

**The Future of Conservation in Kansas: A Needs Assessment to
Evaluate Conservation Challenges, Gaps, and Opportunities**



Prepared for:



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Introduction

Conservation funding plays a critical role in preserving natural resources, maintaining biodiversity, and ensuring sustainable land and water management¹. In Kansas, where agriculture, water resources, and native ecosystems are deeply intertwined, effective conservation funding strategies are vital to support both ecological health and an economically stable future. Despite this need, Kansas remains one of 14 states without a state-based conservation fund². Without a fund, conservation needs across the state may remain as such. This study builds on the Kansas Water Plan³, Kansas Wildlife Action Plan⁴, and the Kansas Association of Conservation Districts⁵ local work group report which together describe priority conservation concerns held by Kansans. Those concerns include conserving the quality and quantity of water resources, expanding soil health practices, managing erosion, invasive species control, mitigating degradation of biodiversity, improving partnerships among stakeholders, and improving conservation staff recruitment, training, capacity, and retention. Our findings suggest many of these concerns remain priorities in need of attention in the form of funding and staff.

This study examines the current state of conservation needs, priorities, and funding in Kansas across various conservation sectors, including parks and recreation, environmental education, agriculture, and working lands as perceived by conservation professionals. This research aimed to identify gaps, challenges, and opportunities in the funding and partnerships landscapes to provide insights into how state resources can be optimized to support long-term conservation goals. The findings of this research are intended to inform policymakers, stakeholders, and legislators about the perceived needs and priorities to support the future of conservation in Kansas.

Findings in Brief

- The most important and unmet conservation need, according to participants, was water resource management and restoration.
 - Specifically, when considering significant conservation needs throughout Kansas, participants reported water availability, quality, and quantity as primary issues.
- Lack of funding and lack of staff capacity are the primary inhibitors for participating professionals in terms of their inability to 1) financially support prioritized conservation projects and 2) allocate or expand attention and effort to projects that address priority conservation needs.
- Concerning quantifying missed opportunities because of a lack of funding, such as matching funding, agencies and organizations stated the impact is difficult to accurately describe but could potentially exhibit a loss of millions of dollars due to an absence of monetary investments.
- Participants stated increasing diversified conservation funding and staff capacity to deliver conservation initiatives is integral to sustaining Kansas natural resources that could be lost indefinitely if not invested in immediately.
 - Conservation of Kansas's natural resources most affects, according to participants, community vitality, economic growth, wildlife habitat and diversity, and overall land quality.

Synopsis

Kansas's natural resources are at the heart of its communities, economy, and identity, but they face mounting challenges from environmental, financial, and social pressures. Our research highlights the critical role conservation agencies and organizations play in addressing these issues, despite persistent barriers like limited funding and staffing. By investing in stable, diversified financial support and fostering collaboration across entities, Kansas can protect its landscapes and enhance the well-being of its people. This isn't just about preserving resources—it's about creating a legacy of sustainable growth, innovation, and community connection that will benefit Kansans today and for generations to come.

Methods

This research aims to understand the current status of funding among Kansas conservation agencies and organizations with the purpose of identifying gaps in funding and opportunities. The use of a qualitative foundation and research process is essential in understanding participant meanings where the researcher “keeps a focus on learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research or that writers express in the literature”⁶. This study used a semi-structured interview format to allow for further depth to be highlighted by involved researchers and unrestricted responses from participants (i.e., using probing to bring forth detected, yet unmentioned details), while still meeting a standard set of baseline questions for consistency across all dialogues. Data computation and interpretation is centered around three research questions within this research:

- How does current funding meet conservation agency or organization's operational needs?
- What, if any, are limiting factors these agencies face in completing state conservation needs?
- How would these conservation agencies and organizations use additional funding if provided?

Participants of this study were selected from entry, mid, and senior level positions within conservation agencies or organizations that operate on varying scales in Kansas. Four focus disciplines are parsed from the broad term “conservation” and include 1) agriculture and working lands, 2) wildlife, 3) parks and recreation, and 4) environmental education, with the intent to gain equal representation from collectives within the categories and to examine nuances between conservation agencies or organizations with differing goals and priorities. Potential participants were selected based on their 1) primary professional function as a conservation collective, 2) lived experiences to inform applicable sentiments, and 3) connections to the direct funding agency of this research, Kansans for Conservation. Individuals identified from this purposive technique were systematically contacted by researchers with standardized, consistent messaging. Participants verified their voluntary intent to be interviewed and acknowledged all included research conditions.

Interviews ($N = 27$) averaged 60 to 90 minutes in length and were conducted via a phone call or video meeting. Per the qualitative foundation and semi-structured interview data collection method, all participants were presented with the same inquiries and probing was used, if additional information was detected by the present researcher(s) directing the dialogue. Interviews were conducted until saturation was achieved through consistent primary themes to

ensure representation was present across involved participants. All interviews were transcribed and analyzed using thematic data analysis to identify common themes among participant responses. For a topic to be considered a theme, at least 20% of the interviewees must have independently mentioned the topic.

This study adheres to the ethical guidelines set by Kansas State University’s Institutional Review Board (IRB-12389).

Findings

Participant Profile and Professional Characteristics

To understand involved research participants, individuals were asked demographic questions in addition to inquiries related to their role in their agency or organization (Table 1). Of the participants ($N = 27$), most (60%) were male. Ages ranged from 30 to 65. All participants identified as white.

As seen in Table 1, each participant’s code name contains a series of letters and numbers. Each letter represents the participant’s conservation focus area(s), listed in order of self-reported prominence within their work, followed by a number that represents a sequential count. The focus areas are agriculture and working lands (A), wildlife (W), parks and recreation (P), and environmental education (E). All participants were in roles of leadership within their entity. Years in their role varied from six months to 35 years. Geographic coverage of the entities’ conservation work included city, county, regional (i.e., multi-state), and national levels. We asked participants to identify how many full-time equivalent (FTE) employees are dedicated to conservation work in their organization. Many participants also reported how many part-time employees and volunteers contribute to their entities’ conservation initiatives. Responses spanned from FTEs to volunteers, ranging from 100 FTEs to less than 1 FTE.

