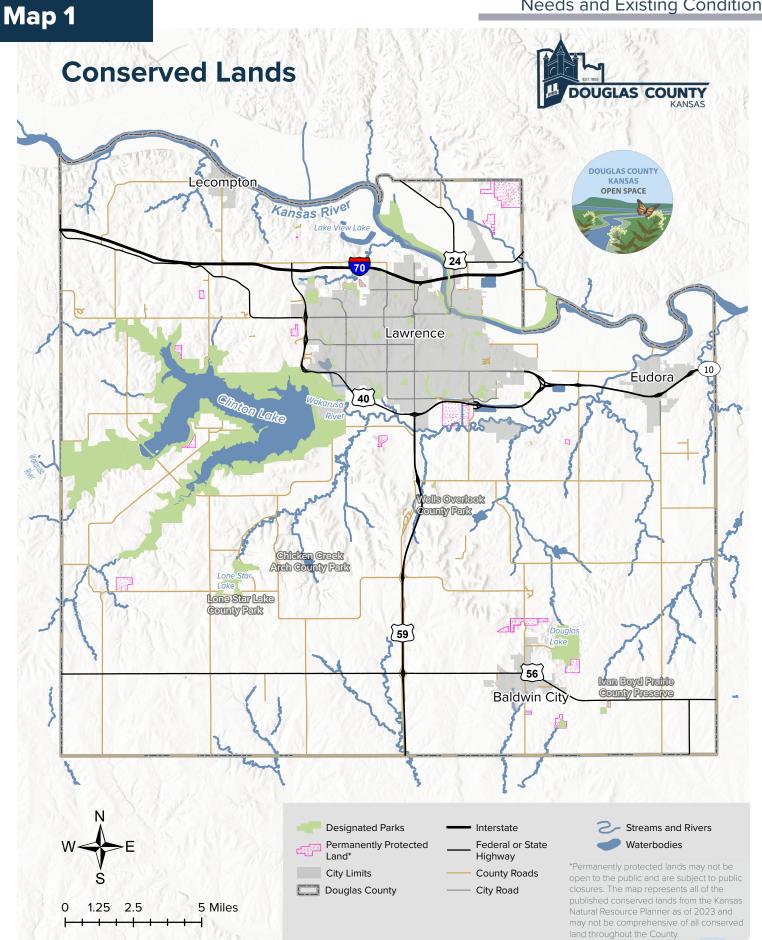
Lone Star Lake Park: Located on 422 acres nestled within rural farmland in southwest Douglas County, the park encompasses a 185-acre lake that was created by damming Washington Creek. It features a campground at the site of the former Lone Star Lake Civilian Conservation Corps (CCC) Camp, which was used by the

Corps while constructing the dam and creating the lake between 1934 and 1940. Today, there are only remnants of the original camp's 26 buildings including the stone water tower, four stone fireplaces, a stone firepit, and a stone staircase. Lone Star Lake Park's other recreational amenities include a day use shelter, picnic areas, restroom and playground facilities, a swim beach, a boat ramp, and a community building available to rent for events.

Wells Overlook Park: Located three miles south of Lawrence, this 17-acre park was donated in 1971 to Douglas County by William Wells in honor of his parents and grandfather. The Park features an original multi-story observation tower and an ADA accessible viewing platform, both providing sweeping inspirational views to its visitors. The Passerine Pavilion (2021) also features wayside panels that provide historic, geological and astronomical information about the land and skyscape seen from the pavilion. The nearby Polaris Pavilion also provides a wheelchair accessible shelter and dining area. In addition to the key observation areas, the park features a prairie restoration project, a ¹/₄ mile nature trail, and picnic areas.

What Open Spaces in Douglas County are already conserved?











Ivan Boyd Prairie Preserve and Black Jack Roadside Nature Park: Located on U.S. 56 Highway, approximately three miles east of Baldwin City, the Ivan Boyd Prairie Preserve is owned and maintained by the Santa Fe Trail Historical Society of Douglas County and the Kansas Department of Transportation. Purchased by the County in 1967, Ivan Boyd Prairie Preserve protects 15 acres of remnant, unplowed prairie and supports dozens of species of native plants. This park is located on the Santa Fe Trail and features well preserved wagon wheel ruts, interpretive signage, and a short trail loop that winds through the prairie. Just down the road from the privately owned Black Jack Battlefield and Nature Park, this property preserves important natural and cultural heritage of Douglas County.

Chicken Creek Arch Park: The historic arch is located a ½ mile east and 1 ¼ miles south of the town of Lone Star at 780 E. 850 Road. The arch was built in 1913 by B.F. Metsker and I. Babb.

Other Conserved Lands in Douglas County

Rarely does one organization provide all open space services on their own. Local, state, national and even global land trusts, non-profit advocacy groups, and universities all occupy vital niches in the partner ecosystem and are working towards the same aims as Douglas County's Open Space Program. Some of the land stewards within Douglas County include the U.S. Army Corps of Engineers (USACE), Baker University, Kansas Department of Wildlife and Parks, Haskell Indian Nations University, and the University of Kansas, among others. A few of the conserved land areas are described below.

Clinton Lake is a popular outdoor recreation area in Douglas County that offers a variety of amenities to visitors. Like many flood control projects across the country, the creation of the dam in 1977 flooded small towns of Black farming communities that were originally settled in the mid 1800s. Today, the USACE operates the 7,000-acre Clinton Lake, created by the construction of the Clinton Dam along the Wakarusa River. The lake is surrounded by approximately 15,000 acres of land that is utilized for parks, onshore recreation opportunities, wildlife protection, and agricultural purposes. Five distinct parks are located around the perimeter of Clinton Lake, including Clinton Lake State Park that is managed by Kansas Department of Wildlife and Parks. Recreational opportunities around and on the lake include boating, fishing, swimming, camping, multi-use trails, wildlife viewing, hiking, disc golf, and dog walking.

The **University of Kansas (KU) Biological Field Station** was established in 1947 and is currently managed by staff at Kansas Biological Survey and Center for Ecological Research. Consisting of over 2,000 acres across Douglas, Jefferson, and Leavenworth Counties, the KU Field Station offers trails and educational opportunities open to the public, as well as private space for ecological research. Additionally, the staff at the KU Field Station oversee land stewardship, outreach, and research at the Baldwin Woods Forest Preserve near Baldwin City.

Other lands conserved by partners include Douglas State Fishing Lake and the Baker Wetlands.

Privately Owned Conserved Lands

In Douglas County, there are nearly 1,730 acres of land under conservation easements. Of those, approximately 128 acres are publicly accessible, including the Lawrence Nature Park and the Akin Prairie Conservation Easement. The Kansas Land Trust is the primary land trust organization operating in Douglas County, with approximately 1,200 acres across Douglas County protected in conservation easements. To date, Kansas Land Trust has preserved over 40,000 acres of important land and water resources across the state and certain areas of eastern Missouri through conservation easements. Conservation easement agreements are flexible and tailored to meet the needs and wishes of the landowner or easement partner.



Understanding existing conserved lands lays the framework for how Douglas County can strategically allocate resources, enhance land stewardship and public access, and collaborate with partners

to build upon ongoing conservation efforts.

To learn more about the communities that lived on the land prior to the development of Clinton Lake, reference the book "Soils of Our Souls" by Martha Parker and Betty Laird.



What natural resources can be conserved through open space protection?

NATURAL RESOURCES

A well balanced and stewarded ecosystem provides numerous environmental benefits, including wildlife diversity and abundance; connectivity for maintaining genetic diversity, seasonal use, and movement; flood management, and many others. The increasing demand for access and development in the County puts pressure on these resources, increasing the urgency to expand open space protection and coordinate consistent management throughout Douglas County.

Natural History of Douglas County

Historically, much of the land that would become Douglas County was prairie, a diverse mix of native grasses and wildflowers. When Euro-American settlement began in the 1850's, Federal land surveyors estimated prairie covered approximately 87 percent of Douglas County (Kansas Biological Survey, 2015). The remaining land, typically along rivers, creeks, and other waterways, was covered with forest and small patches of wetland and marsh. Over the next 150 years, much of the prairie and riparian forests were plowed and cut as settlers of the area made use of the rich soil as they engaged in Euro-American agricultural practices.

Ecosystem Services

Current natural resources in the County include a wide variety of wildlife, vegetation, soils, limestone, and water sources – and together these components of the ecosystem bring compounded benefits and services. These essential ecosystem functions include:

- **1) provisioning services**, such as food, water, and fuel like oil and natural gas;
- » 2) regulating services, such as climate, disease, and other disturbances like wildfire, erosion, and flooding;
- » 3) cultural services, including heritage values and recreation; and
- » 4) supporting services, such as nutrient cycling, water purification, pollination, and carbon sequestration.

These benefits are driven largely by biodiversity, or the variety of life within an area.

Source: A.Rapinsky, Grassland Heritage Foundation

Sensitive Lands in Douglas County

Plan 2040 calls for protection of places that have unique environmental attributes worthy of retention or special care. They are critical to the maintenance of ecosystem services and healthy plant and wildlife populations. Protection of sensitive lands reduces vulnerability to natural hazards and enhances quality of life.

The Douglas County Code expanded identification and protection of sensitive lands to include the following:

- » Regulatory Floodways
- » Special Flood Hazard Areas
- » Jurisdictional Wetlands
- » Stream Corridors
- » Native Prairie and Restored Prairie
- » Prime Farmland
- » Stands of Mature Trees, with priority old growth forests
- » Archaeological and Historic Sites





Tallgrass Prairie

The tallgrass prairie is a diverse vegetation community and ecological system that plays a critical role in the Kansas natural environment. Native prairie supports productive soil generation, habitat for a diverse set of wildlife species including pollinators, water conservation through groundwater recharge, carbon sequestration, and reduced erosion and moderated floodwaters by slowing the rate of precipitation runoff. The tallgrass prairie is a disturbance-dependent ecosystem. Because of regular disturbances, like grazing and fire, both prescribed by humans and naturally occurring, tree cover is reduced, and the complex mix of grasses and forbs (a wide range of native flowers) are able to thrive. Native prairie landscapes are believed to have once covered approximately 400 million acres across midwestern North America. Prairie landscapes also share a long history and powerful connection with Indigenous communities. Indigenous peoples have a strong relationship to the prairie and its stewardship through bison and fire as well as extensive use of plants for fiber, food, medicine, and ceremony.

The tallgrass prairie is one of the world's most endangered ecosystems. Because of the rich soils produced by the deep roots of prairie plants and grasses, most of what was prairie has been plowed for agriculture or fundamentally changed by heavy grazing or other intensive land uses. Currently, only 4 percent of native tallgrass prairie remains across the historic range, with most of that located in the Kansas Flint Hills.

Douglas County Natural Areas Inventory found that, of the 0.5 percent original prairie remaining in 2005, an additional 18 percent was lost in the subsequent 10 years. The inventory also identifies high-priority preservation corridors in the County. Most of the remaining tallgrass prairie in Douglas County is heavily fragmented and was most likely preserved because the land was not suitable for conventional agriculture. As of 2015, 76 prairie sites remain comprising a total of 1,352 acres of high-quality prairie in Douglas County (Douglas County Natural Areas Inventory). Native prairie areas accessible to the public within the County include Akin Prairie and Ivan Boyd Prairie (Santa Fe Trail at Black Jack Ruts).



Forests

Kansas lies at the far western end of the oak/hickory forest complex that stretches east all the way to the Atlantic Ocean. These forests in Douglas County are only in areas that were naturally protected from fire, such as along rivers, streams, and steep, moist, northfacing slopes. These oak forests have long served as a crucial provider of wood products and fuel for human communities, while also offering valuable food and habitat for wildlife. Oak hickory

Needs and Existing Conditions

mixed forest communities comprise approximately 55 percent of forested areas in Kansas and represent a majority of forest area in Douglas County. Burr Oak, Shagbark Hickory, Cottonwood, and Paw Paw are common in places along rivers and streams, while flowering Dogwood can be found on uplands.

