

# JCPRD Natural Resource Plan Update



Building a County Conservation Success Story





# JOHNSON COUNTY

---

## Park & Recreation District



The only special park district in Kansas.

7 million park visitors a year

10,243 acres of park land

2 million recreational program participants

151 miles of trails





# JOHNSON COUNTY

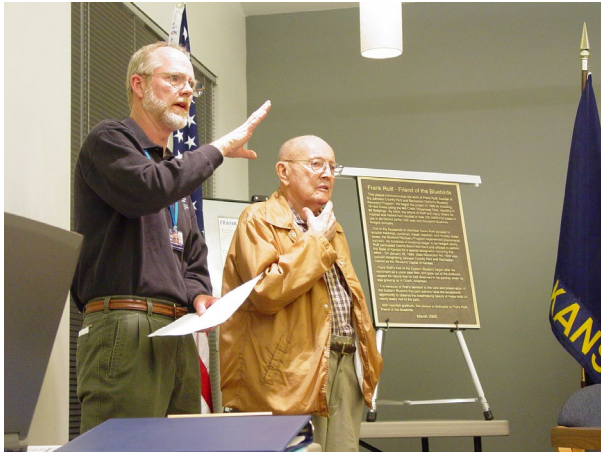
---

## Park & Recreation District

Bluebird Capital of KS due to the early success of the bluebird nest box program starting in 1990.

Program evolved from independent citizen action to formal program.

Extension Master Naturalist are key JCPRD partners in conservation.



# 2019 Natural Resource Plan

Identify Natural Areas owned by JCPRD

Specify how best to restore and regularly manage.

8,700 of 10,000 park acres are natural areas

Most of them the only refuges for high quality plant communities and uncommon wildlife.

Analyze the Natural Resource Program

Consultants analyzed the current program and benchmarked against 5 counties with populations over 350,000.

Community engagement

Created a stakeholder advisory panel for guidance and received 1,372 community responses.

Implementation and Funding

Created Priorities, Costs, and Phasing for district wide restoration projects. The park board has funded \$2.5 million dollars in additional funding since 2019.



# 2019 Natural Resource Plan

*The forests, prairies, waters, and wildlife in JCPRD's parks and streamways will be protected, restored, well-managed to be diverse and long lasting for the enjoyment of all people now and in the future.*

**Protect sensitive natural resources in order to foster resilient and biodiverse natural areas within JCPRD Parks.**

**Tell the ecological story of JCPRD Parks to inspire people through restoration.**



# Evolution of the Natural Resource Work Group



- Field Biologist hired December 2011**
- First resource technician hired 2018.**
- Natural Resource Plan adopted in 2019**
- Second resource technician hired in 2020**
- Third resource technician hired in 2023**
- Natural Resource Internship Begins 2024**