Table 1. *Demographics of Participants and Their Entities.*

Code Name	Years in Role	Geographic Coverage	Number of Staff Dedicated
AEPW01	3	State	40 FTEs, 60 part-time, 4 volunteers
AEPW02	4	State	18 FTEs
PE03	10	Regional	3.5 FTEs
AWPE04	23	Regional	16 FTEs
P05	11	State	3 FTEs
E06	26	State	5 FTEs and 1 part-time
P07	7	City	31 FTEs (350 seasonal workers)
P08	12	City	14 FTEs (6 part-time, 250 seasonal workers) parks and recreation, 3 environmental education staff, 10 part-time, hundreds of volunteers
E09	12	City	14 FTEs (6 part-time, 250 seasonal workers) parks and recreation, 3 environmental education staff, 10 part-time, hundreds of volunteers

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Code Name	Years in Role	Geographic Coverage	Number of Staff Dedicated
W10	13	County	5 FTEs managing natural resources, 3 part-time
E11	1	National	1.5 FTE (50-60 volunteers giving 2,000 hours of service annually)
AWPE12	8	State	5 half-time workers (Agriculture/working lands), 5 FTEs (Wildlife), 1 FTE (Parks and recreation), and less than .3 FTE (Environmental education)
WEP13	10/3.5*	City	40 FTEs (Parks and recreation) 1 FTE, 1 part-time, and 3 seasonal (Environmental education)
P14	6	County	100 FTE (44 for parks and recreation)
E15	18	Regional	1 FTE
P17	16	County	65 FTEs (In division) and 340 FTEs (Whole department)
AW18	10	Regional	Less than 1 in Kansas
A19	1	State	60-75 FTEs
AE20	7	State	150 FTEs
AW21	24	Regional	25 FTEs
AEWP22	35	State	208 personnel members within the organization
AE23	13	State	25 FTEs Partner organizations: 2 people, 15 people
AWPE24	1	State	500 members (All volunteers)
WPE25	10/6 months*	County	30 FTEs (1 dedicated to conservation)
EPA26	5	State	1.5 FTEs, 2 graduate students (Environmental education), 1 graduate student (Parks and recreation), and 5 FTEs (Agriculture/working lands)
AWE27	4	State	2 FTEs in organization partners with hundreds of developers
AE28	3	State	23 FTEs

Note: *Two personnel from the same entity were interviewed together but their responses are counted once in the results.

Agency or Organization Capacity and Budget Characteristics

Participants were prompted with the question, “Where, if at all, do you think your agency/organization has low/limited capacity?”. Table 2 represents various responses provided, but overwhelmingly, findings convey the evident role of funding and staffing in consideration of many capacity issues shared by participants. The most predominant being the *lack of funding for conservation* ($n = 16$), including the lack of matching funds available to tap into additional funding sources. The lack of funding impacts *limited staffing* ($n = 15$) which includes an inability to hire more staff, find skilled labor, or expand current staffing capacity to deliver more conservation programming. Many participants expressed their frustrations with the lack of *incentives to retain employees and producers* in conservation roles and programming ($n = 6$).

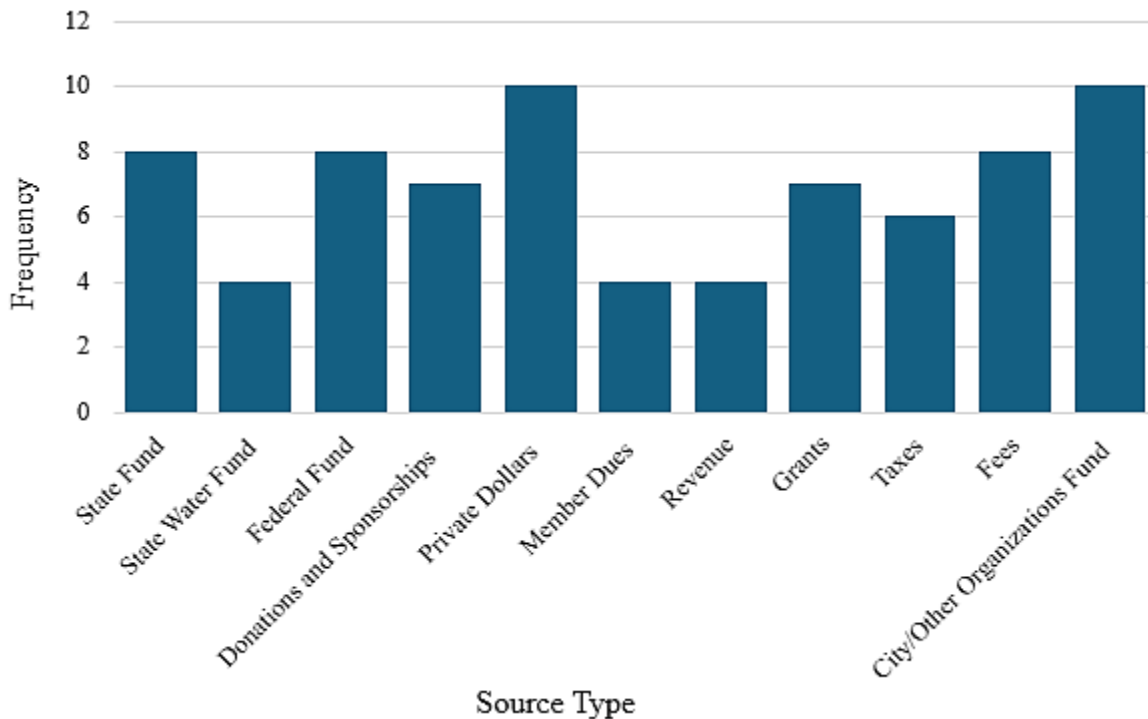
Table 2. *Low or Limited Capacities Identified on the Entity Level.*