Several large contiguous forest ecosystems can be found in Douglas County, including the areas of Eight Mile Creek, Washington Creek, the Wakarusa Valley, and the Baldwin Woods. Baldwin Woods Forest Preserve was designated as a National Natural Landmark and is protected and managed by the University of Kansas. Douglas County is also home to a Floodplain Forest west of Clinton Lake composed of Green Ash, Elm, and Hackberry.

Important Bird Areas

With 483 species of birds in its borders, Kansas is in the top third of the states in the U.S. for avian diversity. Within Kansas, Douglas County is the county with the highest number of bird species, with 346 recorded. This diversity is a product of the County's patchwork of forests and grasslands, as well as its location straddling two major migration flyways. Woodland species are found around Douglas State Lake near Baldwin City, Burcham Park in Lawrence, and Fitch Natural History Reservation north of the airport. Water birds are found on hundreds of ponds around the County and at several locations at Clinton Lake. Grassland and wetland birds are found at the Baker Wetlands and the marsh south of Eagle Bend Golf Course and in many prairie pastures west of Globe on U.S. Hwy 56. Not only is the bird diversity high in Douglas County but the highest number of bird reports in the state are from Douglas County. Birding apps that track bird sightings list "hotspots" where many people are outside birding. The hotspots with the largest number of sightings in the state are from the Baker Wetlands, with locations around Clinton Lake also listed as top hotspots.

Lakes and Reservoirs

Waterways and the ecosystems they support are integral to the growth and sustainability of communities in Douglas County. Waterways serve as visual open space and wildlife habitat. Ensuring the water quality and access to water resources will promote healthy ecosystems that benefit all. In addition to providing wildlife habitat and ecosystem services, lakes and reservoirs provide excellent passive outdoor recreation opportunities including fishing, swimming, wildlife viewing, and camping. In Douglas County, lake and reservoir recreation opportunities are available at Lone Star Lake, Clinton Lake, Douglas State Fishing Lake, and a few other smaller properties.

Clinton Lake also provides drinking water to the Clinton Reservoir Water Treatment Plant and to the Tri-District Rural Water District in Kansas. Together they serve over 100,000 Kansas residents.





Needs and Existing Conditions



Wetlands

Wetlands hold some of the highest biodiversity and provide important ecosystem services and values in the County. Wetlands serve as essential habitat for a diverse variety of fish, wildlife and plants, provide flood protection by dissipating high flows across the landscape, and provide critical water quality benefits through filtration of surface flows.

Within Douglas County multiple wetland areas occur along the banks of the major Kansas and Wakarusa perennial rivers and along their creeks and tributaries. Areas of wetlands have been preserved and maintained for ecological, educational, and cultural purposes, such as the Wakarusa Wetlands that includes spaces stewarded by Haskell Indian Nations University and Baker University.

Rivers and Riparian Corridors

The Kansas River is one of the world's longest prairie rivers, providing irrigation, drinking water, wildlife habitat, recreational opportunities, and prime agricultural land, including the largest contiguous tract of Class 1 and 2 soils in the County. When European settlers arrived, the area was inhabited by the Kanza or Kaw people, hence the locally popular nickname of the Kaw River. The Kansas River begins at the confluence of the Republican and Smoky Hill Rivers near Junction City and flows 173 miles to Kansas City where it joins the Missouri River. The Kansas River watershed drains almost the entire northern half of Kansas and part of Nebraska and Colorado (61,000 square miles), flowing through Junction City, Manhattan, Topeka, Lawrence, and Kansas City. Advocate efforts for the Kaw River are led by the Friends of the Kaw (FOK) whose mission is to protect and preserve the river for future generations while advocating for rehabilitation of the water quality and wildlife habitat.

The Wakarusa River plays a significant role in Douglas County as it traditionally flooded the surrounding banks, creating incredibly rich soils. The river has since been dammed by the Clinton Dam, altering the historic flooding patterns. The lands adjacent to the river were once extensive wetland riparian habitat that has since been altered significantly through agricultural uses. *Map 2* illustrates water resources including waterbodies, such as lakes and reservoirs, rivers, and wetlands.



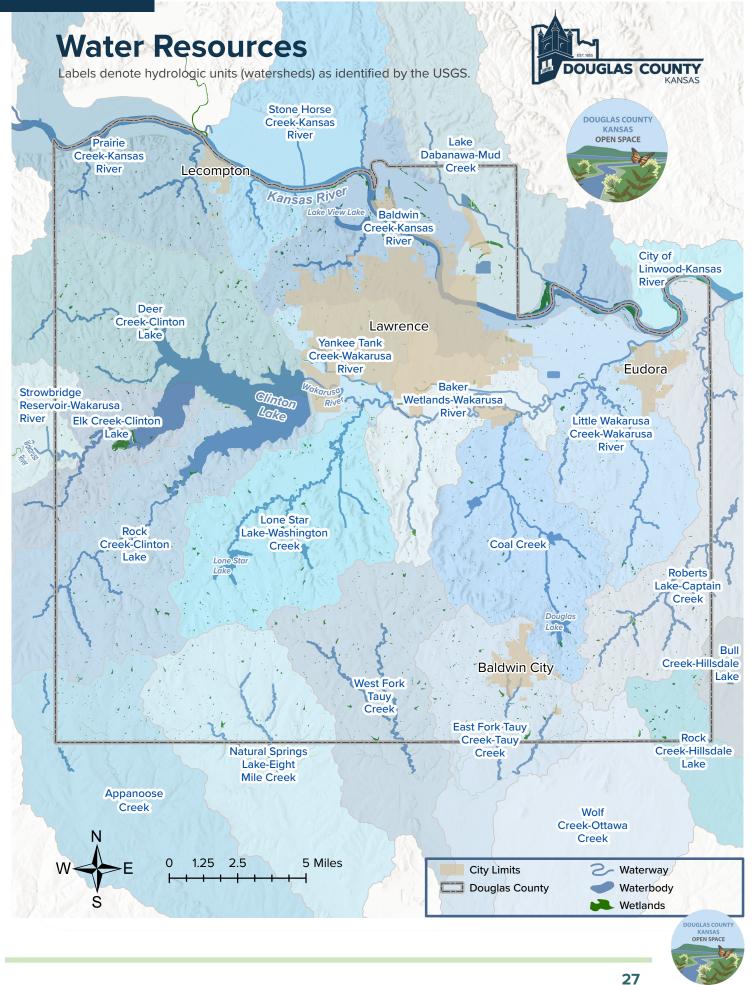
Douglas County's natural resources provide essential tangible and intangible benefits to the community. Exploring the County's

biodiversity and natural heritage will help prioritize key areas of protection of the County's open spaces.

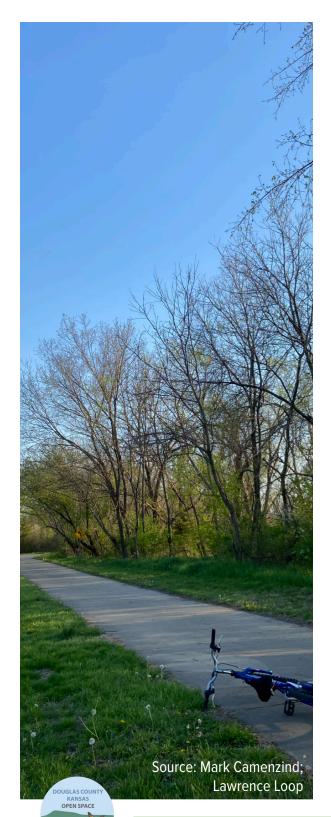
- Selan

Map 2

Needs and Existing Conditions



How do people access and experience open space?



TRAILS AND CORRIDORS

Across the County, there are over 150 miles of trails, with most concentrated around Clinton Lake and within the City of Lawrence **(see Map 3).** Other unique sites, such as Baker Wetlands, Douglas State Fishing Lake, Baldwin Woods, and Black Jack Battlefield, provide trails and paths to learn about history and experience diverse ecology.

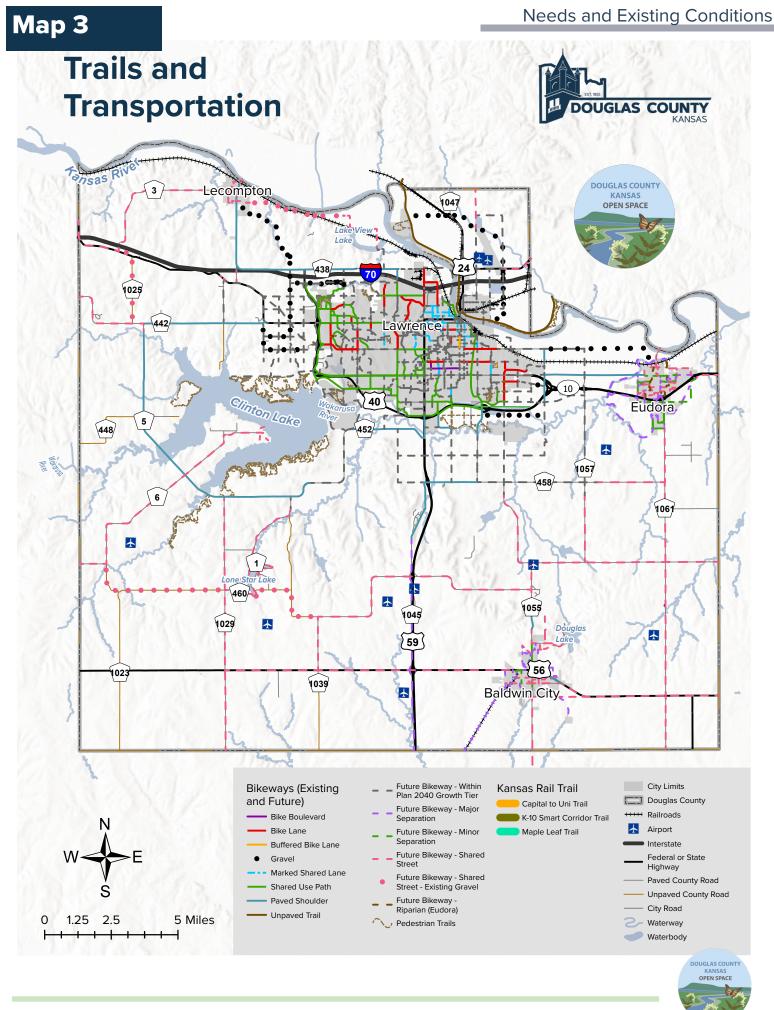
In North Lawrence, approximately 9 miles of mountain bike trails provide access to city land alongside the Kansas River. These trails are cooperatively supported and maintained, primarily by the Lawrence Mountain Bike Club. Additionally, the Lawrence Levee Trail is a 10-mile walking and biking trail that follows the Kansas River atop the levee on its north side.

The 2021 Countywide Bike Plan presents an analysis and vision for improved comfort and safety on a bikeway network across the County. The Bike Plan acknowledges that riding in and along open spaces is one of the primary draws to biking in the unincorporated areas of the County. The Bike Plan also seeks to enhance inter-state and inter-county connectivity through designated routes in the U.S. Bicycle Route System. Currently **Route 76** runs east/west through south/central Kansas. Planned **Route 55** goes north through Kansas from Brownsville, TX to Fargo, ND.

Eudora, Baldwin City, and Lecompton are implementing pedestrian and bikeway improvements identified in the Countywide Bike Plan and Regional Pedestrian Plan to create safe and comfortable access to community destinations, which includes parks and historic places. Lecompton has received funds from the Kansas Department of Transportation to construct a bicycle and pedestrian path providing interconnection through the city.

