

AUDIT REPORT TRACKING SYSTEM (ARTS)

SECTION I: SUMMARY INFORMATION			
Audit Title:	Preserve and Restore Parks Ecology with Sustainable Maintenance Approach	Audit Release Date:	04/30/2018
Department:	Parks and Recreation Department	Last Report Date:	First ARTS Report
Department Director:	Terry Rynard	This Report Date:	02/15/2019
Contact Person/Phone:	Devin Wetzel 816-513-7525	Expected Presentation Date:	03/12/2019
SECTION II: RECORD OF IMPLEMENTED RECOMMENDATIONS			
1. In Progress		7. Implemented November 2018	
2. Implemented March 2018		8. In Progress	
3. In Progress		9. In Progress	
4. In Progress		10. Implemented January 2019	
5. In progress		11. In Progress	
6. In Progress			
SECTION III: SUMMARY OF IMPLEMENTATION EFFORTS			
<p>Recommendation 1: The director of parks and recreation should reduce mowing and replace turf grasses with native plants when possible, shift flowerbeds to native or regionally appropriate perennial beds, and systematically plant and prune city trees.</p>			
<p><i>Status of Recommendation: In Progress</i></p>			
<p>Kansas City Parks and Recreation is in the process of reducing mowing, converting annual beds, and refining tree trimming practices.</p> <ul style="list-style-type: none"> • The Department has converted a six-acre area within Minor Park from mowed area to native planting. Planning began in summer of 2018; site work began in October 2018. • Staff converted four landscape beds along the Mamie Hughes Bridge (Bruce R Watkins Drive and Meyer Blvd) to native beds, replacing all non-native plants with natives. • Staff replaced non-native beds in Pioneer Park (Broadway Blvd and Westport Rd) with native plantings. • Staff have identified ten additional annual beds to be replaced with native perennial plants during spring 2019 planting. • Forestry staff is in the process of obtaining a new contract designated specifically for neighborhood right of way tree trimming as part of preventive tree maintenance, this contract will provide funding of \$300,000 and should be in place by March 1st. 2019. 			
<p>Recommendation 2: The director of parks and recreation should adopt additional practices to limit the use of powered landscape maintenance equipment that exposes site users to local air pollutants and generates greenhouse gases.</p>			
<p><i>Status of Recommendation: Implemented</i></p>			
<p>Kansas City Park and Recreation purchased twenty-four propane-powered mowers to replace existing unleaded equipment. These mowers were used in the 2018 mowing season. The department is furthering the implementation of emission reducing equipment with the handheld battery powered equipment. Three sets of battery powered chainsaws, trimmers, and blowers are being purchased to test the ability to further reduce the need for gas powered equipment. During the summer of 2019, staff will see the viability of these items to phase out traditional gas powered units.</p> <p>During the FY19 fleet order, Parks is ordering an electric powered utility vehicle to replace the current gas-powered unit for service at Loose Park. This order will be placed with the FY19 fleet order and it is hoped that the unit can be used during the summer of 2019.</p>			