Theme	Frequency	Participant Quotes
Limited funding for conservation	16	<p>... very limited, reliable state funding our agency, when we've compared our agency's funding with a lot of similar agencies, state forestry agencies across the country, we're typically right there at the bottom terms of proportion of our funds that come from the state... – AEPW01</p> <p>It's always about dollars. – P17</p> <p>A big limiting factor in Kansas specifically is a lack of that non-federal match... there isn't a whole lot of opportunities to leverage state funding to access those federal grants and programs that are out there. – AWPE12</p>
Limited staffing	15	<p>I would say we're always limited by staffing, which goes back to funding. – PE03</p> <p>From our standpoint, is probably staffing. We need some additional dollars for staff. – AE20</p> <p>We need more contractors to help us expand the scope of what we're doing, and the state doesn't have a lot of people that can do, like, high quality conservation work. – W10</p> <p>There are more students at more teachers asking for programming than I can handle. – E11</p>
Incentives to retain employees and producers	6	<p>Need to be able to pay for that [conservation] work and incentivize producers to adopt those practices. – AWPE12</p> <p>It's difficult to retain them and built experience at the local level. – A19</p>

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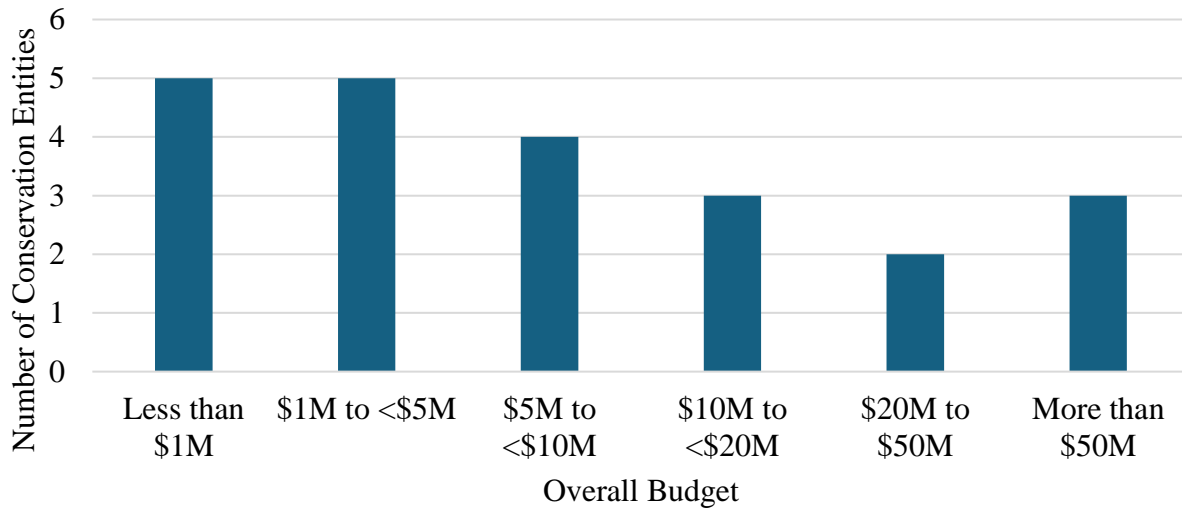
Participants were asked, “What are the funding sources for your agency’s/organization’s conservation efforts?”. Figure 1 illustrates the diverse sources of funding for the range of agencies and organizations, highlighting the frequency of appearance for each source. *Private dollars and city/other organization funds* are the largest contributors ($n = 10$). *State funds and federal funds* also play a significant role for many included entities ($n = 8$), alongside *fees*, which provided the same amount ($n = 8$). *Donations and sponsorships*, as well as *grants*, contribute a sufficient portion ($n = 7$), showcasing the importance of external partnerships and support. Lastly, taxes followed the referenced sources above with contributions for a portion of collectives ($n = 6$). Overall, this distribution emphasizes a need for more scaled funding within these identified entities.

Figure 1. Funding Sources Identified by Participants.



We asked each participant to report their entity’s average, overall annual budget for the last five years. Of those who chose to report ($n = 22$), budgets ranged from \$120,000 to \$107 million. Figure 2 categorizes all reported budgets.

Figure 2. Overall Budgets of Entity as Reported by Participants.



Of the participants who reported a budget, 13 represented non-governmental organizations. Of those, 69% ($n = 11$) operate on a budget of less than \$3 million. Of the NGO participants, 62% ($n = 8$) operate with a staff of five or fewer FTEs.

Participants were asked, “What trends do you perceive to be present within your agency’s/organization’s budget for conservation?”. Table 3 highlights key themes identified in responses related to what participants found present when looking at their budget for conservation and reflecting all four focus areas within this research (i.e., agriculture and working lands, wildlife, parks and recreation, and environmental education). The most prominent theme which arose from participant sentiments includes the presence of *fluctuating conservation budgets and the need for diversified funding* ($n = 13$). Secondly, some agencies and organizations received *slight increases in their overall budget, but specifically for water-based efforts in the state* ($n = 9$); therefore, representing a particular portion of conservation, but not the representative sum and array of areas conservation entails. This reflects the presence of targeted or tailored funding for specific areas of conservation but highlights the persistent instability in funding not only for the range of agencies and organizations working to address natural resource and community needs through varying temporal and spatial contexts in Kansas, but conservation overall.

Table 3. Trends Found in Reported Budgets by Conservation Agencies and Organizations.

Theme	Frequency	Participant Quotes
Fluctuating conservation budgets and diversified assistance is needed	13	<p>...it's kind of ebbs and flows for sure, not very steady or reliable. – WPE12</p> <p>There is no pot of environmental education funding in the state. There are other states that do have pots for environmental education funding in the state specifically so it's, I'm trying to think of an example of a state that does it. I feel like Iowa had it for a long time. I don't know that they still have it. But they did have environmental education funding that they distributed on a yearly basis through their state. We don't have that. We do not have that in the state of Kansas. – E06</p> <p>However, I would hope in the future, with more conservation education, environmental education, that an exposure to our programs, that we would see that grow in the future. – WEP13</p>
Specific funding increases for water-based initiatives	9	We're in the third year of enhanced funding for conservation and water. – A19

Agency or Organization Funding Priorities

We prompted our participants with the inquiry, “Please describe the types of conservation projects your agency/organization prioritizes for funding”. Across all conservation focus areas, the primary need described by participants was *landowner/producer natural resource management programs and assistance* ($n = 16$; Table 4). Many participants operate within collectives that focus on providing planning assistance and outreach to landowners to assist in the adaptation of conservation practices on private land. The second most prominent priority is *outdoor recreation opportunities* ($n = 8$), with an overwhelming number of these participants prioritizing trail development and maintenance. *Water conservation* ($n = 6$) priorities were also discussed, with many participants discussing the importance of preventing sediment from washing into reservoirs. Lastly, *environmental education* ($n = 5$) was reported as a priority in the sense of creating a future where people are aware of, and care for, natural resource issues.