# 2019 Land Cover

Figure 2. Acreage of Different Land Covers in JCPRD Parks

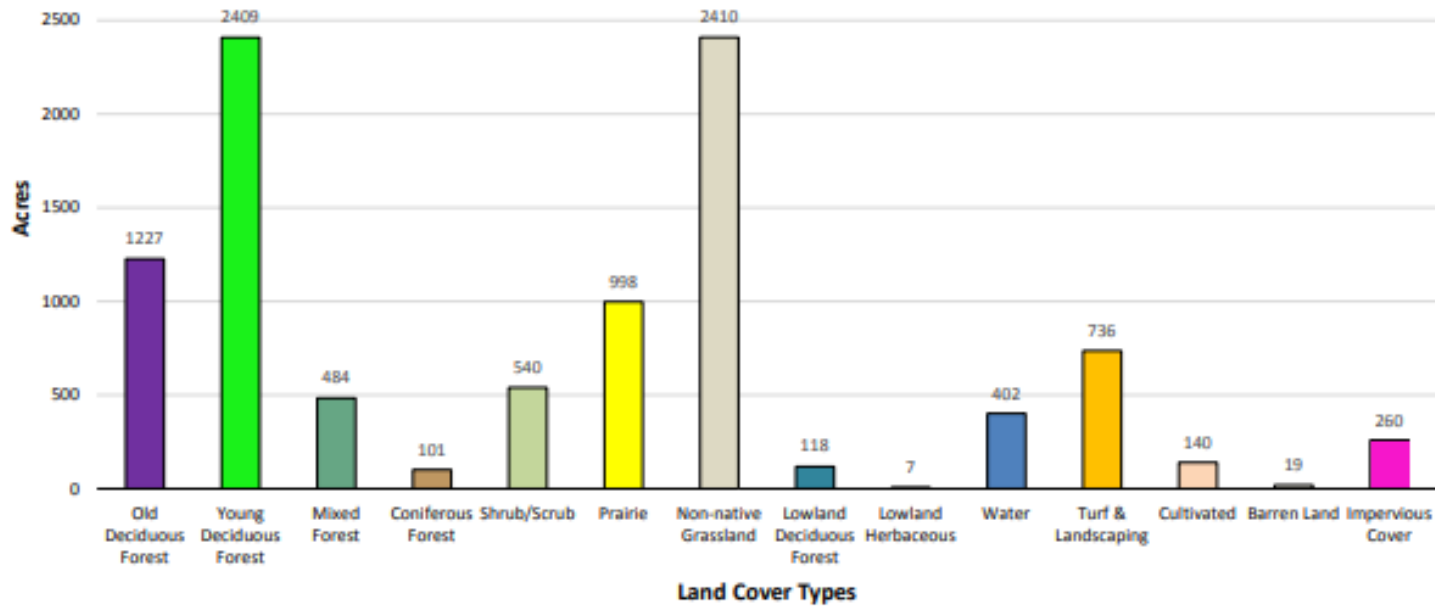


Table 2. Land Cover Types and Rankings in JCPRD Parks

Land Cover Type	Acres	Percent of Study Area	Global & State Priority Rank <sup>1</sup>
<b>NATURAL LAND COVERS</b>	<b>8,695.9</b>	<b>88.28</b>	<b>N/A</b>
<b>Upland Communities</b>	<b>8,169.1</b>	<b>82.9</b>	<b>N/A</b>
<b>Forest/Woodland</b>	<b>4,221.1</b>	<b>42.9</b>	<b>N/A</b>
Old Deciduous Forest	1,227.0	12.5	G2G3/S2
Young Deciduous Forest	2,409.1	24.5	GU/SU
Mixed Forest	483.6	4.9	GU/SU
Coniferous Forest	101.4	1.0	GU/SU
<b>Savanna/Brushland</b>	<b>539.9</b>	<b>5.5</b>	<b>N/A</b>
Shrub/Scrub	539.9	5.5	N/A
<b>Herbaceous</b>	<b>3,408.1</b>	<b>34.6</b>	<b>N/A</b>
Prairie	998.1	10.1	G2G3/S2S3
Non-native Grassland	2,410.0	24.5	N/A
<b>Lowland Communities</b>	<b>526.8</b>	<b>5.3</b>	<b>N/A</b>
Lowland Deciduous Forest	118.1	1.2	G3/S2
Lowland Herbaceous	7.2	0.1	GU/S1S2SU
Water	401.5	4.1	N/A
<b>CULTURAL LAND COVERS</b>	<b>1,154.9</b>	<b>11.7</b>	<b>N/A</b>
Turf & Landscaping	736.4	7.5	N/A
Cultivated	140.0	1.4	N/A
Barren Land	18.9	0.2	N/A
Impervious Cover	259.6	2.6	N/A
<b>Total</b>	<b>9,850.8<sup>2</sup></b>	<b>100<sup>2</sup></b>	

<sup>1</sup>Global & State Rarity Ranks (KNHI 2012): G=Global Rank; S=State Rank; 1=critically imperiled; 2=imperiled; 3=vulnerable to extirpation; 4=apparently secure, uncommon but not rare; 5=secure, common, widespread and abundant; U=unrankable; N/A=not applicable

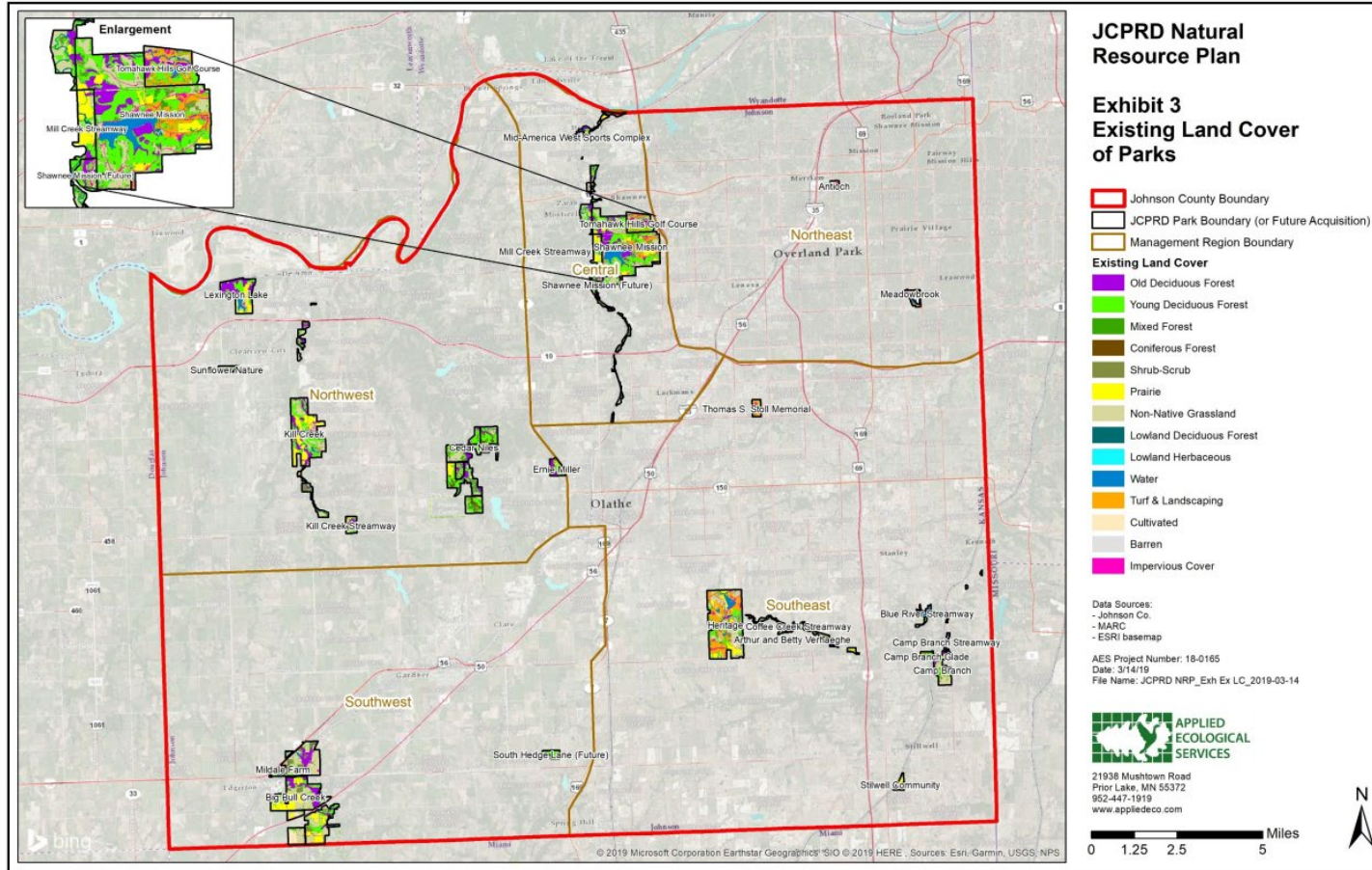
<sup>2</sup>Total not based on rounded numbers above.