The **American Discovery Trail**, a coast-to-coast route across the USA, stretches 570 miles in Kansas. Following paved or gravel roads though the Sunflower State, the trail travels past wildlife refuges and unique geological formations of Kansas while sharing its path with the Flint Hills Nature Trail and a portion of the Sante Fe Trail. While in Douglas County, it follows portions of the Lawrence Loop shared-use path and E 1250 Road/E 1300 Road also known as old US-59 highway, which is immediately west of US-59.

Baldwin City has constructed two phases of the Maple Leaf Trail with eventual plans to connect with the Prairie Spirit Trailhead in Ottawa. Once the **Maple Leaf Trail** connects to Franklin County, the American Discovery Trail is recommended to go through Baldwin City. It is currently shown as a proposed future alignment once development occurs.



Needs and Existing Conditions



Many historic railroads become the backbone of a rails-to-trails system as rail uses are decommissioned. There are a few rails-to-trails within the City of Lawrence that make up a significant portion of the Lawrence Loop, an off-street trail connection around Lawrence's primary urban development; these include the Haskell Rail-Trail (0.7 mile), Burroughs Creek Trail and Linear Park (1.7 mile), and the Haskell Avenue Shared Use Recreation Path (0.8 miles).

Abandoned railroads provide opportunities for linear open spaces and regional trails, however, have often reverted to private ownership or been covered up. Future rails-to-trails opportunities exist throughout the County and will tie into other trail systems. The Kansas Department of Transportation has identified future rail-to-trail Projects in Douglas County, including the Capital to Uni Trail, the K-10 Smart Corridor Trail, and the Maple Leaf Trail. More information can be found at: www.traillink.com.

Trails present opportunities for people to sustainably access and spend time in natural areas.

Identifying existing trails and recreation opportunities, linkages, and partnerships in the region is critical to developing a connected network of conserved land.

National Water Trail

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On July 14, 2012, the Kansas River was designated as a National Water Trail, which is a subset of the national Recreation Trails Program. The National Water Trails have been established to protect and restore America's rivers, shorelines, and waterways. Access points to paddle the river are provided in Lecompton, Lawrence, and Eudora.



Source: Heather Moore; Lone Star Lake

OPEN SPACE

What historic and cultural resources can be conserved through open space protection?

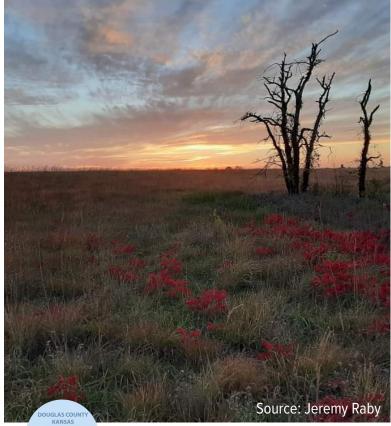
HISTORIC CONTEXT AND CULTURAL RESOURCES

Since time immemorial, human communities have resided on the land that would eventually make up Douglas County. The Kansa, Osage, and Shawnee peoples utilized all aspects of the landscape to sustain community and culture. Their seasonal and intentional stewardship of resources, like the use of prescribed fire, contributed to the ecology of Douglas County today. Regional trail networks developed by Indigenous communities facilitated trading, tribal relationships, and seasonal migration.

Before the region was declared "open-for-settlement" by the U.S. government, many eastern tribes, such as the Potawatomi, Kickapoo, Wyandot, and Delaware were forced to relocate west of the Mississippi. Despite promises that they would not be moved again, the U.S. government forced the removal of almost all Indigenous people in the Kansas Territory in 1854 to make way for settlement.

Non-Indigenous settlement in Kansas began in the early 19th century, primarily in the form of farms and small settlements. As a result of the Kansas-Nebraska Act passed by the U.S. Congress, the question of Kansas being admitted as a free state or pro-slavery state was to be established by popular sovereignty. This situation resulted in what is known as "Bleeding Kansas," a time where there were violent confrontations between settlers, including a notable

entanglement known as the Battle of Black Jack. This period ended as Kansas entered the Union as a Free State in 1861, but the violence in the region continued through the Civil War. Douglas County was also considered a destination of Exodusters, a name given to African Americans who migrated from states along the Mississippi River to Kansas in the late nineteenth century in pursuit of improved living conditions away from racial violence in the American south. Additionally, fighting between the settlers and the Tribes in Kansas ensued until 1867 when U.S. forces decimated native peoples, who were coerced into signing treaties and forced from their tribal lands.



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Three trails, the Santa Fe, Oregon, and California Trails, were significant thoroughfares during the U.S. westward expansion and were designated National Historic Trails by Congress. This designation provides historic appreciation, tourism, and interpretive and recreation opportunities within Douglas County. Remnants of the trails are still visible, specifically the Santa Fe Trail at Black Jack Ruts-Ivan Boyd Prairie, County-owned properties that are managed in partnership with the Santa Fe Trail Historical Society of Douglas County. Here visitors can walk the landscape of remnant, tallgrass prairie and see the wagon wheel ruts remaining in the landscape from travelers on the Santa Fe Trail.

Map 4 highlights the National Historic Trails and other properties that have been listed on the National and State Register of Historical Places. Not all traditional cultural properties and important Indigenous sites are listed on the historic registers, and as such are not represented on this map. Future outreach and cultural inventories should be completed with Tribes as specific properties are evaluated for conservation. For the most up to date records on historic resources inventoried and listed on the National and State Registers of Historic Places, visit KHRI (hub.kansasgis. org). Additionally, *Map* 4 is not a comprehensive account of sites of historic and cultural significance in Douglas County– many important cultural, archaeological, and historic sites and trails are not depicted on this map.

The Heritage Conservation Council's (HCC) mission is "to promote and advocate for the conservation of tangible and intangible natural and cultural heritage to honor the past, enrich the present, and inspire the future" (Strategic Plan 2023-2025). The HCC has completed a systematic survey of historic structures across unincorporated Douglas County. The HCC has also completed the publication of the Rural Historic Resources Guide, which summarizes and analyzes the survey results and identifies opportunities for the preservation of these historic resources.

Notably, of the approximately 2,400 historic resources in the unincorporated areas of the County potentially eligible to be included in the National or Kansas Register of Historic Places, only



about 2 percent are actually listed.

Douglas County's historic resources and cultural landscapes help preserve both past and living heritage stories.

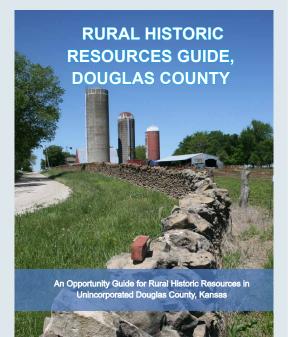
By connecting the history of the County to current communities and sites, the opportunity to conserve important spaces and stories can be identified, protected, and shared for future generations.

The Strength of Douglas County's Agricultural Heritage

Over Thirty-six Century Farm Awards and eight Sesquicentennial Farm Awards by the Douglas County Farm Bureau Association honor those family farms that have passed down their heritage for more than century.

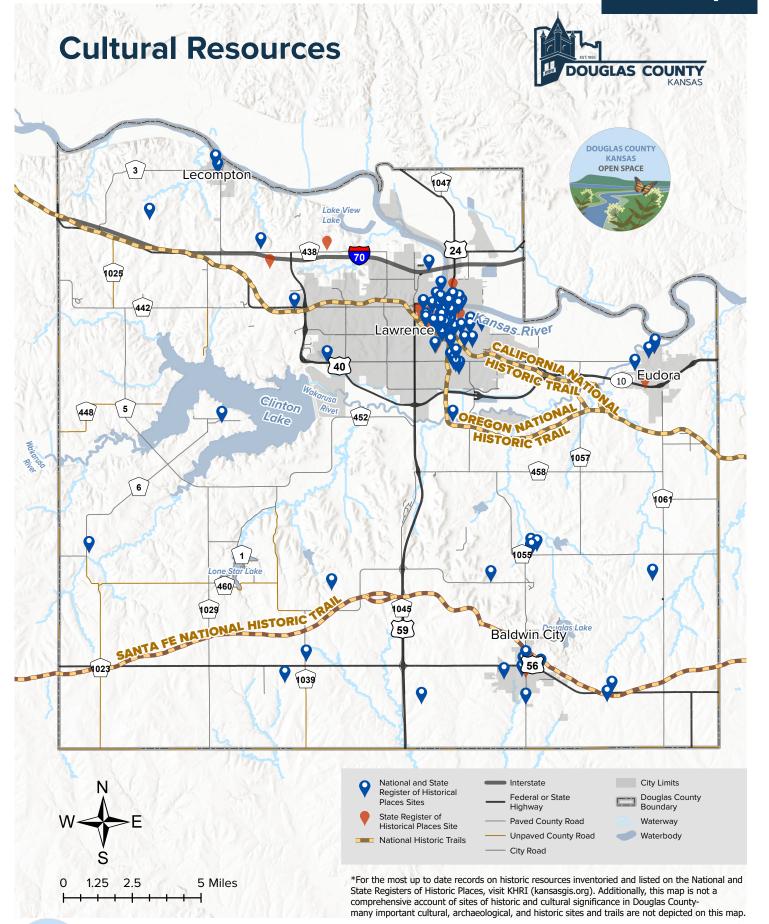
Document Resource:

Rural Historic Resources Guide





Map 4



DOUGLAS COUNTY KANSAS OPEN SPACE

AGRICULTURAL RESOURCES

Douglas County's landscape consists of rich, high-quality (Class 1 and 2) soils, climate, precipitation, and terrain that makes it well suited for its principal rural land use – agriculture. This industry is also a major contributor to the County's economy, identity, and way of life. According to the USDA Census of Agriculture, crop and livestock sales in Douglas County amounted to \$86.4 million in 2022 (USDA). *Map 5* shows areas of prime farmland across the County.

Incorporated cities in Douglas County are growing and development pressure will continue to expand into agricultural land. As of 2022, agricultural practices account for over 218,949 acres, managed by over 919 farms (USDA). Much of the current agricultural land in Douglas County is used for cropland and rangeland, with the dominant crops being soybeans, corn, forage, and wheat for export or animal feed. Beef cattle makes up the vast majority of livestock produced. Vegetable production is a smaller portion of overall agriculture, yet Douglas County remains a leader in the state, having the largest count of total vegetable farms in both 2017 and 2022. As a top producer with interest among aspiring farmers in specialty crop production, vegetable farming in the County nearly doubled in both total farms and acreage between 2017 and 2022 (USDA). Additional pressures of land prices and market opportunities have pushed some producers to look for new revenue sources. One of the most promising is agritourism, a blend of agricultural production and processing with tourism, drawing visitors to farms, wineries, and orchards. With over 14 agritourism farms and ranches in Douglas County, this model provides new and unique ways to diversify family farms and existing agricultural lands.

How does the land in Douglas County support farmers and the local food system?

What are High-Quality Agricultural Soils?