Table 4. *Types of Conservation Projects Prioritized by Agencies and Organizations.*

Theme	Frequency	Participant Quotes
Landowner/producer natural resource management programs and assistance	16	<p>We offer the planning assistance for all kinds of different parties, whether it's a private landowner or a city or a fire department, whatever it is, we offer really good planning at no cost to them to make sure that what they're going to do is be successful. – AEPW01</p> <p>The majority of programs are programs that go directly to producers. – A19</p> <p>Most of our emphasis, of course, on private lands, working with our individual farmers and ranchers in each of the each of the counties, and working through with the conservation districts is the primary delivery system. – AE20</p>
Outdoor recreation opportunities	8	<p>Trails has definitely been the priority. – P14</p> <p>... the primary focus, both historically and going forward, has been recreation. So, we look at maintaining the trail system as I think, the number one priority... – WPE25</p>
Water conservation	6	<p>... we focus on reservoir water supply and sedimentation. – AE28</p> <p>...projects are focused on water quality and above our priority reservoirs and keeping sediment out. – AEPW02</p> <p>We're doing riverbank restoration projects. – PE03</p>
Environmental education	5	<p>Lack of education. That's, um, mainly, mainly with all Kansans, and that is what we have consistently heard, is we need resiliency for our water supply. We want to make sure that we have enough water for future generations and for our communities, our landowners, our producers, but also, we need that education for just Kansans in general... – AEPW02</p>

When participants were asked, “What types of projects has your agency/organization been unable to fund?”, the most prominent theme includes *implementing new programs or significant program expansion* ($n = 11$; Table 5). Responses within this theme vary greatly between the four focus areas. An additional prominent theme when considering unfunded projects involves sentiments regarding being *unable to meet program potential* ($n = 10$), where within most of the responses, agencies and organizations have appropriate, refined programs

available, but do not have sufficient staff, funding quantity, or funding consistency to implement these programs effectively.

Table 5. *Projects Entities Have Been Unable to Fund.*

Theme	Frequency	Participant Quotes
Implementing new programs or significant program expansion	11	I do know that lots of trails get unfunded every year across the state. – P05
Unable to meet program potential	10	We have been up to this point, really unable to fund meaningful cost share work for practices on the ground. – AEPW01 We were providing grants to these feed lots in western Kansas to improve the efficiency of their water systems for stock water. – A19 We could have done a lot more conservation easement. – AW21

We then asked participants, “Why were you unable to fund those projects?”. Overwhelmingly, participants responded with the statement that a *lack of funding* ($n = 17$; Table 6) is the consistent hindrance to their ability to incorporate new efforts and/or expand existing initiatives. This reasoning was expressed as not only an influential factor in their short- and long-term operations, such as through a lack of matching funds, but in the capacity to increase partnerships (e.g., amplifying and investing in new connections). Further, the presence of funding was noted by participants as a potential considered factor within the decision-making processes of stakeholders based on their desire to acquire additional support from agency or organization resources, such as programs, but may choose to not pursue involved conservation offerings per a reduction in monetary support.

Table 6. *Reasons for Being Unable to Fund Projects.*

Theme	Frequency	Participant Quotes
Lack of funding	17	We've not been able to fund our partner. – P07 ...the amount that we were able to offer probably left many of them wanting more and maybe not even interested in the program. – A19 If we don't have the money, we can't afford the staff, and we can't really do anything, – E15

Agency or Organization Conservation Needs

We asked participants, “What do you perceive as the most important conservation initiative needs that are unmet concerning your agency/organization?”. As shown in Table 7, across all conservation focus areas, the most prominent need described by our participants ($n = 12$) were issues regarding *water resource management and restoration*. Participants described a need to enhance programs and funding for Ogallala Aquifer recharge efforts, wetland restoration, sedimentation mitigation, stream bank restoration, stormwater management, and responsible water usage by all stakeholders. The second most prominent ($n = 7$) theme was producer-oriented conservation programs. These programs allow for the delivery of conservation solutions to be implemented at the farm or ranch level. According to participants, programs need to be expanded to include more types of conservation projects as well as opportunities for producers and conservation organizations to build relationships. The final theme that was repeated by participants ($n = 5$) was invasive species control. Our participants were concerned with a variety of plants threatening the conservation of state resources, including all types of woody encroachment as well as the spread of Asian bush honeysuckle, *Sericea Lespedeza*, and Old World bluestem.

Table 7. *Most Important Unmet Conservation Initiative Needs at the Entity Level.*

Theme	Frequency	Participant Quotes
Water resource management and restoration	12	<p>I think the biggest areas of growth in Kansas would be western Kansas, the Ogallala Aquifer, working to recharge and get playa wetland restoration are a big focus of our programs that we would like to see ramped up to offset the loss in the Ogallala Aquifer. In eastern Kansas, it would be wetlands for water quality, working on some of these areas that have algae blooms, nitrate and phosphorus problems, sedimentation problems, that's an area of growth that we see. – AWPE12</p> <p>We're going to need to establish some policies that encourage water conservation and responsible usage. Also, public awareness and education will be needed in order to just increase the community's knowledge about the importance of water conservation and sustainable practices...” – AEPW02</p>
Producer-oriented conservation programs	7	<p>Farmers and ranchers have something they want to do in the conservation world on their property and they don't fit any of the Farm Bill programs, so they don't get it done. – AWPE24</p> <p>Funding for producer-oriented conservation programs that also help us with larger goals, like conserving the Ogallala or improving the stability of our reservoirs through better management practices. – A19</p>