# 2019 Land Cover

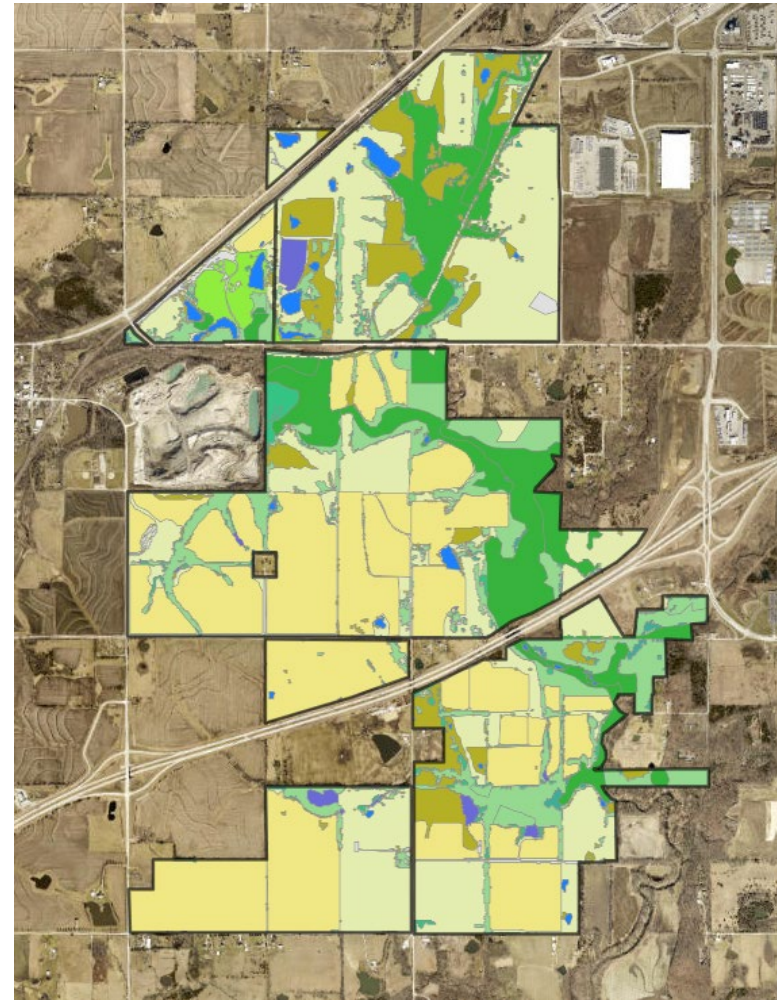
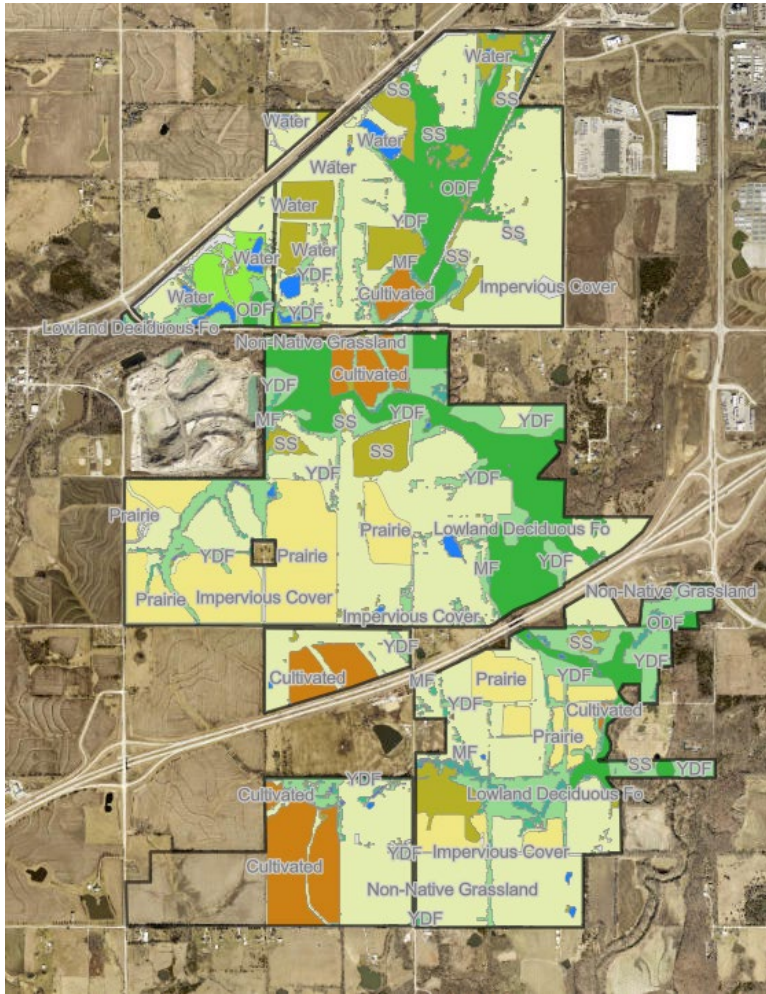
Exhibits