High-Quality Agricultural Soils are locations that have been graded as being the best land for agricultural production. This includes 2 classes:

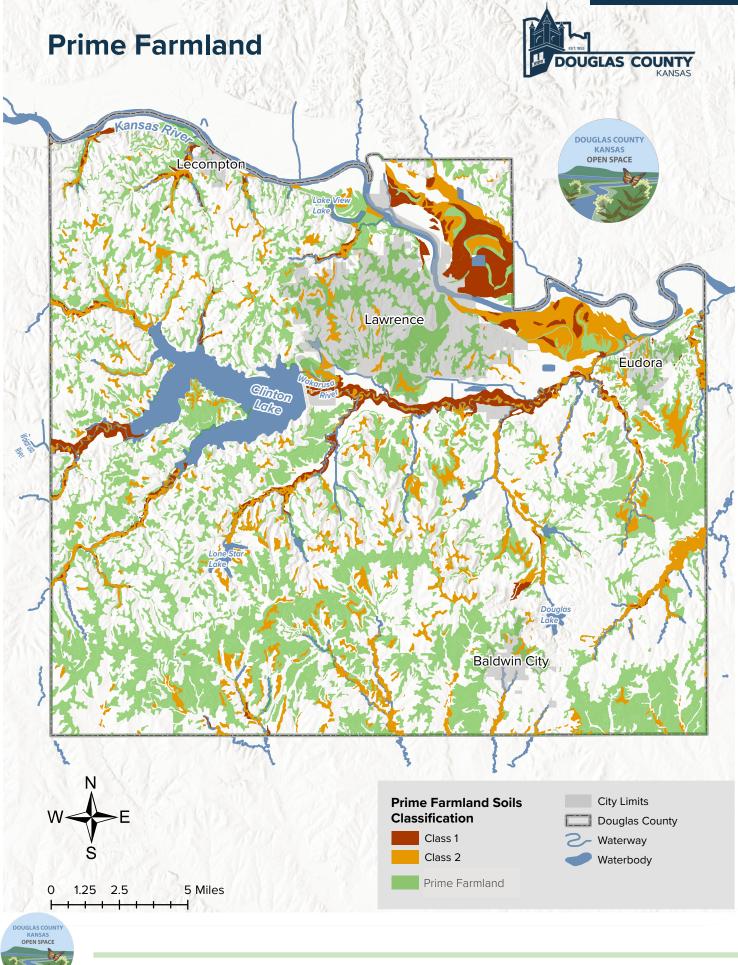
Class 1: Soils in this class are best suited for cultivated crops, pasture, range, woodland, and wildlife. They are deep, generally well drained, easily worked, and less prone to erosion. In Douglas County, soils of this class occur only in the geologic floodplain along larger drainages.

Class 2: They require careful management to prevent deterioration or to improve air and water relations when cultivated. The limitations are few, and the necessary management is easy to apply. The soils may be used for cultivated crops, pasture, range, woodland, or wildlife food and cover. These occur within the geologic floodplain of rivers and streams of all sizes in the County, and on level uplands where windblown silt is a major component.



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Map 5



The Food System Plan (2017) calls out a number of goals and objectives:

Goal 1: Agricultural producers, food entrepreneurs, and food sector workers thrive in our regional economy.

- » **1.1** Develop local food and agricultural businesses.
- » **1.2** Promote local food, farms, and agricultural heritage tourism.
- » **1.3** Increase local food purchasing.
- *** 1.4** Expand workforce development and readiness to prepare community members for successful food system employment.

Goal 2: As our cities grow, we prioritize natural resource conservation and maintain working lands to promote soil health.

- » **2.1** Protect high quality agricultural lands.
- » **2.2** Conserve soil and water resources.
- » 2.3 Improve soil and water quality.
- » **2.4** Support intergenerational land transition and beginning farmer land access.
- » **2.5** Build the resilience of agricultural ecosystems.

Goal 3: We build and design our communities to ensure food access, foster health, and eliminate food deserts.

- » **3.1** Reduce built environment and transportation barriers that limit food access.
- » **3.2** Expand urban agriculture and community-based food production.
- » **3.3** Make healthy food choices more convenient.

Goal 4: Our community fosters an equitable food system.

- » **4.1** Apply equity principles to local government food system efforts.
- » **4.2** Expand City- and County-led initiatives to make food more affordable.
- A.3 Strengthen collaboration with community partners to ensure all residents have enough food.
- **4.4** Celebrate diversity and cultural heritage as part of local food promotion.



A local food system connects to a wide array of local issues, including sustainability, transportation, public health, arts and culture, and agriculture. A healthy food system is one that is integrated with agricultural resources and open spaces. Current challenges for area farmers include profitability and access to capital, including securing labor and credit, access to wholesale market, variations in weather, and urban growth and high land prices. While there were nearly 1,000 farms in Douglas County in 2017, that number had been reduced to 919 farms by 2022 (USDA). As development pressure increases and established farmers approach retirement, the need to empower training and innovative access for aspiring farmers and support adaptive practices to sustain the agricultural sector is at hand.



Agriculture is the predominant land use in Douglas County.

Understanding the connection between the agricultural economy and open space is essential to supporting the local food system and sustainable land use.



CLIMATE AND RESILIENCY

Sustainable stewardship of conserved lands is increasingly important as Douglas County seeks to adapt to intensifying climate impacts. The climate has warmed substantially over the last 50 years, and climate models predict an increase of more than 1.5 degrees in the short term, even with the most urgent mitigation strategies, due to greenhouse gases already trapped in the atmosphere.

Altered growing seasons and changes in soil moisture due to warmer and drier conditions are anticipated to lead to shifts in habitat suitability for vegetation communities and wildlife, and an increase in wildfire activity and season length (EPA 2021). Drier soils may also lower the average flow of rivers and streams, impacting water recreation, and decreasing water supply and quality for agricultural producers. Meanwhile, intensified rainfall and increased severe flooding are among the greatest climate risks for Douglas County (Kansas City Climate Risk and Vulnerability Assessment 2022), making the ecosystem services provided by floodplains even more critical to community resilience.

Regenerative agriculture, native grasslands, forests, and other open green spaces are actively sequestering a portion of Douglas County's carbon footprint. As part of the County's climate mitigation efforts, maintaining and nurturing greater potential of these inherent sequestration services will be a vital co-benefit of stewarding open space.

Preserving landscape connectivity for both humans and wildlife, restoring degraded and native landscapes, and utilizing climate adapted management strategies across the County are a few of the many ways land conservation can increase community resilience, maintain ecosystem productivity, and minimize habitat

loss due to a changing climate.

Understanding the role of ecosystem services and the unique landscapes of Douglas County in climate adaptation

can help identify opportunities to protect both open space and the human community from the projected hazards of climate change. What impact does open space conservation have on Douglas County's adaptation to a changing climate?





How does open space conservation tie into existing community plans and projected growth?

LAND USE AND GROWTH

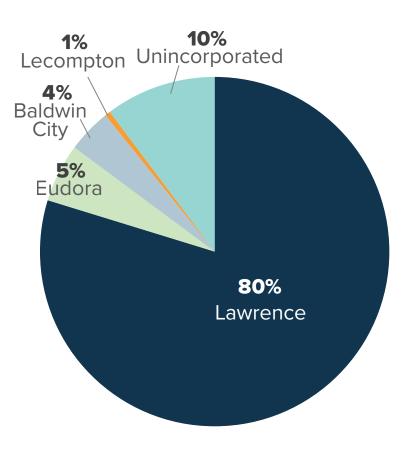
Douglas County covers nearly 475 square miles with a population of nearly 120,000. Since the 1950s, Douglas County has experienced changes due to population growth, increased development, large infrastructure projects (Clinton Lake for flood control and regional highways), and ecosystem disruptions. Suburban encroachment and continued development disrupt important ecological functions of the natural areas that remain, reducing biodiversity and wildlife habitat potential. These impacts are only exacerbated by the impacts of climate change.

The County population grew by about 10,000 people between the 2010 and 2020 Census, at about a 7 percent growth rate, which was faster than the state as a whole (3 percent).

The vast majority of the population lives in incorporated cities:

- Lawrence: 95,700
- Lecompton: 600
- Eudora: 6,500
- Unincorporated: 12,300
- Baldwin City: 4,900

Douglas County Population by Municipality



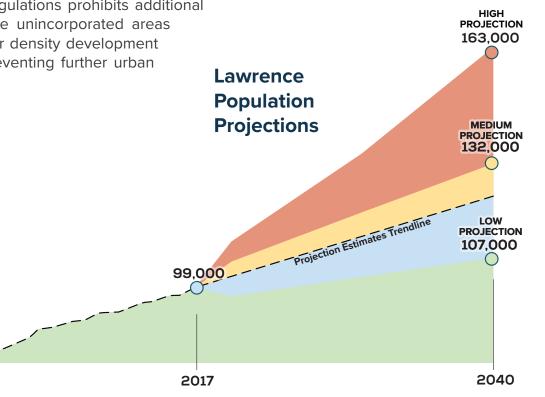


Population Growth

Population projections in Lawrence could nearly double the population on the high end, while medium population projection would add 30,000 more people. Under an ideal growth pattern, this population would grow within Tiers 1 and 2. Growth into Tier 3 is not proposed until after 2040, parameters for which will be identified in the next 20-year comprehensive plan. Plan 2040 Tiers are shown on *Map 6*.

The current comprehensive plans for Baldwin City and Eudora also call for park planning and open space preservation. Despite the holistic vision expressed by these guiding documents, there is little structure recommended in how the County and its partners should strategically accomplish it.

Most Kansas counties use growth management tools like stream buffers, zoning, rural development standards, conservation subdivisions, joint planning with cities, etc. to direct growth and preserve agriculture and natural resources. For Douglas County, these tools are defined in the County Zoning Code and the Joint Subdivision Regulations. Prior to 2019, emerging new patterns of development were introducing unplanned increases in traffic and population density, placing significant strain on existing County infrastructure including roads, bridges, and utilities. As a result, a moratorium was placed on rezoning requests that year. A 2020 update to the zoning regulations prohibits additional concentrated development in the unincorporated areas of the County, but enables higher density development to occur through annexation, preventing further urban sprawl.





Goals currently identified in Plan 2040 include:

- Working to preserve agricultural lands to support local farmers and strengthen the agricultural economy;
- Preservation of ecologically sensitive and culturally significant lands which include: floodway, floodplain, wetlands, stream corridors, native and restored prairie, prime farmland, stands of mature trees and archaeological and heritage sites; and
- Land preservation work with land trusts and municipalities to permanently preserve open spaces, protect natural and cultural resources, and provide public access to nature.

Plan 2040

Plan 2040 provides direction for enhanced parks and open space planning, coordination, and protection in the community. This Open Space Plan activates and implements this direction. The vision presented in Plan 2040 is to "manage growth within rural Douglas County by encouraging agricultural uses and accommodating the demand for other compatible uses while protecting environmental resources."

Further the Open Space Plan accomplishes or progresses many of the implementation actions including:

Parks, Recreation, and Open Space

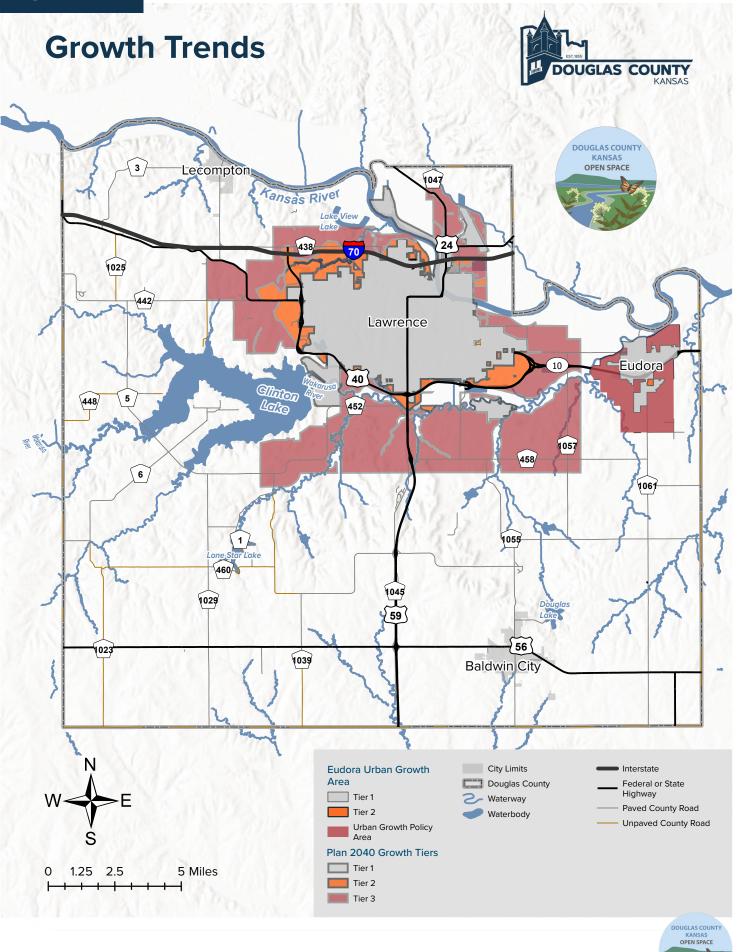
- ✓ 2.1 Incentivize land dedications, conservation easements, and other voluntary mechanisms to protect natural and historic areas of the community for public purposes.
- ✓ 2.3 Create awareness and education programs showing the benefits of natural and historic areas.
- ✓ 5.1 Promote sensitive land retention through programs such as conservation easements and other voluntary programs.