Theme	Frequency	Participant Quotes
Invasive Species Control	5	<p>The biggest challenge we have in terms of conservation is just invasive species management. – WPE25</p> <p>We have a major issue with invasive plants in our woodlands in eastern Kansas [...] our ability to have forest management plans with those landowners to ensure those forests stay healthy and will stay as forests going in the future is really limited. – AEPW01</p> <p>Funding for woody encroachment, control and reversal, and then funding to address invasive species - namely <i>Sericea Lespedeza</i> and Old World bluestem. – AW21</p>

We followed up the previous question by asking what participants perceived as barriers to meeting the conservation needs, they described. Overwhelmingly, *funding availability* was the most prominent barrier described by our participants ($n = 18$) as shown in Table 8. Based on the data, dollars are needed to complete projects, hire people, deliver programming, provide incentives, leverage as match for additional funds, and otherwise expand the scope and impact of each entity’s conservation work. Funding was tied to the second most prominent barrier, *labor capacity* ($n = 10$). Participants described not having enough staff, volunteers, or available contractors to complete the conservation work they are expected or would like to do. Programs are understaffed, stunting their capacity for delivery. Another barrier to meeting conservation needs is *stakeholder understanding of the need for conservation efforts* ($n = 7$). There is a sense among some of the participants that increasing understanding of conservation issues, through education, among communities, the public, and elected officials is needed to make progress on the unmet needs our interviewees described.

Table 8. *Barriers to Addressing Conservation Initiative Needs at the Entity Level.*

Theme	Frequency	Participant Quotes
Funding availability	18	<p>I think the major barriers are stable, predictable funding that is linked to our capacity to continue to provide important resources for people. – AEPW01</p> <p>It's all funding. All funding, based all of those [unmet needs] are a lack of funding to complete those projects and get them off the ground – PE03</p> <p>I think it's the funding limitations of that, and that's where I think we from a state level, it's difficult for us because we're confined within our budgeting processes that we have at the state level. – AE28</p>

Theme	Frequency	Participant Quotes
Labor capacity	10	<p>If I don't have staff, I can't do anything. – E15</p> <p>[The barrier is] full time staffing and conservation contractors [...] it's just not enough people to cover 9,000 acres. – W10</p> <p>[The barrier is] technical assistance, having those folks out there on the ground, working with the farmers and ranchers. – AE20</p>
Stakeholder understanding of the need for conservation efforts	7	<p>[The barrier is] elected officials also understanding the need, understanding the benefits of them [conservation efforts], and then, I think the elected officials having the confidence to fund those sorts of projects. So, I don't know that it's just a pure dollar barrier. I think it's more of a do they understand how important these things are and what impacts they can have. – WEP13</p> <p>I think it's [the barrier] community buy-in and I think it's educating local elected officials on the need for this [conservation effort], and to be able to express and educate, what future development will look like, even in terms of economic impact. – P07</p> <p>[The barrier is] more and better outreach and education and programming that puts conservation delivery on the ground. – AW18</p>

We then asked participants to consider beyond the borders of their entity's objectives and programs, "What do you perceive as the most important conservation initiative needs that are unmet in the state?". Like other findings, water was the main unmet conservation initiative need ($n = 15$; Table 9). Participants viewed *water availability, quality, and quantity statewide* as a cross-cutting issue, no matter the focus within conservation. Data analysis revealed participants regard water conservation as the priority given that it affects every person in the state, whether they identify as a community member, farmer or rancher, public servant, or otherwise. The second most prominent unmet need was *access to public land* ($n = 8$), shared mostly by participants whose background is in environmental education, wildlife, and parks and recreation focus areas. Our interviewees were most concerned with making existing public land accessible for all, as well as having more land, in general, available for the public to access. The final unmet need repeated by interviewees was grassland management ($n = 5$). Despite the importance of the Great Plains ecosystem and the amount of grasslands that are privately owned in Kansas, participants described working lands as overlooked by conservation initiatives and funding.

Table 9. *Most Important Unmet Conservation Initiative Needs at the State Level.*

Theme	Frequency	Participant Quotes
Water availability, quality, and quantity statewide	15	<p>I think from a broad umbrella, it'd be water. [...] How can we improve water availability, quality, quantity, statewide? Well, that's probably number one. – AWPE12</p> <p>I think really the big cross cutting issue is water. I mean, water is for agriculture, for city water use, municipal water use, for everything. - AEPW01</p> <p>Water is a number one priority issue for so many people in the state and doing good water education is so important. – E06</p>
Access to public land	8	<p>It's access to public land. We're 49th out of 50 states for public land, and so what little public land we have should be 100% publicly accessible, and it's not. – PE03</p> <p>I would say the trails are probably the most in demand. We can't keep up at all with the demand. – P05</p> <p>I think state park funding, conservation funding at a state level needs to be drastically improved to just stabilize the current park land. – W10</p>
Grassland management	5	<p>The prairies are central to the continent, and people are really counting on Kansas to maintain prairies and prairie populations. – AWPE04</p> <p>One area that we often think is overlooked [...] is for grasslands and grassland management. – A19</p>

We followed up the previous question by asking what participants perceived as the barriers to meeting conservation needs, they described at the state level. Many participants ($n = 14$) reiterated funding as a barrier to unmet conservation needs, so they did not elaborate as much on their answers to this question (Table 10). Similarly, to barriers of unmet, entity-level conservation needs, funding in general was cited as the most prominent barrier to meeting priority conservation needs at the state level. In essence, as AE20 said, “*It all comes down to dollars*”. *Dedicated staff capacity* ($n = 9$) was mentioned as the second most frequent. Participants focused on the limited capacity of conservation entity staff who are often dealing with competing focuses which constrain their ability to deliver conservation efforts to stakeholders. Education was a barrier characterized by participants as *stakeholder understanding of conservation challenges and solutions* ($n = 7$). At the state level, interviewees described those stakeholders as the public, as well as landowners and producers. According to participants, there is a lack of understanding among these groups about conservation issues, solutions they could implement, and why they should do so.