<p>Recommendation 3: The director of parks and recreation should adopt water conservation practices to track the amount of water applied annually for parkland maintenance and minimize the overall application of water for landscape irrigation after plant establishment periods.</p>
<p><i>Status of Recommendation: In Progress</i></p>
<p>Park maintenance staff currently uses water logs to track usage for watering of plant material, and monthly statements are reviewed to reveal any increased usage of metered water which could indicate a leak or stuck valve. Additionally, the following recommendations for water conservation are listed in the Parks and Recreation Sustainability Plan (PRSP) that was approved by the Parks Board in November 2018:</p> <ul style="list-style-type: none"> • Reduce water use by 10% in the next 3 years by transitioning 20% of the annual beds to perennial natives in the next two years. • Use water sensors to monitor need and water as needed, not on a predetermined schedule. • Schedule watering before 10AM to reduce evaporation. • Foster a culture of water conservation within the department to reduce employee usage of water. <p>[A copy of the highlights plus the workplan and timeline from the Parks and Recreation Sustainability Plan are attached.]</p>
<p>Recommendation 4: The director of parks and recreation should develop additional practices to minimize or eliminate the use of synthetic pesticides in parks.</p>
<p><i>Status of Recommendation: In Progress</i></p>
<p>Currently, only non-restrictive herbicides are applied. To control broadleaf weeds, synthetic herbicide applications are made on a limited basis and, in general, on a rotation of three to five years. Additionally, the PRSP outlines integrated pest management (IPM) to be implemented by the department, including the following:</p> <ul style="list-style-type: none"> • Establishment of Action Thresholds for pest management. • Create a chart/methodology for choosing non-chemical solutions first, such as, prevention, cultural, physical, mechanical and biotic before choosing chemical use. • Prioritize training and management of high use areas like golf and athletic fields. • Require certification of management staff overseeing chemical applications and annual training for all staff who use chemicals. • Require all landscape and mowing contractors to adhere to the same requirements. <p>Parks is in the process of updating the existing “Operations and Maintenance Manual”, current recommendations will be modified to focus on organic solutions when applicable. This updated draft will be completed for director review by April 1st of 2019.</p>
<p>Recommendation 5: The director of parks and recreation should ensure staff adhere to the department’s and city’s adopted pesticide policies and procedures.</p>
<p><i>Status of Recommendation: In progress</i></p>
<p>In 2018, Staff began integrating pesticide safety into the safety training. Supervisors and staff will obtain additional training and certification on an annual basis. During the updating of the “Operations and Maintenance Manual” from 2014 that is currently in process, new practices and procedures will be listed and applicable staff will be updated and educated on this topic.</p>
<p>Recommendation 6: The director of parks and recreation should implement sustainable fertilizer observation and planning practices.</p>
<p><i>Status of Recommendation: In Progress</i></p>
<p>Much of the Kansas City parks system receives no fertilization, and what fertilizers are applied are done so on a limited basis at recommendations from the manufacturer. Current policies and procedures are being updated in the Operations and Maintenance Manual that will require site specific fertilization plans based on soil testing. The use of Phosphorus will be limited to times of over seeding if soil samples indicate it is necessary.</p>

<p>Recommendation 7: The director of parks and recreation should propose goals related to native plant selection, pest and invasive species management, air quality, soil inputs, and water conservation in parkland for consideration by the Board of Parks and Recreation Commissioners.</p>
<p><i>Status of Recommendation: Implemented</i></p>
<p>Kansas City Parks and Recreation partnered with the Kansas City Native Plant Initiative to develop a Sustainability Plan for the Department. This plan, which outlined goals for a number of sustainability issues, was presented to and approved by the Board of Parks and Recreation Commission November 2018. An updated “Operations and Maintenance Manual” is due April 1st. Once completed the updated version will be introduced to staff and will become part of the on-boarding education for new staff.</p>
<p>Recommendation 8: The director of parks and recreation should incrementally develop environmental resource plans for parkland that utilize the existing work of the department, city programs, and area partners.</p>
<p><i>Status of Recommendation: In Progress</i></p>
<p>The Department has some environmental resource plans (ERP) in place for native areas, including Jerry Smith Park and now Minor Park. The PRSP recommends development of ERPs based on “use of space and programming type” (i.e. open space, athletic fields, ornamental, native, undeveloped etc.). Once these plans are created, they will be implemented on an incremental basis. It is important to note here that additional resources are needed to complete the ERPs.</p>
<p>Recommendation 9: The director of parks and recreations should incorporate plant, air, water, soil, and pest management sustainable practices into the department’s operations and maintenance manual.</p>
<p><i>Status of Recommendation: In Progress</i></p>
<p>The Parks and Recreation Department’s Operations and Maintenance Manual requires updating to integrate both the recommendations of the sustainability audit and the recommendations of the PRSP. Along with the attached Workplan and Timeline (attachment B) the updated Operations and Maintenance Manual is due April 1, 2019 to the director of Parks and Recreation.</p>
<p>Recommendation 10: The director of parks and recreation should incorporate the department’s adopted sustainability requirements in parkland maintenance contracts.</p>
<p><i>Status of Recommendation: Implemented</i></p>
<p>Mowing contracts currently contain instructions that are consistent with the Department’s Ozone Action Plan, which requires certain measures be taken on Ozone Alert Days. This helps ensure that the Department’s contractors are not further degrading air quality on alert days. Contracts for the 2019 mowing season also require contractors to maintain pesticide spray logs, to be presented upon request.</p>
<p>Recommendation 11: The director of parks and recreation should train staff on the department’s adopted sustainable practices.</p>
<p><i>Status of Recommendation: In Progress</i></p>
<p>The Department has begun implementing small scale training for specific issues, such as Ozone Alert procedures and providing certification for chemical applicators through the Department of Agriculture. However, the Department must still develop a more comprehensive training plan which will be based on the revised Operations and Maintenance Manual. Items of training include, but are not limited to, native plant selection, soil testing, reducing of gas-powered equipment, best watering practices and integrated pest management.</p>
<p>SECTION IV: ADDITIONAL OUTCOMES</p>
<p>One of the bigger challenges in audit implementation will be the dedication of resources—financial, personnel, and upgraded technology. Many of these measures will call for a more robust or reorganized Conservation Corps that can implement programs and train staff as more and more recommendations are implemented.</p> <p>One unforeseen difficulty in the conversion of equipment to propane or electric. While Parks’ mowers have been replaced with cleaner-burning propane mowers, hand equipment such as chainsaws, trimmers, etc. are proving difficult to replace. The Park Maintenance division is currently piloting some battery powered hand equipment and will continue to stay updated on the evolution of the battery powered industry.</p>