115





# 2019 Land Cover to 2024 Land Cover



# Restoration Philosophy

Figure 1. Generalized Cost of Restoration and Management Over Time

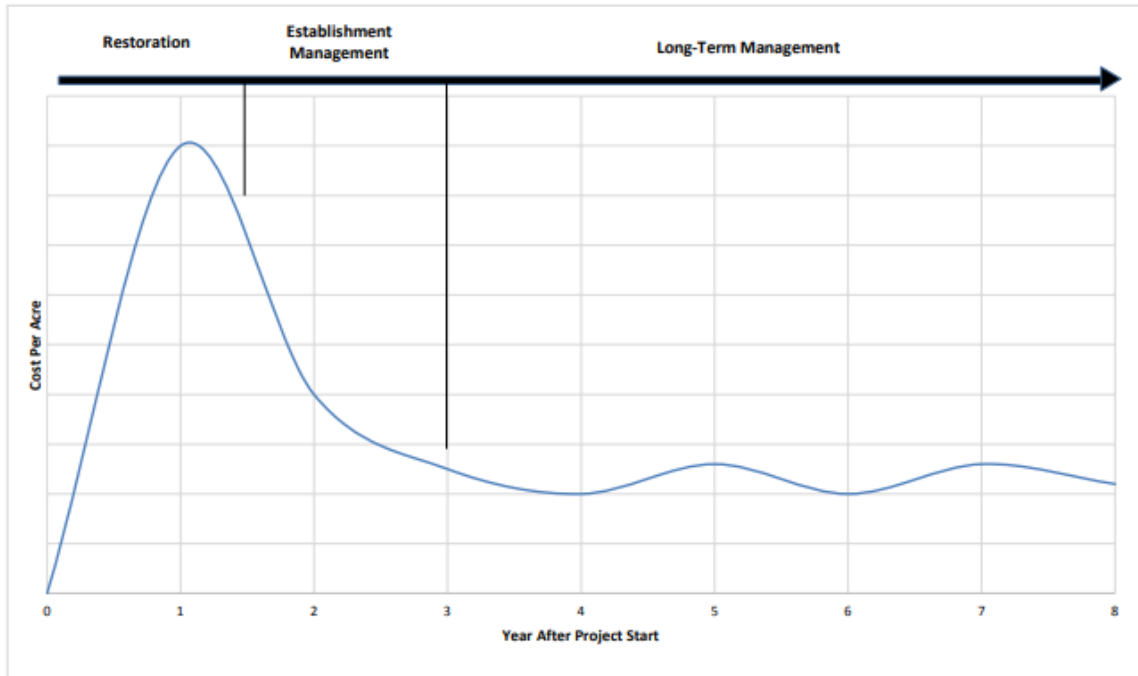
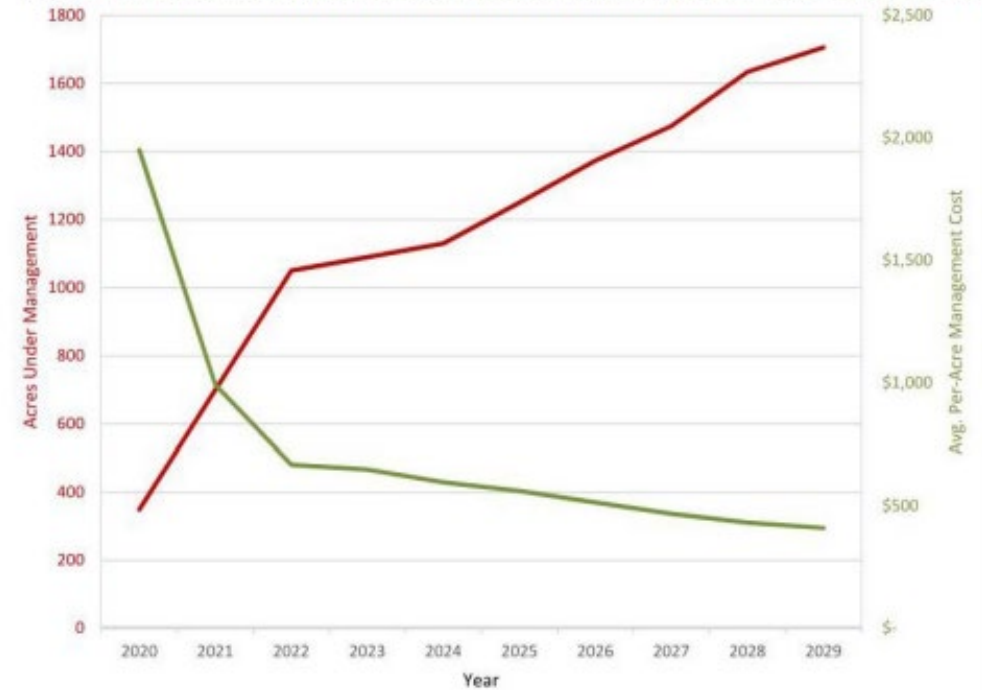