Table 10. *Barriers to Addressing Conservation Initiative Needs at the State Level.*

Theme	Frequency	Participant Quotes
It all comes down to dollars	14	<p>Making sure we have the funding to support producers that want to take actions to improve their land, and just making sure that we have the data to show the return on investment that those practices are providing. – A19</p> <p>Building trails is expensive, more expensive than people realize. So, funding is the biggest issue. – P14</p>
Limited staff capacity	9	<p>It all comes down to dollars – AE20</p> <p>The biggest barrier for me is, and not just us, for everybody [...] for every single person who has anything role with water quality and quantity has very limited capacity to give assistance to landowners. - AEPW01</p> <p>The barrier is there's so many different avenues of reaching people that it's hard. It's very difficult for one agent. To do, and so it's going to need to be a collaborative effort and making sure that the message that we share is the same. - AEPW02</p> <p>They [conservation entity staff] have other competing focuses that they work on. And so, for example, our conservation district folks do an amazing job of providing education, but it's only a small part of what they do. They have a whole host of other things that they're responsible for doing. – E06</p>
Stakeholder understanding of conservation challenges and solutions	7	<p>I also agree that it's public awareness and understanding of the challenges and of the solutions that would create a change in attitudes and behaviors towards both the species and the habitats to be able to live. – WEP13</p> <p>Just an education of how, why it's important, and what these new [conservation] approaches could mean for our environment. – E09</p> <p>I think there's a big need for additional farmer and rancher education on conservation opportunities that exist on their own lands that they just don't recognize at this point. – AWPE24</p>

Missed Opportunities and Associated Outcomes

To estimate the material and non-material costs of missed opportunities for conservation initiatives, we asked participants, “What is the cost of the missed opportunities created by unfunded projects and/or lack of resources? What numeric value, if any, could you assign to those costs?”. Many participants focused on the non-financial, non-material costs of missed opportunities (Table 12). When asked specifically about assigning a dollar figure to missed opportunities, those who did answer the question (Table 11) shared the sentiment ($n = 12$) stated by AE28 that it is, “*Tough to put an actual figure on that.*”. Participants who did attempt to quantify the financial cost described in terms of *millions of dollars* ($n = 6$). These participants described spending on conservation as a smart investment because there are valuable financial returns for communities and avoided increased future costs.

Table 11. *Quantifiable Costs of Missed Conservation Opportunities Created by Lack of Resources.*

Theme	Frequency	Participant Quotes
Tough to put an actual figure on that	12	Tough to put an actual figure on that. – AE28 I don’t know how much we are really missing out on there. - EPA26
Millions of dollars	6	That would be a hard, hard question to answer. – E09 Millions of dollars could potentially be lost by a lack of conservation. [...] The economic impact is very significant, especially when they're spending the night in our community, they're shopping, they're eating, they're getting gas, all of these things. They're spending time, and they're spending, you know, dollars in our community. So, it's millions. – P07 It's really hard to characterize this in terms of dollars, but we know the scale of this is 10s of millions of dollars, based on the work we already do supports 10s of millions of dollars in value being able to do a little bit more work we know, you know, exponentially increases the value we can help provide. – AEPW01 You could make the argument for lots of other pieces, [...] we put off a solution until it becomes so big that now we're talking, you know, multi, multi-million-dollar projects. – WEP13

Participants were asked “What is the cost of the missed opportunities created by unfunded projects and/or lack of resources? What are the non-financial costs of missed opportunities?”. When considering non-financial costs, participants reported that a primary outcome involves the interconnection of *tangible and intangible impacts from reduced capacity*

($n = 8$; Table 12). Specifically, due to reduced staffing, funding streams, and holistic support, participants shared that based on decreased opportunities to expand their efforts through tangible means, intangible effects have, and could, come forward through the long-term deterioration of environmental (e.g., degradation of natural resources) and social (e.g., community composition) factors in the state. Secondarily, participants also stated the *long-term degradation of Kansas natural resources* was an additional non-financial cost ($n = 7$). Similar to the production of tangible and intangible results from conservation-based decision-making and situations, participants highlighted the impact of rising costs for agencies, organizations, landowners, producers, and communities which are met with decreased levels of funding to address involved dilemmas and the growing concern of depleting integral natural resources in the state, such as preserving land in the Flint Hills through easements to prevent alternative land development actions. Lastly, participants also stated that *reduced education and public awareness* is an overall non-financial cost that proliferates in small- to large-scale choices of individuals ($n = 6$). Participants shared that a reduction in investment in informing current generations, could result in varying, future knowledge gaps and play a notable role in how both environmental and social factors are perceived; therefore, bringing to fruition a lasting impact in the natural and social landscapes of Kansas.

Table 12. *Non-financial Cost of Missed Opportunities Due to Unfunded Projects and/or a Lack of Resources.*

Theme	Frequency	Participant Quotes
Connected tangible and intangible impacts of reduced capacity (e.g., reduced staffing, funding, and support)	8	<p>I think it goes back to staffing, is, you know, being able to bring the adequate staffing needed to get to put the boots on the ground, to work with our farmers and ranchers. – AE20</p> <p>I think the cost is, is wildlife, wildlife populations, and that would continue to be on the decline, or that that is a cost, and I think that that is, as we always say, like that is an, it's both tangible and intangible, and I think in our world right now, with climate change, we start to see it become more tangible, because we are unraveling the pieces, the rivets on the plane, if you will, and so, I think we're starting to see the plane start to fall apart. So, I think that's the cost of not being able to do more. – WEP13</p>
Degradation of Kansas natural resources and forever impact	7	<p>...when you miss an opportunity to acquire a piece of real estate that is high in natural resource quality, it's gone forever...if you miss it, it's gone forever. – P17</p> <p>Let's say a landowner is advanced in age, and they're put on, like on a wait list of, hey, we'll do it when we see funds. And that landowner passes away, and it goes to his kids, and they're not as in sync with the value of those Flint Hills grasslands or Red Hills, or wherever you're at, and you're close to Kansas City...</p>