Environment and Natural Resources

- ✓ 2.2 Preserve and restore native prairies, including utilizing conservation easements.
- ✓ 2.5 Identify important wildlife habitats and prioritize them for protection and conservation to establish corridors.

Plan 2040 establishes three tiers of growth for Lawrence, providing direction for sustainable, cost-effective development, in alignment with necessary and planned infrastructure and utilities. Tiers 1 and 2 are the primary focus for future growth in and around Lawrence. Growth into Tier 3, which is not proposed until after 2040, would require major municipal utility expansion and additional investment in fire infrastructure and personnel. *Map 6* illustrates formally identified growth boundaries across the County.





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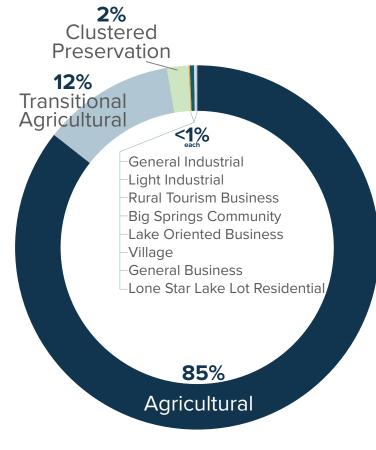
Under today's acreage requirements, approximately **50 percent of Douglas County's rural land has been built on**. At the average rate of 75 new residences annually, the County would be **fully subdivided and built out** (accounting for floodplain constraints) **in less than 30 years.**

Growth Scenarios

A recent study envisioned three different growth scenarios: Business As Usual, Runaway Sprawl, and Better Built Cities. According to the American Farmland Trusts' *Farms Under Threat* **2040**, 5,300 acres of productive farmland (includes cropland, pastures, and woodlands associated with farms) within Douglas County are projected to be developed from 2016-2040 in the runaway sprawl scenario.

Runaway Sprawl: Development becomes even less efficient. Low-density housing sweeps across the countryside, displacing farmers, and ranchers. Although slowed by the 2020 regulations with the prohibition of new subdivision creation, continuing non-agricultural residential development continues to remove agricultural land from production and impact working farms. Even with recent policy changes, development pressures continue to fragment the agricultural landscape, and limit production, marketing, and management options for the working farms and ranches that remain.

Percentage of Total Acres of Land Use by District Type in Douglas County



Douglas County has been zoned since 1966. Zoning districts provide a unique set of standards which outline permitted land uses within each respective area. They are designed to protect the safety, health, and welfare of the County and its residents.

> Strategic planning and collaboration among regional stakeholders are essential to achieving and retaining the largescale community benefits of open space protection. By assessing growth projections and alignment with existing community plans, recommendations for open space programs and projects will proactively meet the future pressures and opportunities of Douglas County.



CURRENT COUNTY OPERATIONS AND MANAGEMENT

Currently, multiple County Departments work on various open space related initiatives. Their roles are described in the following sections.

Sustainability

The mission of the Douglas County Sustainability Office is to develop, adapt, and implement public programs and policies that strive to balance the priorities of living systems and the built environment, and to elevate their interdependence. The Sustainability Office supports the work of the Douglas County Food Policy Council and the goals of Adapt Douglas County: A Climate Action and Adaptation Plan, among other efforts and programs that consider impacts on and alignments with preserving open space.

Heritage Conservation

Formed in 2011, the Heritage Conservation Council (HCC) brought new resources and capacity to advance analysis and action for local preservation of both cultural and natural resources. Supported by one staff person, the Heritage Conservation Coordinator, the Heritage Conservation Office facilitates the Natural and Cultural Heritage Grant Program, supports local historic preservation initiatives, and connects with community partners working to support natural and cultural heritage conservation in Douglas County. The grant program is overseen by a Committee.

Since its start in 2011, the HCC Natural and Cultural Heritage Grant Program has distributed just under \$3 million dollars in funding throughout Douglas County for a diversity of natural and cultural conservation projects led by local organizations. Natural heritage conservation projects account for 27 percent of all projects that have been funded by the grant program. To date, over 520 acres have been protected through conservation easements and 52 acres of native vegetation have been restored through various projects.

Zoning and Codes

Using comprehensive planning and zoning, Douglas County regulates land uses and density with the intention of maintaining rural character and agricultural land uses. Local zoning allows communities to transparently plan for the use of land and regulate the types of land uses that may be developed on a property—typically residential, commercial, and industrial uses. Rural land use planning often limits density with the intent of maintaining rural character, preventing urban sprawl, and slowing the conversion of agricultural land to residential and other uses.

What role does Douglas County currently have in open space protection?

PLAN 2040, Goal 2.11:

Develop programs to preserve and promote open spaces throughout Douglas County.



Needs and Existing Conditions



The Open Space Plan will identify priority resources and areas that are critical to rural character and the agricultural economy that can be incorporated into future planning and zoning efforts.

The Zoning and Codes Department can use planning and zoning tools to limit impacts to sensitive lands and encourage preservation of the rural landscape that supports open space values. A readily available conservation tool that already exists is the Agricultural and Natural Resource Protection Agreement. Staff educates interested landowners and facilitates this agreement. In addition, development applications are reviewed in accordance with the existing sensitive lands regulations.

Public Works

Existing County open spaces, including Lone Star Lake Park and Wells Overlook Park, are managed by the Public Works Department. Public Works manages the lake's campground and oversees care and maintenance of both sites. While they provide a vital role in keeping these areas open, safe, and aesthetic for the public to enjoy, these sites would further thrive with enhanced natural resource management and conservation stewardship provided by an Open Space Program. Further, if additional open spaces were to be managed by the County, the Public Works Department would exceed its capacity.



Douglas County currently has a limited role in open space protection with efforts spread across multiple departments.

An assessment of the County's current capacity will inform strategic opportunities to fill existing gaps and build upon strengths to develop open space protection projects at the County level.

Needs and Existing Conditions

Case Study: Johnson County, Kansas Natural Resource Program Start Up and Staffing

The Johnson County Parks and Recreation Department (JCPRD) has a unique history in Kansas: being the only special park district in the state. Pioneered by John Barkley in the 1950s, the park system has evolved from being considered excessive and unnecessary to becoming a beloved and extensive network of parks and natural areas in Kansas. The JCPRD is primarily funded by a countywide property tax (e.g., mill levy).

In 2011, JCPRD began investing in developing a natural resource management program. Starting with the hiring of a field biologist, the department has since grown to include four full-time staff members and develop its Resource Management Plan in 2019.

Volunteers and partnerships with local organizations play a significant role in Johnson County's parks and natural areas. Volunteers are essential for various projects, such as removing invasive species and managing bluebird box trails. The County also contracts with non-profit groups for seed collection and restoration projects. Additionally, Johnson County Parks works with a nonprofit that manages 180 miles of singletrack trails, with the County providing equipment and volunteers assisting with trail maintenance.

Lessons learned from implementing the 2019 Resource Management Plan include starting small, working with volunteer groups, and emphasizing the need for the work.





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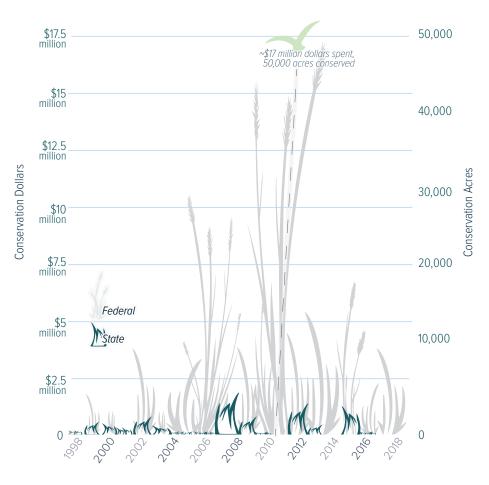
How is open space conservation supported at the state and federal level in Kansas?

CONSERVATION EFFORT ACROSS KANSAS

Funding and acquisition often set the stage for an emerging open space program's long-term success because acres conserved correspond to available funding (see graphic below). Land conservation is often followed by restoration and recreation as a later phase. As approximately 95 percent of unincorporated Douglas County is privately owned, landowners, funders, and conservation organizations are Douglas County's most important partners in this process.

At the federal level, the largest funders were the Department of Defense (49,012 acres), U.S. Fish and Wildlife Service (12,950 acres), and the Natural Resources Conservation Service (108,846 acres). At the state level, Kansas Department of Wildlife and Parks funded 95 percent of the 7,534 acres conserved statewide through their Wildlife Fee Funds, Wildlife Conservation and Nature Appreciation, and General Appropriations.

Conservation Funding and Acres Covered in Kansas







The Conservation Almanac reports that in 20 years (1998 – 2017), 226 conservation transactions were completed in Kansas, totaling \$65 million with 175,821 acres protected. Using simple math, with 105 counties in Kansas that would be 1,674 acres conserved per county. Or by population per capita (Douglas County represents 6 percent of Kansas' population), one might expect over 10,500 acres to be conserved.

But Douglas County has not benefited like other counties or the state. Only one conservation transaction in Douglas County, funded by the U.S. Forest Service's Forest Legacy Program (\$499,000) and the State's General Appropriations (\$757,264), for 166 acres in the Baldwin Woods Forest Reserve is reported to have occurred during the same 20-year period.



With limited funding for conservation projects available at the state level in Kansas, the importance of local conservation efforts is magnified.









This chapter presents an all-encompassing vision representing the collective aims and feedback from our community members, stakeholders, and local experts. At the core of this vision lies a deep commitment to preserving our County's natural and cultural heritage, fostering ecological health, and nurturing a vibrant environment for current and future generations. This chapter then outlines specific Conservation Criteria that should be utilized in decision-making for open space protection and conservation initiatives.

VISION AND VALUES

Our Vision

"To nurture a community dedicated to preserving and enhancing our natural environment through inclusive stewardship, innovative partnerships, and responsible resource management, fostering a harmonious future where biodiversity, heritage, and well-being flourish."

Our Community Values

What are our community values? This Plan is built on the foundation of shared values articulated through communitydriven conversations. These community values help inform the Plan, which ultimately helps the decision-making process, providing elected officials and the community a basis for making rational, informed decisions. Our community values can be referenced by various community members, non-profit organizations, municipalities, and landowners for future planning, grant applications, and implementation.

KANSAS OPEN SPACE

It's our turn to:

- Protect and enhance our natural environment through stewardship, conservation, and accountability.
- Enhance important focus areas for wetlands, woodlands, prairie, wildlife habitats, prime farmland, floodplains, riparian corridors, and biodiversity.
- Provide incentives, education, and collaborative partnerships to empower willing landowners in managing private lands responsibly.
- Protect the continuation of local farming and ranching to support the local food system.
- Embrace creative and culturally inclusive land stewardship solutions and partnerships.
- Promote adaptability within human and non-human communities of Douglas County for an unpredictable climate future.
- Convene and support the collaboration of open space partners and interest groups working towards a shared vision.
- Preserve rural character.
- Support the creation of regionally connected recreation networks where open spaces, waterways and parks are thoughtfully linked to ensure physical connectivity.
- Support and encourage safe access to public spaces for all abilities, cultures, socio-economic status, and geographic areas of the County.
- Promote the County's natural beauty and sense of place.
- Preserve, honor, and respect historic sites, landmarks, and cultural landscapes.
- Conserve areas to provide immersion in the outdoors.
- Thoughtfully consider the use of resources wisely, both financially and environmentally.