Figure 20. JCPRD Priority Terrestrial Project Acres Managed & Per-Acre Cost (2020-2029)



# Project Update



Table 18. 10-Year Phasing of Priority Terrestrial Projects (2020-2029)

Prioritization Rationale and Natural Areas/Parks	Natural Area Investments (ac)	Estimated Initial Resto & Mgmt Costs for Project	Year										Total Cost
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
<b>Prioritized Terrestrial Restoration &amp; Management Projects</b>													
SMP-Orange Violet Trail honeysuckle removal	200	\$400,000	★ \$133,200	★ \$135,864	★ \$138,581	● \$63,672	● \$64,946	● \$66,245	◆ \$33,785	◆ \$34,461	◆ \$35,150	◆ \$35,853	\$741,757
EM-Honeysuckle removal	70	\$175,000	★ \$58,275	★ \$59,441	★ \$60,629	● \$22,285	● \$22,731	● \$23,186	◆ \$11,825	◆ \$12,061	◆ \$12,302	◆ \$12,548	\$295,284
BBC-Large scale tree removals	140	\$280,000	★ \$93,240	★ \$95,105	★ \$97,007	● \$44,571	● \$45,462	● \$46,371	◆ \$23,649	◆ \$24,122	◆ \$24,605	◆ \$25,097	\$519,230
BBC-Prairie restoration	500	\$1,300,000	★ \$260,000	★ \$265,200	★ \$270,504	★ \$275,914	★ \$281,432	● \$165,612	● \$168,924	● \$172,303	◆ \$87,874	◆ \$89,632	\$2,037,396
CN-Honeysuckle removal	140	\$350,000	★ \$35,000	★ \$35,700	★ \$72,828	★ \$222,854	● \$45,462	● \$46,371	● \$47,299	◆ \$24,122	◆ \$24,605	◆ \$25,097	\$579,338
CB-Mission Road Property prairie restoration	80	\$208,000				★ \$44,146	★ \$180,117	● \$26,498	● \$27,028	● \$27,568	◆ \$14,060	◆ \$14,341	\$333,758
SMP-Oakridge Hills prairie restoration	90	\$234,000						★ \$258,355	● \$30,406	● \$31,015	● \$31,635	◆ \$16,134	\$367,544
KCP-Prairie restoration north of remnant	60	\$156,000						★ \$34,447	★ \$140,545	● \$20,676	● \$21,090	● \$21,512	\$238,270
SMP-South Shore honeysuckle	240	\$480,000							★ \$180,006	★ \$183,606	★ \$187,278	● \$86,047	\$636,936
BBC-North savanna restoration	40	\$220,000							★ \$24,776	★ \$126,355	★ \$103,106	● \$14,341	\$268,578
KCP-Prairie restoration	18	\$46,800								★ \$16,128	★ \$38,384	● \$6,453	\$60,965
SC-Wet prairie restoration	15	\$39,000									★ \$45,695	● \$5,378	\$51,073
MCS-Craig's Crossing woody removal	6	\$10,800									★ \$12,654	● \$2,151	\$14,805
CN-Cedar removal	70	\$210,000									★ \$49,210	★ \$200,776	\$249,985
CCS-Multiple small prairie restorations along streamway	37	\$104,440										★ \$124,815	\$124,815
<b>Total</b>	<b>1,706.3</b>	<b>\$4,214,040</b>	<b>\$579,715</b>	<b>\$591,309</b>	<b>\$639,549</b>	<b>\$673,443</b>	<b>\$640,150</b>	<b>\$667,086</b>	<b>\$688,243</b>	<b>\$672,418</b>	<b>\$687,647</b>	<b>\$680,175</b>	<b>\$6,519,735</b>

★ orange cells = Initial Restoration; ● green cells = Establishment Management (avg. \$300/ac/yr); ◆ purple cells = Long-term Management (avg. \$150/ac/yr); costs assume 2 percent annual inflation