Theme	Frequency	Participant Quotes
<i>Cont.</i> Degradation of Kansas natural resources and forever impact		<p>...those kids just flip it. But if you know that elderly member who is able to access it, we can get that put in a in an easement, and you know, those are going to be preserved, as you know, Flint Hills, grazing lands from here to forever, and so, you're looking at, you know, the last of the 4% tall grass prairie in the United States stays that way. – AE23</p> <p>...seeing higher costs for our reservoirs and water supply, higher reduced water supply and our groundwater, reduced soil health, reduced grassland health...reduced productivity of those lands or increased input costs to those farmers. – A19</p>
Reduced education and public awareness (e.g., impacts to decision-making, effects on facilitated learning opportunities, and long-term knowledge implications within generations)	6	<p>I think it kind of goes back to the educational piece. People don't, people haven't been exposed to high quality outdoor natural spaces in Allen County, and so they don't recognize when their own land, if they are landowners, is slipping into lower and lower quality. It's being compromised. – WPE25</p> <p>I don't know how you assign a numeric value to the knowledge of a child...I am losing between 500 to 1,000 children, in, annually from the program who could be receiving programming education and knowledge that would that could be covered in the presence of sufficient classroom space. – E11</p>
Diverse short- and long-term community impacts	5	<p>...to the residents of Kansas, it's going to be their health and well-being is not going to be as well off, as it would be if you invested – P05</p> <p>...the culture and humans, they all depend on this stuff. You're talking about degradation of communities, kids not coming back to the state, industry not being interested in the state, because there's a limiting factor. The social fabric of western Kansas would probably unravel without sustainable aquifer. –AWPE04</p> <p>...that's a huge risk, is losing community members, you know, elsewhere, you know, potentially even out of state. So, I think that is a very significant risk and challenge that we'll, you know, continue to be faced with, and with that comes loss of economic activity, you know, and impact, which are all dollars that go back into our, you know, local communities to be able to fund things like conservation. – P07</p>

Agency or Organization Conservation Priorities and Utilization of Associated Funding

Lastly, participants were asked “If additional statewide funding for conservation was available for [agriculture/working lands, wildlife, parks and recreation, and environmental education], how would your agency/organization utilize it?”. Primarily, participants shared that additional statewide funding would allow for the opportunity to *increase the quantity of public land, implementation of associated, conservation-based management methods, and facilitate experiences* which align with all focus disciplines ($n = 14$; Table 13). Specifically, participants highlighted the ability to *expand their on-the-ground efforts* through measures involving wildlife habitat management, approachable conservation-related land uses (e.g., for landowners and producers), expanding recreational experiences, and motivating connections between communities and Kansas landscapes. As a second theme, participants also noted that additional statewide funding would provide beneficial opportunities for their agency or organization to *increase overall capacity* (e.g., amplify staffing, funding, planning, outreach, engagement, and partnerships) *and resiliency* considering evolving, complex environmental dilemmas ($n = 13$). Participants shared that through growth in capacity across disciplines, more individuals would be empowered with resources to fully address not only short-term tasks necessary for their day-to-day needs but address significant long-term efforts.

Participants stated a third theme in coordination with expanding the quantity and management of land in addition to overall capacity increases, which involves *producing outcomes which resonate on local- and state-based scales* ($n = 10$). Specifically, participants continuously amplified the need for large-scale decisions and impacts and the proliferation of attributes which touch the lives of all individuals and natural resources within the state.

Table 13. *Identified Future, Potential Efforts Within Agriculture and Working Lands, Wildlife, Parks and Recreation, and Environmental Education if Statewide Funding was Available.*

Theme	Frequency	Participant Quotes
Quantity of land and associated multiple-use focus	14	<p>...if you're talking about taking public lands and making them useful and want to so that people enjoy those properties and come out and use them. I think that's what we've been doing, you know, and I think that's what we would continue to do if we had state funding available. – P14</p> <p>Definitely putting more habitat on the ground, leveraging it with lots of grants and federal sources, non-federal sources, foundations, private philanthropy, definitely we would be able to multiply the dollars invested by the state. We would be very frugal with those, and prioritize them in the areas that would have the most impact, either for habitat or water or whatever the particular focus of those funds would be potentially increasing capacity where, where we were lacking, or reducing out of pocket costs to make it more some of these practices more approachable by producers and get increased adoption that way. – AWPE12</p> <p>...if we were currently going to remove 500 acres of an invasive plant in a given year, if we had additional funding, you know, we can push that goal further, and so, it just allows us to maximize the restoration and habitat work that we're able to do. –W10</p>
Increase holistic capacity across professional contexts to be adaptive in current and future efforts	13	<p>...our economies tend to grow, and we want them to grow, but I tend to always think as conservation is at this baseline level. And some, to some extent, that's a societal desire that, you know, people want money in their pocket, but the idea that conservation gets carried along with economic growth. I don't think that's really in there. So, for the legislators, something like, well, as the economy grows, the pie for doing conservation should also grow, and so, I think that that might be a change or an important message. – AWPE04</p> <p>We know that we do it through education, but it's an adaptive challenge. It means that it has to be done over time. There's not a quick fix for this, and that is how it's so different than the other conservation work that we're talking about. It's an adaptive challenge, and it's going to require creative thinking, and it's going to require multiple attempts at doing it. – E06</p>