CONSERVATION CRITERIA

The Conservation Criteria represent the collective and diverse community values identified in this planning process, in addition to alignment with existing conservation, preservation, and community planning efforts. These criteria can be applied when considering proactive conservation opportunities geographically dispersed throughout the County. They provide direction to further sustain open space in all of its forms, ensuring future generations can enjoy the benefits of ecological health, cultural inclusion, and recreational access. The Conservation Criteria do not replace existing codes or regulations.

The Conservation Criteria can be adapted and prioritized across multiple County departments to meet the diverse needs of an Open Space Program. These criteria will be used to allocate and prioritize future resources, inform land use and development review, and facilitate other proactive decision-making related to open space conservation.

Conservation projects will be undertaken in phases and as future opportunities arise, with guidance from County officials and the voluntary participation of landowners. It is not realistic for—nor is it the intent of—Douglas County to conserve all lands that meet one or more of the criteria outlined in this plan. Rather, areas that meet these criteria are prime candidates for conservation, investment, and stewardship with willing partners.

The following types and characteristics of land are priorities for open space conservation in Douglas County:

- » Native Plant Communities
- » Riparian Corridors
- » Floodplain and Floodways
- » Historic and Cultural Sites
- » Working Agricultural Lands and High-Quality Soils

- » Potential for Restoration and Stewardship
- Public Access or Connection to Recreational, Educational, and Cultural Opportunities
- Proximity to Existing
 Protected Lands and Wildlife
 Corridors

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Native Plant Communities

Native plant communities, including old growth forest and remnant prairies, are areas that support a variety of flora and fauna that are native to Douglas County. These lands serve as crucial reservoirs of biodiversity, supporting wildlife populations and maintaining healthy ecosystems. By prioritizing the conservation of the remaining, high-quality native plant communities, Douglas County's natural heritage can be protected for future human and non-human communities.

- Remnant ecosystems that support native plants, insects, and wildlife, including prairies, forests and woodlands, and wetlands.
- Highly diverse sites that host a wide range of native plant species, and may include threatened or endangered species.
- Sites that offer the opportunity to collect and share seeds of native plants to promote the restoration of nearby sites with local plant genetics.



Riparian Corridors

Riparian corridors, or rivers, streams, creeks, and wetlands, are essential landscape features that convey floodwaters through the County and serve as critical habitat connectors for wildlife. The conservation of these spaces retains and protects many community benefits, including water filtration, streambank stabilization, flood mitigation, and more. Riparian corridors can also provide recreation in the form of fishing, trails, or even river play, paddling, and floating.

Considerations for Decision-Making:

- Land within or adjacent to rivers, streams, creeks and wetlands with balanced and functional ecosystems.
- Areas that can support access to low-impact recreation opportunities, either through the creation of new trails and infrastructure or connection to existing opportunities.
- During implementation of specific projects and/or evaluation of properties for sensitive resources, a site specific wetland delineation should occur to provide the most accurate mapping for wetlands.



OPEN SPACE

Floodplain and Floodways

Floodplain and floodways are designated areas within the County that may be affected by the inundation of floodwaters. Federal Emergency Management Agency floodplain maps delineate flood zones and help to communicate flood risk to residents. These areas are currently regulated by Douglas County Code to protect public safety and minimize risk, but strategic conservation of these areas could continue to improve resilience to flood events in the future.

- Protecting public safety by maintaining the natural integrity of floodplain ecosystem functions.
- Maintenance and improvement of water quality, groundwater recharge, and watershed health.
- Investment in nature-based solutions that reduce stress on stormwater infrastructure.



Historic and Cultural Sites

Historic and cultural sites in Douglas County contribute to the preservation of heritage and community stories of the past and present. By preserving these invaluable sites, the County perpetuates a profound sense of place, fostering pride and community identity among residents. The protection of cultural landscapes uplifts living heritage and can provide space for worship, reflection, celebration, and (re)connection to nature. These landscapes may provide spaces for outdoor classrooms where residents, students, and visitors can learn about the County's history, architecture, and cultural traditions.

- Historic sites that share, uplift, and protect under-told stories or narratives of historically marginalized communities in Douglas County.
- Sites with cultural importance that offer opportunities for communities to gather and convene to share cultural practices, such as sustainable harvest.
- Places that are or may be eligible for listing on the National or State Register of Historic Places.



Working Agricultural Lands and High-Quality Soils

Agriculture, the principal land use in Douglas County, is a major contributor to Douglas County's economy and a proud part of local heritage. Maintaining working lands and potentially productive agricultural land is a principal goal for our local food system, as identified in Plan 2040. Additional considerations that expand upon high-quality soils may include stewardship, habitat, and agricultural economic opportunity.

- Farms that support biodiversity, carbon sequestration, and/ or crop diversity, increasing the resilience of our local food system.
- Land access opportunities and other support for beginning farmers.
- Agritourism and other economic opportunities to enhance the sustainability of local farms.



Potential for Restoration and Stewardship

Conservation decisions should consider the potential for future restoration of biodiversity and ecosystem services. Restoring landscapes through the implementation of sustainable land stewardship practices and activities can result in improved wildlife habitat, reduced erosion and stabilized streambanks, improved soil health, and more

- Improved water quality and filtration from restored buffers of native vegetation.
- Restoration on public lands or other highly visible spaces that lend to shared knowledge and educational opportunities.
- Implementation of land stewardship practices that reduce invasive species pressure, promote habitat recovery, and support a balanced ecosystem.



Public Access or Connection to Recreational, Educational, and Cultural Opportunities

Public access to open spaces is critical to achieving the physical, sensory, mental, and other health benefits of time spent in nature, especially for Douglas County residents that may not own land or have access to private natural spaces. Conservation decisions should account for a site's accessibility to the public and the opportunities to develop or connect with new or existing trails and other recreational opportunities. While public accessibility should be elevated in the decision-making process, some conserved spaces may still require restricted or very limited public access to protect, respect, and sustain the values that these spaces provide (i.e., sacred cultural spaces, sensitive ecosystems, private property, etc.).

- Public access to parks and other natural spaces.
- Corridors that present opportunities for multi-use, outdoor travel between and within open spaces and County destinations.
- Spaces for outdoor learning, sharing history and community, and cultural and spiritual practice.



Proximity to Existing Protected Lands and Wildlife Corridors

Sites, projects, and parcels that adjoin or are near existing parks and protected spaces should be prioritized. By planning and allocating conservation investments in strategic places, the benefits of conservation multiply. Contiguous conserved lands create opportunities for wildlife travel and a larger, more connected recreation and trail network.

- Investment in sites that expand upon existing conservation efforts.
- Local and regional strategic planning of open space projects.
- Identify innovative connections between protected lands to allow for the movement of wildlife and connection of trails.





In addition to the specific Conservation Criteria outlined above, the County should consider the following overarching priorities when making conservation decisions:

- Increasing the County's resilience to a changing climate.
- Equity considerations in resource allocation and public access to protected spaces.
- Partnerships and collaboration among organizations and agencies.
- Matching resources that may be available to enhance local investment.
- Extent and significance of scenic views and viewpoints.
- Impact and scale of a potential conservation project.
- Protection of public safety from risk of natural hazard.
- Multiplied co-benefits of meeting several criteria.
- Efforts that markedly extend and complement existing community goals and plans.





Implementation Recommendations

Implementation Recommendations

Multiple resources, potential future funding sources, partnerships, staff roles, and/or policy tools are necessary to protect, restore, steward, and support existing and future open spaces. Through a menu of conservation options and incentives, willing private landowners are and will continue to be vital partners in voluntarily conserving land, across the County. Further, many existing agencies and organizations are actively working on programs and resources to enhance and steward Douglas County's natural resources; convening these partners to link resources and expertise will be critical in an Open Space Program. This chapter recommends how to establish a successful Open Space Program, outlines a phased approach, and the County's role in leading versus supporting other partners.

PROGRAM MODELS FOR DOUGLAS COUNTY

Creating a new program to meet Douglas County's open space vision will be no small task. The following program models outline scenarios for the County's role in the implementation of this Plan.

Program Model	Description	Funding Source	Implementation Partners
Continue to maximize existing partnerships and educational tools	Encourage landowners to conserve land and/or implement open space projects with existing resources. The County could help provide education by creating an online clearinghouse of available conservation resources and public open spaces, hosting educational series, and convening partners on a periodic basis. Evaluate and mitigate impacts to open space assets through review of development applications.	No new funding required.	Douglas County, NRCS, KBS, KFS, DCCD, KDWP, and other non- profit and agency partners.
Implementation through Planning and Zoning	Provide experienced natural resource recommendations on long-range plans and land use developments. Continue to expand Agricultural/Natural Resource Protection Agreements. Continue to encourage open space protection with innovative tools and resources.	Create a new full-time County staff position to support long-range planning activities, land use development reviews and code revisions.	Douglas County
Expand the existing Natural and Cultural Grant Program	The County's current Natural and Cultural Heritage Grant Program has provided about 32 percent of its total funding for natural heritage projects, including support for permanent land conservation through easements, community-driven restoration projects, surveys, educational programs, and more. Build upon the existing grant program to specifically allocate funds for open space projects. Consider the expansion of the charter and membership of the HCC to open space conservation.	HCC is currently allocated approx. \$200,000 annually through the General Fund. These funds could be expanded, or a dedicated funding source could be established to increase the program's impact. Additional funding may be required for added staff capacity in grant administration.	HCC

DOUGLAS COUNTY KANSAS OPEN SPACE Acronyms: NRCS = Natural Resource Conservation Services; KBS = Kansas Biological Survey; KFS = Kansas Forest Service; KDWP = Kansas Department of Wildlife and Parks; HCC = Heritage Conservation Council; Douglas County Conservation District = DCCD

Program Model	Description	Funding Source	Implementation Partners
Create an Open Space Lead Staff Role	Coordinate private land conservation, including processing and monitoring of protected lands, natural resource stewardship of County properties, facilitation of public access, outreach and education, and more. Continue to assess program demand and impact, and explore and pursue sustainable funding opportunities accordingly. Eventually, as demand warrants, additional natural resources, education, and visitor services staff may be needed.	Create a new full-time staff position through American Rescue Plan Act funding to demonstrate the impact and effectiveness of additional capacity. To maintain a long-term position, especially one that would attract a career open space professional, sustainable funding sources would be necessary.	Douglas County, Municipalities
Create a new Shareback Open Space Grant Program	 With future funding, according to program demand, the County could award funding competitively to non-profits or to landowners to conserve and/or implement open space projects. Funding could serve as a local match for state and federal funding and/or to collaborate with local partner funding for major, influential projects. As a grant program is developed, a citizen's Open Space Advisory Board could be created to oversee grant distribution. 	A new general fund allocation or dedicated funding source will be necessary. Additional funding may be required for added staff capacity in grant administration.	Douglas County, Municipalities and partners

Acronyms: NRCS = Natural Resource Conservation Services; KBS = Kansas Biological Survey; KFS = Kansas Forest Service; KDWP = Kansas Department of Wildlife and Parks; HCC = Heritage Conservation Council; Douglas County Conservation District = DCCD

ht Mile Creek

What is a Shareback Program?