# Project Update

**Hypothetically \$35.9 million to restore 8,400 acres in 2019.**



Table 17. Anticipated Restoration & Management Costs for All JCPRD Parks

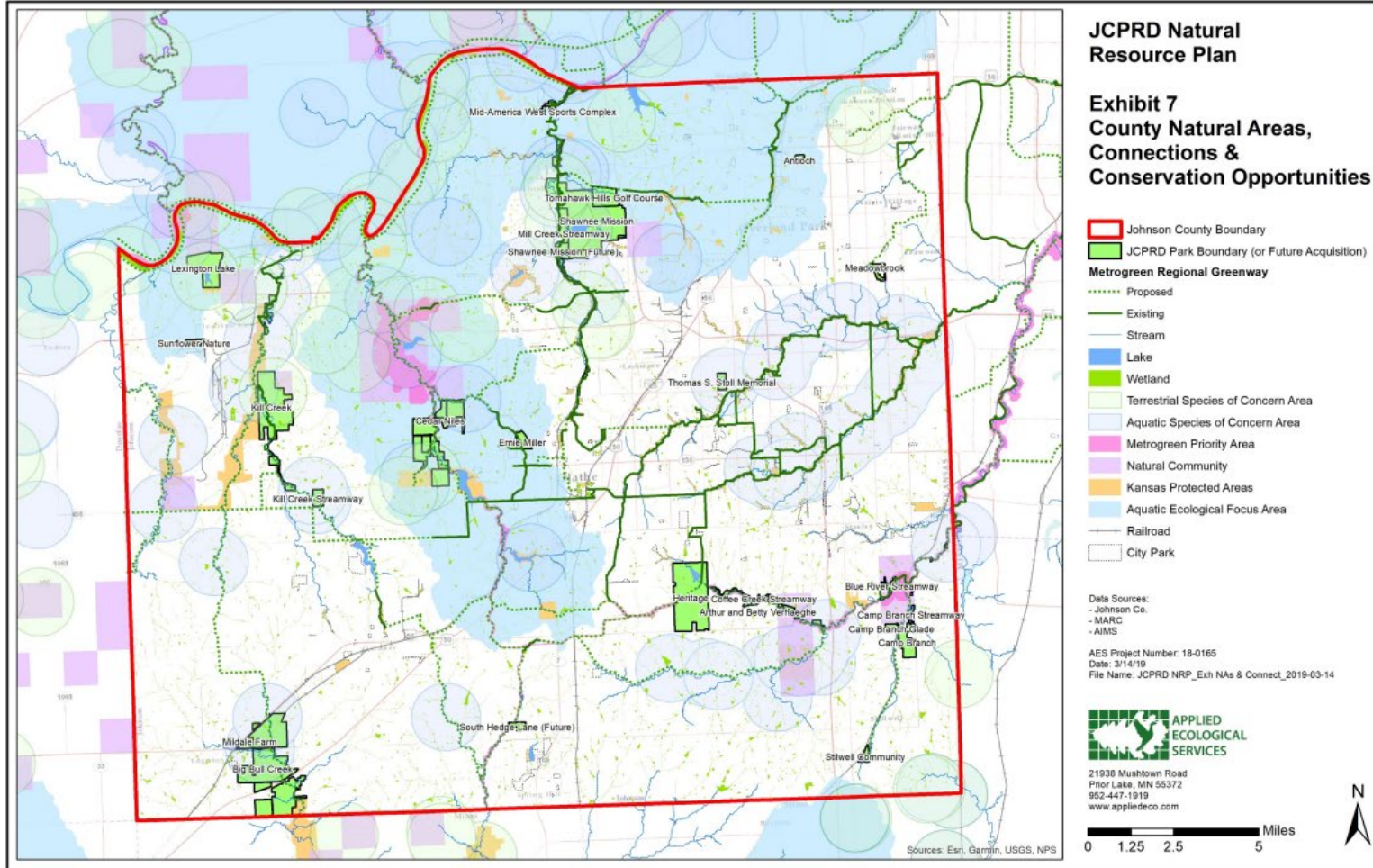
Park Name	Natural Area Investments (ac)	Estimated Initial Restoration & Management Costs for All Projects <sup>1</sup>
Antioch	8.2	\$49,748
Arthur and Betty Verhaeghe	32.2	\$ 162,034
Big Bull Creek	1,880.2	\$6,212,395
Blue River Streamway	49.1	\$ 266,027
Camp Branch	235.5	\$1,073,745
Camp Branch Glade	53.2	\$379,105
Camp Branch Streamway	29.7	\$179,129
Cedar Niles	1,091.8	\$5,953,831
Coffee Creek Streamway	158.1	\$825,056
Ernie Miller	114.1	\$618,879
Heritage	764.3	\$2,734,592
Kill Creek	843.3	\$3,105,439
Kill Creek Streamway	302.0	\$1,449,507
Lexington Lake	432.7	\$1,952,745
Meadowbrook	2.6	\$ 13,736
Mid-America West Sports Complex	23.1	\$105,349
Mildale Farm	3.7	\$20,080
Mill Creek Streamway	620.5	\$2,951,361
Shawnee Mission	1,265.5	\$5,673,548
Shawnee Mission (Future)	154.9	\$659,493
South Hedge Lane (Future)	60.6	\$291,489
Stilwell Community	51.8	\$157,670
Sunflower Nature	45.5	\$172,516
Thomas S. Stoll Memorial	21.1	\$148,417
Tomahawk Hills Golf Course	157.9	\$754,140
<b>Total</b>	<b>8,401.8</b>	<b>\$35,910,032</b>

<sup>1</sup> Assumes initial restoration and establishment management (usually first 3 years) conducted by professional ecological contractors; costs do not address long-term management.