Theme	Frequency	Participant Quotes
<i>Cont.</i> Increase holistic capacity across professional contexts to be adaptive in current and future efforts		If the legislature, anybody, wants to address conservation issues in Kansas, it's going to have to be done in a cross bound, meaningful landscape, you know, holistic way, as opposed to very specific, pots of money or colors of money that say this has to be used for deer, or this has to be used for wheat, or this has to be used for whatever I think, because the issues have blurry lines. The funding needs have blurry lines as well, on where it can go to be meaningful. – AEPW01
Develop and expand resources on local- to state-based scales for conservation	10	<p>I think if we're really going to make an impact, especially on public lands, it's got to be done at the local level. But funding is the challenge. Because, at the local level, we're fighting against the police department and the fire department, and water, and sewer, and all that. So honestly, conservation falls very, very low on that priority list for local government. – WEP13</p> <p>...identifying the best practices that we have in our toolbox and trying to highlight and enroll producers in those programs. – A19</p> <p>I think we're still trying to figure out, are we able to meet the needs? Like I said, the stock water piece, which is very, very small piece of that overall funding was the demand was over twice what the actual funding was. The funding sources would help our members figure out how to access, improve their operations, improve their conservation on the ground. – AE23</p>
Expanding education opportunities and resources for agencies, organizations, and all Kansans	8	<p>I feel like it would be our opportunity and our honor to convene environmental educators to really develop a statewide plan for how we're going to do this and to work collaboratively and develop the partnerships and the connections with each other, so that we're not working in silos in doing this, but rather, we're magnifying and multiplying the impact that we have because we'll work collaboratively together... – E06</p> <p>It's limitless. Education is interwoven into everything that we do, there would be so many projects that we could work on to increase the education about the Kansas River water quality watersheds. We could go on and on, but I could see us definitely playing a role in helping to advance Kansas water education. – PE03</p>

Theme	Frequency	Participant Quotes
<i>Cont.</i> Expanding education opportunities and resources for agencies, organizations, and all Kansans		I think we're constantly trying to remind consumers of the value of beef nutritionally, make sure folks know the environmental impact, or lack of environmental impact, that we have. I think that gets lost a lot of times, that if you look at a healthy grasslands, it involves ruminants and really, when you look at, so much emphasis put on carbon and climate change, but that our part of that carbon cycle is - we're a renewable resource within that. – AE23
Increasing efforts to connect with communities to proactively build stable, engaging partnerships	6	<p>...trying to collect information about the attitudes and beliefs and motivations of those different audiences before messages are grafted for enrollment... – AW18</p> <p>We just need to continue to help build their capacity. So, that would certainly be one area that I'd want to focus on, is a stable delivery system with through having stable funding for districts. – AE20</p> <p>I think we would, we would jump with the opportunity to put more dollars on the ground for landowners to get these things taken care of. – AEPW01</p>

Conclusions and Implications

The findings of this study underscore the vital role conservation agencies and organizations in Kansas play in shaping the future of the state’s natural and social landscapes. By exploring the perspectives of conservation professionals across diverse disciplines, the study highlights how historical and current dynamics inform the state’s capacity to address pressing conservation challenges. These insights not only reveal persistent barriers—such as budgetary constraints, limited staffing, and restricted funding streams—but also illuminate opportunities for innovative, forward-thinking strategies to foster sustainable conservation outcomes.

Participants consistently emphasized the critical need for stable, diversified funding as a cornerstone for growth and effective conservation efforts. The consequences of financial limitations extend beyond operational challenges, affecting the ability to pursue strategic goals, foster partnerships, and deliver on long-term commitments. However, despite these constraints, agencies and organizations in Kansas have demonstrated resilience and adaptability, employing creative approaches to maximize their impact. This ingenuity has enabled them to sustain essential services and programs, though the capacity to scale up efforts remains contingent on increased financial and human resources.

Looking ahead, the future of conservation in Kansas lies in fostering collaboration, innovation, and public engagement. Key opportunities include building interconnected networks of conservation partners to address shared challenges, enhancing educational outreach to raise awareness of conservation’s value, and ensuring equitable access to natural resources and recreational opportunities for all Kansans. These strategies can help protect the state’s landscapes and build a stronger sense of community and attachment to Kansas’s natural heritage.

Future research should include quantitative and qualitative explorations of more stakeholder perspectives on needed conservation initiatives and investments. Stakeholders of interest include all Kansas citizens, landowners and agricultural producers, as well as elected officials at all levels with an emphasis on engaging diverse partners in the research process. This approach would provide valuable insights into community priorities, awareness levels, and willingness to support conservation efforts, offering a critical lens for shaping policies and programs that resonate with the broader public. Additionally, exploring innovative funding mechanisms—such as public-private partnerships, community-driven investments, and strategies to enhance grant accessibility—could address persistent financial barriers for conservation agencies and organizations. Research should also examine the effectiveness of collaborative networks among stakeholders, analyzing how integrated efforts can amplify impacts across disciplines and regions. Longitudinal studies assessing the outcomes of conservation investments—both tangible, such as improvements in water quality and land restoration, and intangible, such as community engagement and environmental awareness—would further clarify the long-term benefits of such initiatives. Finally, comparative studies with other states facing similar challenges may uncover best practices and innovative approaches that can be tailored to Kansas’s unique environmental and social landscape.

Ultimately, our study affirms investments in conservation are investments in the long-term health and prosperity of Kansas. By addressing existing gaps and prioritizing inclusive approaches, the state can ensure its natural resources, and the communities dependent on them, thrive for generations to come. Through deliberate actions, informed decision-making, and sustained commitment, Kansas has the potential to become a model for balancing conservation with economic and social vitality, ensuring its legacy endures for all who call it home.

We sincerely appreciate each conservation professional who gave their time to discuss their perspectives and experiences with us. We thank Kansans for Conservation for funding this research.

Limitations

The findings do not encompass all the perspectives of Kansas conservation professionals and should not be generalized. Rather the findings provide in-depth insight into the perspectives of such people who are motivated to talk about conservation needs in the state. We invite you, the reader, to consider the transferability, the qualitative standard equivalent to generalizability, of the findings to contexts like those richly described herein based on the direct testimonies of participants⁷. If you find a connection between the study narrative and your own experiences, allowing you to apply the findings to your work, then transferability has been achieved⁸.

A non-random, purposive sample of participants was used because of fit for the study goal, knowledge of conservation needs in Kansas, and responsiveness to recruitment messages⁹. Though 27 personnel from across a variety of conservation entities with varying experience and focus areas said similar things in their interviews, a larger sample size representing more perspectives on conservation needs would expand these results. There are other external, unstudied factors attributing to responses which are explored in the suggestions for future research.

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