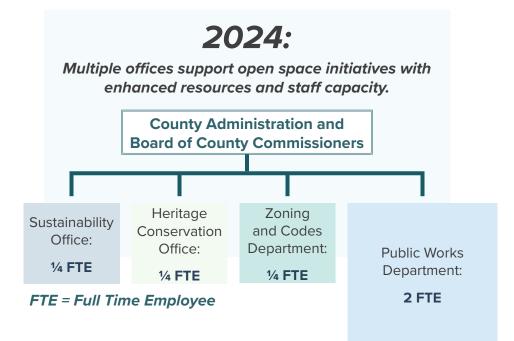
Shareback programs distribute funds competitively to municipalities, non-profits, or to landowners to conserve and/or implement projects on their property. These are increasingly popular and effective way for multiple jurisdictions in a region to work together.

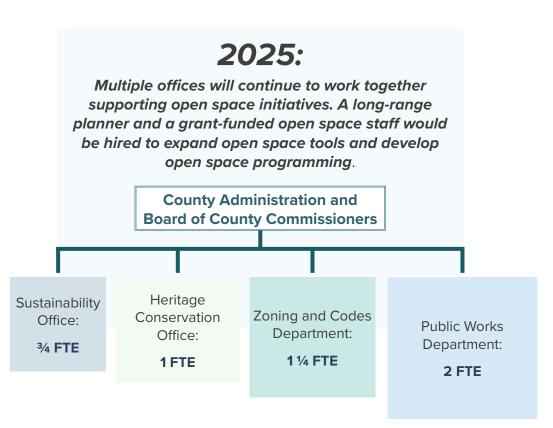
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KANSAS OPEN SPACE and the second

A PHASED APPROACH

The Open Space Program will start with immediate opportunities and enhance existing resources and staff capacity while leveraging community partnerships. It should evolve over time and as needed to fulfill our community's expanding conservation vision.

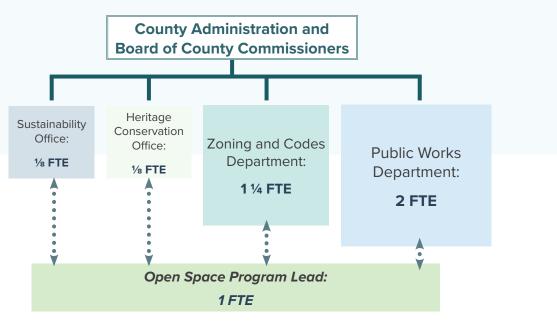




DOUGLAS COUNTY KANSAS OPEN SPACE

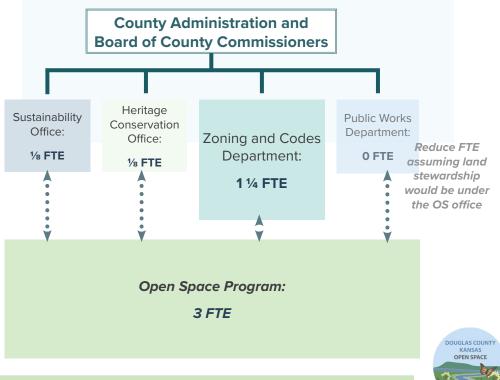
2030:

Additional County owned/managed open space and new programs and services require development of a dedicated open space FTE to coordinate the Open Space Program. This FTE may report and/or float between different Departments, depending on the focus of the Open Space Program at that time. Investigate a dedicated funding source.



2040:

Consolidate decentralized County owned/managed open space and new programs and services into the Open Space Program, including land management. New dedicated funding source sustains operations long-term.





IMPLEMENTATION TOOLS AND RESOURCES

Future Land Use Tools

Future land use tools will assist Douglas County decision makers in determining the appropriate type and location of future land uses. By applying zoning tools that will help achieve our conservation vision, we can align uses that are most compatible with our community goals. Tools take into account growth trends, types of land uses, locations with heightened market pressures and Conservation Criteria. Any adoption of future regulatory tools will require additional public process. As the community evolves, these tools should be evaluated and updated to align with the shifting pressures and opportunities of the County.

Future Land Use Mapping

A future land use map is critical to help identify desired land uses, conservation goals, and growth patterns. Future land use mapping for the County only exists where municipalities have established growth management areas and sector plans, including the cities of Eudora and Lawrence. Future land use maps illustrate the desired mix, character, and location of future land uses within a community. In addition, these maps may also define the planning and growth boundaries for jurisdictions within a county using analysis of water and sewer serviceability, existing land use trends, and environmentally sensitive lands, and cultural/historic sites. Led by Planning and Zoning, the development of a future land use map involves a community engagement process and coordination with residents of the unincorporated County.

Mitigation and Environmental Assessment Requirements for Development

An Environmental and Mitigation Assessment will work to identify environmental impacts related to a proposed development, ensuring the protection of sensitive lands, historically or archaeologically significant sites, and areas with unique features such as wetlands, streams, floodplains, nature preserves, parks, native vegetation areas, critical wildlife habitat, and sensitive soils.

A full environmental assessment may include a map of the property depicting wildlife activity patterns, streams and ditches, floodplains, wetlands and riparian areas, trees, critical habitats and plant species, and soils; identification of any species that use the property that are listed as endangered, threatened, or are species of special concern; and an impact report describing the impact of the proposed development on the identified habitats and natural resources. The impact report would be accompanied by a mitigation plan that describes how the proposed development will mitigate negative impacts.



Open Space Zoning District

The creation of an open space zoning district encourages the protection and conservation of open space, as well as agricultural, environmental, and culturally and historically significant features. The intent is to preserve and enhance major open space and recreational areas by protecting the natural amenities they possess. Both public and private lands are encouraged in this zoning district. The district would promote agricultural and natural resource conservation and have limited future development options.

Zoning Overlays

Zoning overlays help guide development review decisions on open space efforts and direction of growth. Overlays are a zoning tool tailored to specific needs, such as agricultural preservation, floodplain and riparian protections, and wildlife corridors. This zoning approach offers flexibility by applying stricter standards across multiple traditional zoning districts simultaneously, streamlining regulations without modifying each individual zone. Implementation involves introducing strategic zoning in new areas to proactively promote sustainable development while safeguarding the County's diverse and valuable landscapes. Current zoning overlay districts include the Floodway, Floodway Fringe, and Eudora Source Water Protection overlay districts.

Continue to Promote Expanded Floodplain Protections

The protection of hydrological resources is critical to preserving life and property from flood damage, providing wildlife habitat, and protecting water quality. Douglas County has many large streams, rivers and reservoirs located in its jurisdiction. However, the environmental, recreational, and aesthetic benefits of these water features must be balanced with protecting the public from the negative impacts of flooding from extreme weather events with a changing climate, which is a significant issue in Douglas County. The County encourages the construction of ponds, wetlands, terraces and other features that reduce water quantity and improve water quality. The floodplain management regulations help prevent property loss and damage for residents and enhance stream health. The expansion of including 500-year floodplain protection and restrictions will serve to further enhance these goals.

Open Space Dedications

Douglas County can investigate implementing open space dedications as a standard practice to address the impact of new developments on local community assets and public amenities. Open space dedication requirements can be adopted by local governments to ensure that development in the County provides for additional protections and recreational resources. This may involve an option for a fee-in-lieu, which would provide funds for public uses, such as facility development or upgrades, benefiting residents of the area.

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Agritourism and Farmland Stewardship Agreements

Agritourism, a growing trend, allows visitors to experience a working farm that generates supplemental income for the owner or operator through the creation of value-added activities and products. Agritourism can include farm stands or shops, self-pick orchards, farm stays, tours, on-farm classes, festivals, pumpkin patches, corn mazes, Christmas tree farms, wineries, youth camps, hunting or fishing, guest ranches, and more. Douglas County currently has several agritourism businesses serving local residents and visitors alike. Agritourism also supports other Douglas County goals, including bolstering local food production, expanding a sustainable, resilient, and diverse economy, and preserving agricultural land. Supporting new agritourism opportunities will help Douglas County realize these goals while further empowering the entrepreneurial spirit of the agricultural sector.

Other open space programs have creatively integrated agricultural leasing and land stewardship agreements into their program models, succeeding in the co-benefits of farmland access, land stewardship, community food production, and more. With Douglas County's prime soils, energized local food system, and multiple agricultural agency partners, agricultural access and stewardship exchanges may be a promising structure to explore in the future.



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Other Implementation Tools And Resources

In addition to Zoning and Future Land Use tools, the County can explore additional opportunities to implement open space conservation in Douglas County.

Sustainability Resources for Rural Land Management

Resources exist to assist landowners with improving the local ecosystem. Landowners can proactively implement low-impact landscape management practices, such as native or droughttolerant planting, wildlife-friendly fences, habitat conservation, and more. The County can help connect landowners with expert partners and resources, and/or support knowledge-sharing on best practices for preserving ecological balance and cultural heritage on private properties. For example, working with partners to convey the cost-effectiveness of preserving on-site native plants and mature trees by drawing connection to their role in promoting connectivity, wildlife habitat and resilience against fire and invasive species.

"Friends Of" Group

A foundation is typically a citizen-led initiative. Establishing a "Friends Of" group or foundation presents an opportunity to support programming through external advocacy, education, and funding measure support. A group can rally philanthropy for a specific or broad area that needs improvements. These incorporated tax-exempt organizations can provide general support to the County and partner organizations.

Donations

The County may accept donations and monetary gifts, often as part of an estate, will, or tax deduction. The County would be responsible for maintaining these properties and resources would be needed for long-term stewardship.

Promote Conservation through Tax Incentives

The County could work with the State to investigate tax incentives for landowners that place their land into protections. Tax reduction may serve as incentive for establishing conservation easements or participating in potential future agricultural or conservation districts.







DOUGLAS COUNTY-LED PROJECTS

Douglas County acknowledges that conservation efforts across the County will not all be led or initiated by the Open Space Program itself. The County will strive wherever possible to uplift and provide support for partners and landowners in their own conservation aspirations across the geography of the County, and where appropriate, help convene resources and efforts toward a shared conservation vision. That being said, this planning process has identified three significant and actionable areas in which the County can play an immediate leadership role. These focus areas are not the limit of Douglas County's intentions to conserve open space, nor do they represent all of the opportunities yet to be discovered. Rather, they are foundational places to begin building best practice, landowner partnerships, and proactive socioecological system planning and preservation.

Current County Park Improvements and Enhancements

Douglas County residents have expressed strong support for park improvements and developments that enhance their quality of life and connect them with the natural beauty of the region. Douglas County can enhance existing public assets to elevate awareness and access of residents and visitors and allow the land to flourish. With an emphasis on natural resource stewardship, Douglas County can lead by example in implementing best practices to restore native ecosystems and control invasive plants on County properties. By enhancing amenities and stewardship of existing County parks, Douglas County can encourage exploration of the outdoors through improved trails and interpretation.

County leadership actions could include:

- Create a natural resource stewardship plan for existing County parks.
- Revitalize native ecosystems through ecological restoration. This can include planting native vegetation, prescribed burns, native seed collection, and controlling the spread of invasive species, and restoring prairies, woodlands, or wetland areas.
- Improve lake, river, and stream health through floodplain connectivity, bank restoration, river shading, and riparian improvements.
- Enhance facilities and infrastructure to support and encourage use of County spaces. Future developments may include nature-based play areas, outdoor pavilions, trail and water access, and interpretive signage.
- Enable equitable access to existing spaces through trail planning and development in collaboration with regional partners.

- Create entry-level natural resource stewardship jobs or internships to support workforce development.
- Develop hands-on educational or interpretive opportunities for Douglas County residents, such as a volunteer land steward program.

Programmatic Support for Private Land Conservation

In combination with implementation tools outlined previously in this chapter, protecting land through conservation easements can play an important role in open space programming. Conservation easements can protect public benefits, like wildlife habitat, historic preservation, and water quality, while retaining private ownership. The initial costs to establish a conservation easement may present an obstacle for many landowners who are seeking conservation options. In partnership with local land trusts, the County could focus efforts to reduce or offset the costs of establishing conservation easements for lands across the County that represent significant Conservation Criteria asserted in this Plan, while assuring that benefits are shared with the public.