# Project Update

Exhibits  
119



# 10 Year Project Update



SMP Orange Trail  
Honeysuckle  
Completed

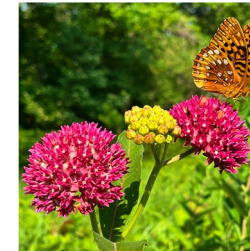


CNP Honeysuckle  
Removal  
Completed

EMNC Honeysuckle  
Completed



Bull Creek Prairies  
570 new acres, 28  
units



Bull Creek Tree  
Removal  
Completed

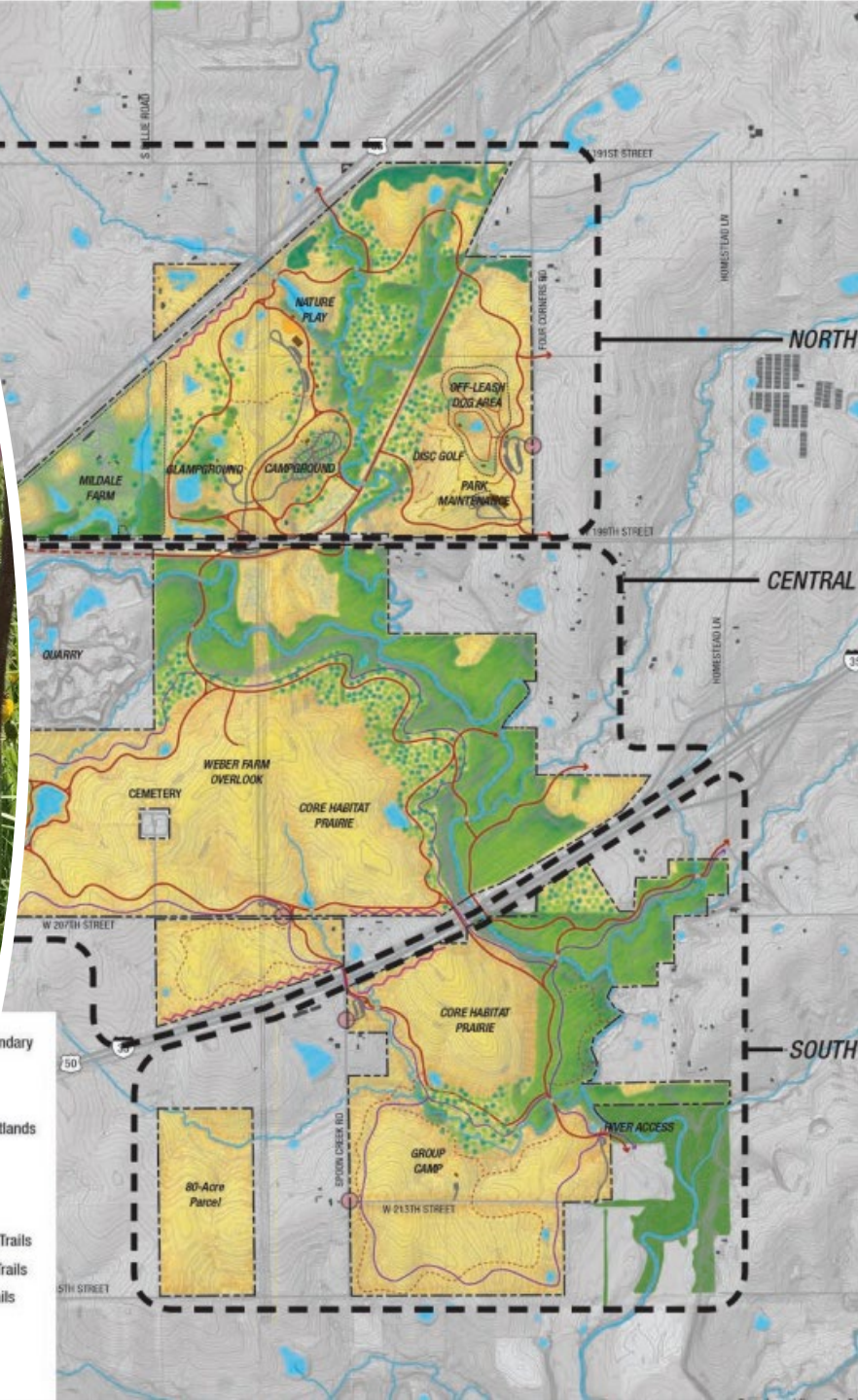


Oakridge Hills  
Prairies 30%  
completed



# Prairie Restoration- Bull Creek Project

- 7 Years into the project
- 570 acres completed
- Additional 100 planned for 2025
- Long term maintenance and staffing needs bolstered.



# Big Bull Creek Park Prairie Restoration

Breeding Bird Surveys  
indicate threatened species  
are using the 500+ acres of  
new habitat.







# Bush Honeysuckle Removal

Regional Leader in removing bush honeysuckle.

1000+ acres removed with staff and contractors at

- Ernie Miller Nature Center
- Cedar Niles Park
- Shawnee Mission Park



# Ernie Miller Honeysuckle Removal

- 116 of 116 acres cleared. Full Park!
- Extensive seedbank
- 10-year restoration project
- Seeding
- Shrubs
- Trees





# The PARKS & RECREATION FOUNDATION of JOHNSON COUNTY



2024 was the first year for the Natural Resource Internship funded by the foundation.

Strong Applicant Pool

Great first intern from K-state.

Helped extend the reach of growing season work.