KANSAS CITY, MISSOURI

Parks and Recreation Sustainability Plan



Native prairie, green spaces, forests, riparian zones and other natural areas provide multiple benefits for the people who live or work near them. These natural resources are an important part of a community, and they benefit both people and the environment through *ecosystem services*. Ecosystem services clean our air and water, slow down flooding, trap carbon, and create cooler communities by reducing urban heat islands. Services also include pollination; healthy ecosystems have diverse pollinators and butterflies. One out of every four bites of our food rely on pollinators.

The Kansas City, Missouri Parks and Recreation Department's sustainability plan enhances the ecosystem services of its natural areas and reduces the department's negative ecological impact. The sustainability plan creates a more regenerative environment by renewing, revitalizing and restoring ecosystems where people and nature thrive together.

TOP RECOMMENDATIONS

Annual Beds to Perennial Natives

- KCNPI recommends replacing 20 percent of the Parks Department's annual beds with native perennials in a two-year period.
- Replace entire annual beds with native perennials.
- The recommended list of "most likely to succeed" species provide texture, varied bloom seasons, have high success rates and behave predictably.
- Due to increased demand for native plants, order as soon as possible.
- Implement a series of repeated annual trainings for Parks' landscaping staff.

Turf Grass Reduction

- Reduce turf grass by 5 percent (excluding golf courses and sports fields) in five years.
- Devote appropriate resources to manage Parks' natural resources including staff funding for a Parks Ecologist, District Forepersons, and seasonal staff.
- Invest in equipment and seed for transitioned acreage.
- Prepare soil appropriately to enhance the success of new native landscapes.
- Instead of native grasses, some reduced mowing areas can be addressed with shrubs and trees.

CONTINUED ON BACK

TOP RECOMMENDATIONS (CONT'D)

Water Conservation

- Reduce water use by 10 percent in three years.
- Transitioning 20 percent of Parks Department's annual beds to perennial natives will significantly reduce water use after native plants are established in Year Three.
- Install water sensors to water beds on-demand instead of on schedule.
- Schedule watering before 10 a.m. to reduce evaporation.
- Contractors should adhere to the same water conservation strategies as the Department.
- Within Parks Department buildings, foster a culture of water conservation.

Integrated Pest Management

- Begin using an Integrated Pest Management (IPM) approach to reduce chemical use.
- Establish Action Thresholds for pest management.
- Choose non-chemical solutions first: prevention, cultural, physical, mechanical, biotic, and chemical last.
- Prioritize training and management in high use areas like golf courses and sports fields. Require contractors to adhere to the same standards as the Parks Department.
- Require certification by management staff and provide ongoing, annual training for all staff who use chemicals.
- Document chemical use.

Stewardship Goals

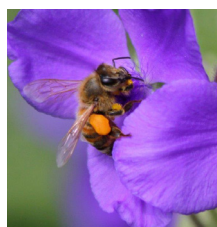
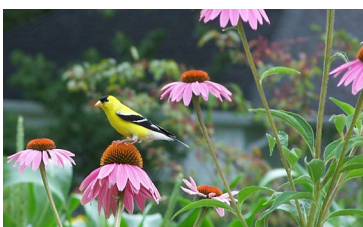
- In the Kansas City, Missouri Parks Department's next strategic plan, KCNPI recommends stewardship goals and policies to promote a sustainable, regenerative environment.