County leadership actions could include:

- Collaborate with local land trust organizations, such as the Kansas Land Trust, The Ranchland Trust of Kansas, or the Kansas Alliance for Wetlands and Streams, to identify how the County can leverage resources and staff capacity to offset the initial costs of establishing conservation easement agreements that contribute to the public good.
- Utilizing the Conservation Criteria of this Plan, develop a framework and process for determining how the County should evaluate requests for County support or funding for obtaining a conservation easement.

A conservation easement is a voluntary legal agreement between a landowner and a land trust organization that permanently limits uses of the land, protecting its conservation values in perpetuity. Landowners retain the right to own and use the land, sell it, and pass it on to their heirs. Fach easement agreement is unique and tailored to meet the goals of both the landowner and land trust organization.

- Adapt the existing Natural and Cultural Heritage Grant Program to accommodate more opportunity to assist with landowner conservation, through an easement or other means, that also benefits the public, and/ or create a new grant program to promote these conservation avenues to meet demand and opportunity.
- Advocate at the State level for tax benefits that provide an incentive for private land conservation.

Colorado's Conservation Easement Tax

Farmers and ranchers in Colorado who donate a conservation easement enjoy a tax credit valued at 90 percent of the appraised conservation easement value up to a maximum credit amount of \$5 million. These tax credits can be claimed in \$1.5 million increments per year and can be used over a 20-year period. A 2017 analysis of the state's conservation easement tax incentive program by Colorado State University showed Colorado taxpayers realizing \$4 to \$12 in public benefit from conserved private land for every \$1 invested in protection. To date the incentive has resulted in 2.1 million acres of private land conservation.





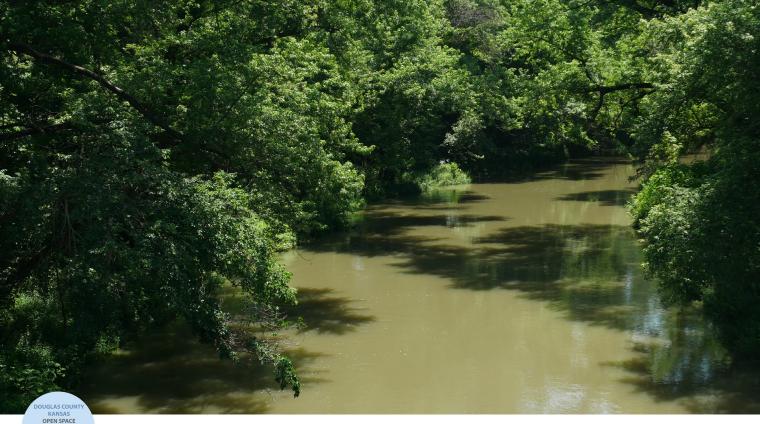
Conservation of the Wakarusa River Corridor

Presenting a convergence of all eight Conservation Criteria and rich opportunity for partnerships, the Wakarusa River Corridor is also one of the most pressured by new development, contributing to its emergence as an immediate priority.

This Plan recognizes that the Wakarusa River Valley is not the only concentration of valuable natural and cultural resources within the County. The urgency and opportunity in this area will not limit the implementation of conservation efforts in other areas of the County that meet aspects of the Conservation Criteria. Placing intentional focus in the Wakarusa River Valley will allow the County to realize partnerships across multiple governments and institutions, and achieve a wide range of conservation benefits for residents, human and non-human, across the County.

Several key factors underscore the significance of this area as an initial focal point:

 Ecological Richness: The Wakarusa River and wetlands represent a diverse and ecologically rich landscape. These natural habitats serve as critical ecosystems, supporting an array of flora and fauna. Their preservation is vital for maintaining biodiversity and safeguarding the health of local wildlife populations.



- Cultural Significance: The Wakarusa River Valley holds deep histories of the land and people who have been a part of its story since time immemorial. Haskell Indian Nations University, established as the United States Industrial Training School in 1884, forcibly assimilated Indigenous children to the "mainstream way of life." To honor this history and learn from the Wakarusa Valley, Indigenous and multicultural perspectives are of utmost importance for cultural stewardship, revitalization, and (re)connection with the land.
- Ecosystem Services: Floodplains enveloping the landscape provide natural infrastructure against dangerous flood events, a function that cannot be taken for granted in a shifting climate. Meanwhile, natural water filtration and groundwater recharge occurs in these areas, providing optimal water quality and security for our community.
- Recreational Connectivity: The Wakarusa River and its surroundings provide an opportune setting for various lowimpact, accessible, and diverse outdoor activities, such as hiking, birdwatching, and fishing.
- Agricultural Soils: The fertile prime soils of the Wakarusa River Valley bottomlands provide a critical resource for current and future agricultural production, contributing to the resilience of our local food system.

County leadership and/or collaboration in proactively conserving this landscape could include:

- In collaboration with multiple partners, complete a comprehensive study and action plan for the Wakarusa River Corridor that identifies key areas and scenarios for enhancing biodiversity, climate resilience, recreation, agriculture and other desired future land uses.
- Support and uplift staff, faculty, students, and alumni of Haskell Indian Nations University, and Indigenous community members, in leadership of conservation projects in the Wakarusa Valley.
- Identify and apply for grant funding for specific projects to support conservation initiatives that may include private land conservation, land stewardship, and public outreach, access, and education.
- In collaboration with willing landowners, explore conservation opportunities in the Wakarusa Corridor with existing and enhanced zoning tools and floodplain regulations.



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PARTNERSHIPS

Collaborative efforts between the County, municipalities, tribes, agencies, non-profit organizations, communities, and willing landowners will be essential to implementing this Plan's recommendations and creating a lasting impact in open space conservation. There are many existing community organizations and partnerships within Douglas County working to protect and facilitate access to open spaces. During implementation, many recommendations would benefit from agreements between the County, municipalities, and local agencies and organizations to continue to develop the County's role as a convener and facilitator of open space conservation. A few areas of partnership that the County should further develop to implement this Plan are detailed here.

Tribal Partnerships

While efforts were made to integrate and incorporate multicultural perspectives and culturally important areas in this Plan, continued outreach is needed throughout implementation. It is essential that the County build relationships with tribal leadership and representatives to create meaningful acknowledgments and cultural education recognizing the past, current and future Indigenous stewards of the lands that now comprise Douglas County. Additionally, Douglas County should seek leadership and input with the Indigenous community in open space prioritization, opportunities for co-stewardship of open spaces, and securing access to open spaces for cultural practices and medicinal plant collection.

Community Organization Partnerships

Many local organizations are currently working in Douglas County to directly and indirectly support open space protection, advocacy, stewardship, and education. These organizations have diverse focus areas, such as outdoor recreation, wildlife conservation, native ecosystem stewardship, heritage, and more. By actively convening and building relationships with organizations working in these spaces, the County can best support shared efforts and foster meaningful projects and programs.

Agency and Agricultural Partnerships

Current agency and agricultural partners, including K-State Research and Extension, the County Conservation District, and the Natural Resources Conservation Service, are active in the County and reach many landowners and land stewards each year. By supporting and uplifting the work of these organizations, the County can encourage landowners to utilize these existing resources to learn more about grant programs, education, funding, and other landowner support methods.

Government Partnerships

Douglas County aims to be a collaborative partner with municipalities and other government agencies to foster open space protection that meets mutual strategic visions and planning alignments. By collaborating with cities and townships, the County can share knowledge, convene resources to meet countywide goals, and thoughtfully plan for both growth and conservation.



LOCAL FUNDING SOLUTIONS

Partnerships, grants, donations by philanthropists, and even General Fund allocations are not predictable, long-term funding sources. Implementing a successful Open Space Program, one that sustainably and equitably manages public land and offers accessible conservation options, will require multiple tools. Additionally, alternative funding solutions could help provide matching funds when federal grant opportunities, which often require a funding match, are available.

Work to demonstrate the implementability of the program models and tools, as well as additional public surveys (i.e., ballot testing), would occur before proposing a new tax to voters. A dedicated sales or property tax is one form of alternative funding that other communities have established. A dedicated source would provide a relatively predictable outcome versus grants and other soft money which significantly vary year to year or dry up altogether. Sales and property tax could be a steady revenue stream for annual projects, or put in a bond if a large capital project is desired. Bonding would reduce the overall available funding by about 30 percent for administrative purposes.

Sales Tax

The County currently has a sales tax of 1.25 percent. Additionally, the state sales tax is 6.5 percent and the cities also collect their own sales tax including Baldwin City at 1.5 percent, Eudora at 1.75 percent, Lawrence at 1.55 percent, and Lecompton at 1.75 percent. Increases in the County sales tax rate must be voter approved. In Kansas, any new sales taxes must be placed on the ballot by a governing entity, i.e., a county commission or city commission. Counties may only collect additional sales tax in .25 percent increments.

Approved in November 1994, the local county sales tax fund is supported by a 1 cent countywide sales tax. These funds are used for general governmental purposes, including the debt service and operation of the County Correctional Facility, and the debt service related to the Community Health Building. The County portion of the 1 cent countywide sales tax is generated from about 1/3 of the 1 cent sales tax. Douglas County received \$9.3 million from sales tax in 2022. In 2018, another .25 percent was voter approved specifically for behavioral health services.



Sales taxes can target certain industries (alcohol, lodging, etc.), as well as exempt specific categories (groceries, menstrual products) to tailor what and where the revenue is generated from. Approximately 30 Kansas counties, as well as multiple cities, impose a transient guest tax (in addition to the sales tax) on the rental of rooms, lodging, or other sleeping accommodations. The guest tax applies when there are more than two bedrooms furnished for the accommodations of guests and when the room is rented for 28 consecutive days or less. The City of Lawrence has a 6 percent guest tax. A portion of the revenue goes to a grant program to provide funding for specific events that demonstrate economic benefits and enhance Lawrence's identity.

The following table presents the revenue generation if a .25 percent sale tax increase were implemented.

Sales Tax (County Sales Tax Currently 1.25%)		Revenue Generated Annually
Additional .25% (total 1.5%)	One quarter for every \$100 spent	~ \$6 – 6.5 million

According to the U.S. national census, Douglas County's per capita income is \$34,966 annually. If a .25 percent sales tax was introduced that would be a cost of \$7.28 per month. This cost is equivalent to one fancy coffee a month or even one beer at a local brewery per month.

Property Tax

The County currently has a property tax of 46.219 mills, of which 33.801 goes to the General Fund. The remainder is allocated specifically for employee benefits and road and bridge maintenance. One mill generates approximately \$1.9 million.

The following table presents a high-level summary of typical homeowner costs:

Property Tax (Current County Property Tax 46.219 Mills)	My Share	Revenue Generated Annually	
	For residential property valued at:		
	\$250,000 = \$29/yr	~ \$1.9 million	
Additional 1 mill	\$500,000 = \$58/yr		
	\$750,000 = \$87/yr		
	\$1,000,000 = \$116/yr		





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What will the future of open space look like across Douglas County? By working with partners and willing landowners, Douglas County can help organize, promote, and champion the next steps to achieving the vision of "a harmonious future where biodiversity, heritage, and well-being flourish" for all!

As Douglas County works to implement initial actions, the entire community can get involved by:

- **Partnering:** Connect with non-profits and partner organizations and ask them to help accomplish the Conservation Vision of this Plan.
- **Advocating:** Talk to local community leaders about your support for open space projects and funding.
- *Visiting:* Become familiar with open spaces in our community.
- **Inquiring:** Reach out to local conservation organizations (as needed) about resources for lands you steward.
- **Sharing:** Pass on knowledge and best practices for land conservation.



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