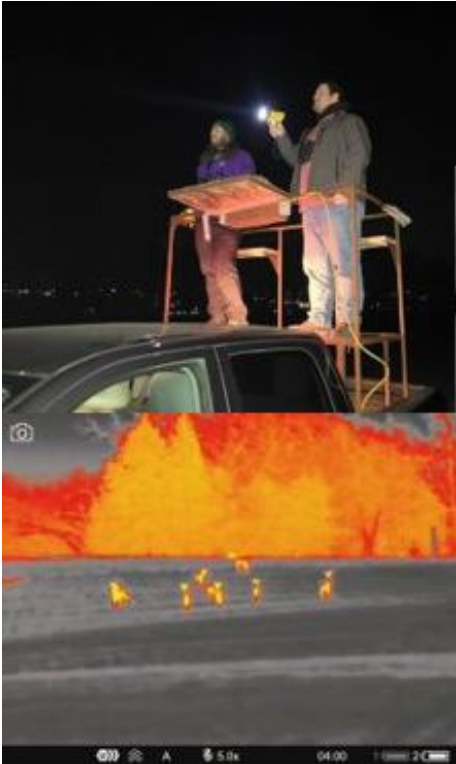




# JOHNSON COUNTY

---

## Park & Recreation District



Deer management program is active at 3 parks.

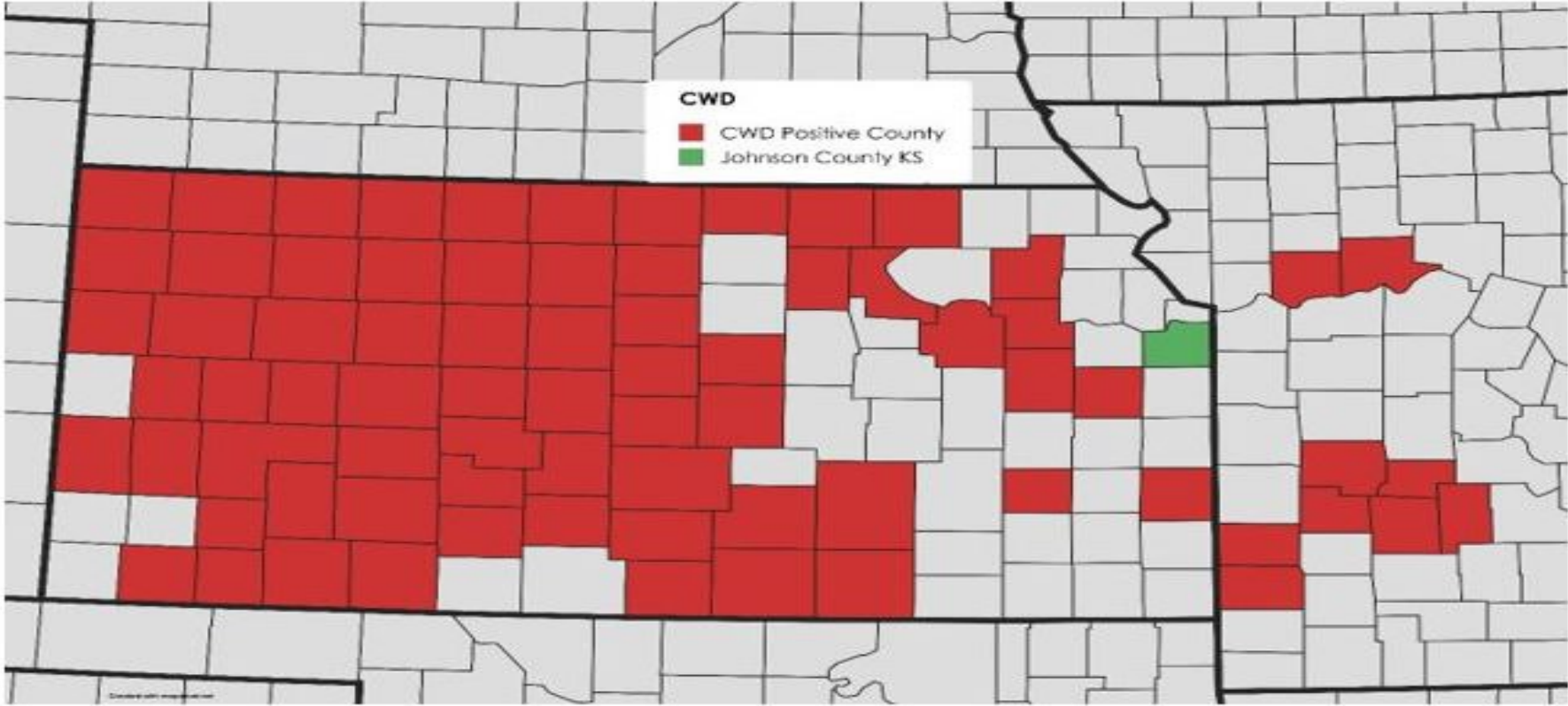
Hunters Apply in April

Archery hunting is Sept-January

Staff monitor the herd and collect CWD samples from all harvested animals.



# CWD IN KANSAS AND MISSOURI





# 2025



- **Natural Resource Plan Mid-Cycle Update Ongoing**
  - Evaluate plan progress
  - Staffing structure review
  - Strengthen outreach goals
- **NRMPs**
  - Kill Creek Park
  - Sunflower Park
  - Sunflower Plant additions
  - Stoll and HP
- **ArcPro for all data collection**
  - Fire
  - Seed Collection
  - Invasive work





# Birds in JCPRD Parks



# Birds in JCPRD Parks