Communications Strategies

- Engage Parks staff through regular trainings to engage their interest in sustainable activities.
- Create talking points for front-line staff regarding new sustainable strategies.
- Provide regular updates to the Parks Board and City Councilmembers
- At newly transitioned turf areas install easy-to-read, durable signs, "Urban Prairie Coming Soon, Do Not Mow."
- Similarly, when applying chemicals, place temporary signage, "Warning, Pesticide Applied to Park. Harmful to People and Pets."
- Highlight new native landscapes with press releases and social media including Facebook, Twitter, and Instagram. Look for opportunities to tell stories about pollinators, butterflies, birds and habitat.
- Consider hiring an expert consultant to create and manage an expansive communications and marketing plan.

Underwriting Strategies

- National and Federal grants are more likely to underwrite programs of the size and scale of the Kansas City, Missouri Parks Department, and their priorities are aligned with the mission of Parks' sustainability efforts.
- Consider hiring a professional grant writer with successful experience acquiring federal funding.
- Local, private foundations are more likely to play a targeted role in Parks' sustainability project.





KANSAS CITY, MISSOURI Parks and Recreation Workplan and Timeline



TASK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
ANNUALS TO NATIVE PERENNIALS					
Parks Department and KCNPI Partners identify 10-12 annual beds to transition to native perennials.	✓	✓			
KCNPI partners with Parks staff to install and maintain the new, native gardens throughout the season.	✓	✓			
Parks Department and KCNPI Partners identify second round of 10-12 annual beds to transition to native perennials.		✓			
KCNPI partners team with Parks staff to install and maintain new gardens and help mentor staff on monitoring the gardens from Year 1.		✓			
Parks Department takes responsibility for all 20-24 native beds.			✓		
Consider transitioning additional annual beds to perennial natives.			✓		
TURF REDUCTION					
Create a new division, a <i>Reimagined Conservation Corps</i> , to include Parks budget line items, personnel policies, job announcements, and hiring.	✓				
The Department's new Ecologist will work with an outside contractor for training purposes and hire a team of forepersons.	✓				
Simultaneously with the preparation, seeding, and initial maintenance of pilot plantings, this new team will assess and prioritize additional acreage for turf removal.	✓				
Identify the acreage to be addressed in Year 2.	✓				
Identify three, highly visible pilot areas to transition turf grass to native perennials and hire an outside contractor to begin transitioning these areas.	✓				
Contractor will work side-by-side with the new Conservation Corps to provide training for ongoing management of these three sites as well as prepping and seeding new sites.	✓				
Staff and contractor will continue managing the three pilot areas.		✓			
Prioritize the next five sites for turf reduction and conduct site assessments.		✓			

CONTINUED ON BACK

KANSAS CITY, MISSOURI

Parks and Recreation Workplan and Timeline, Cont'd

TASK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
TURF REDUCTION, CONTINUED					
The Kansas City, Missouri Parks Department's Conservation Corps assumes full responsibility for ongoing maintenance of the original, pilot areas.			✓		
Prepare, plant, and begin to manage the five new turf reduction sites identified in Year 2.			✓		
From the acreage previously identified by parks, prioritize the next five sites for turf reduction and conduct site assessments.			✓		
Prepare, plant, and begin to manage the five new turf reduction sites identified in Year 3.				✓	
From the acreage previously identified by parks, prioritize the next five sites for turf reduction and conduct site assessments.				✓	
Examine Parks land for larger acreage opportunities to create large swaths of habitat.				✓	
Begin considering Boulevard acreage and golf course roughs for next phase of turf reduction.				✓	
Prepare, plant, and begin to manage the five new turf reduction sites identified in Year 4.					✓
From the acreage previously identified by parks, prioritize the final five sites for turf reduction based upon criteria listed above and conduct site assessments.					✓
Examine Parks land for turf reduction opportunities on significant acreage to create large swaths of habitat.					✓
Prioritize Boulevard opportunities and golf course roughs for turf transition.					✓
From successful native plantings implemented in Years 1 and 2, begin seed collection program.					✓
INTERNAL AND EXTERNAL COMMUNICATIONS					
Convene landscape, and other affiliated staff, to participate in a round table discussion.	✓	✓	✓	✓	✓
Implement a series of repeated, annual trainings for staff on native landscaped bed management, turf transitions, water conservation and IPM strategies.	✓	✓	✓	✓	✓
Create an RFP for professional marketing and communications services.	✓				
Create a public relations and marketing plan for city residents and businesses to communicate benefits of changes to landscaping practices.	✓	✓	✓	✓	✓
Implement plan coordinated with in-house communications staff and community partners.	✓	✓	✓	✓	✓