



## LONG-TERM STRATEGIC PLAN

Kansas City Native Plant Initiative (KCNPI)

March 8, 2017 Update

It is possible to cultivate beautiful landscapes that are able to clean the water and the air as part of sustaining a healthy human population in harmony with a healthy well balanced eco-system. In a world with increasing pressures from urbanization and climate change, healthy communities and habitats are more challenging to create and maintain but they are even more necessary than ever, as observed through the rapidly declining pollinator habitat and the imperiled Monarch butterfly migration. Kansas City Native Plant Initiative (KCNPI) is seeking solutions to these interrelated pressures through innovative interdisciplinary approaches to assure a sustainable future for Kansas City and the Lower Midwest.

Our collaborative organization comprises a diverse group of partner organizations across the Missouri and Kansas state line, including nonprofit organizations, private businesses, municipal departments, regional council departments, community leaders and influencers who work together to encourage the restoration of ecological balance and offer solutions for clean air, water and prosperous life of all types.

The following strategic plan offers a clear structure and guideline for the future of KCNPI. The plan outlines the path to expanding our collaborative efforts, enhancing educational opportunities, furthering regional research, addressing ecosystem needs in our work, such as restoration of season-long habitat for the imperiled Monarch and pollinators, and supporting planning and policy changes in order to engage the greatest number of people and opportunities in ensuring that our region is intentionally adapting to climate change and becoming ever more resilient.

### HISTORY

The inspiration for KCNPI originated from a talk that Doug Ladd gave at a Westport Garden Club (WGC) meeting in January of 2014. In recognizing the potential to reintegrate ecologically sustainable landscapes into the cultural fabric and identity of Kansas City Metropolitan area, WGC began seeking out a diverse group of individuals and potential partners who shared an interest in native landscapes. This effort resulted in nearly 300 people with a shared interest in Native Landscapes coming together for a public meeting in September 2014 to hear Doug Tallamy's talk on native landscapes. Shortly after that, a group of 35 organizations began to meet as the Kansas City Native Plant Initiative to determine how working together would further the use, preservation and reintegration of native plants in the region. Realizing the power of a collaborative effort, KCNPI explored the idea of how to create a unified, overarching initiative that spans disciplines and interests across the region to leverage visibility and resources for all involved. After research into several successful organizational structures for this type of work, and debating the merits and drawbacks of forming a new organization versus management through an existing organization, a new collective impact backbone organization was formed in April 2016.

### COLLECTIVE IMPACT

KCNPI is a collective impact group comprised of organizations from different sectors who share the common mission to ignite a regenerative relationship between native landscapes and heartland communities and address the social issues emerging from urbanization that the widespread use of native plants can impact in a positive way. Through a structured form of collaboration, our main function is to connect native plant projects with resources and funding in ways that would not have previously been possible. KCNPI's

collective impact is based on the concept that in order for our organization to create large-scale, lasting solutions, we need to coordinate our efforts and work in true and trusting partnership around clearly defined goals and criteria

KCNPI collective impact is defined by the following five criteria:

**Common Agenda:** All participating organizations involved with KCNPI have a shared vision for change and a common understanding of the necessity of a strong native plant presence in the region and have agreed upon a joint approach to achieving our vision and goals of greatly expanding the native plant presence through agreed upon measurable actions.

**Shared Measurement System:** Success will be measured and reported with a short list of key indicators across all participating organizations. Under the umbrella of the native plant initiative, measurable goals will be set in each goal area for habitat, food, air, water, health and wellness, and collaboration that will measure progress and impact and influence future work.

**Mutually Reinforcing Activities:** KCNPI's diverse group of partners work together in an interdisciplinary way, encouraging each participant to undertake the types of activities in which they excel. No one agency can change a regional indicator alone. This type of change requires the collaborative, focused work of numerous cross-sector partners applying their individual skill set and expertise to have the greatest impact. KCNPI's role is to connect those partners and funding with native plant and associated projects and that best suit their skill sets.

**Continuous Communication:** Success of KCNPI as a collective impact group relies on frequent communications over a long period of time among key players within and across organizations, to build trust and inform ongoing learning and adaptation of strategies. The establishment of a common language of native plants and their associated areas of impact, as well as consensus on priority project areas is important to KCNPI's ability to continue to collaborate successfully and to establish trust among partners.

**Backbone Organization:** Creating and managing collective impact requires an oversight organization and staff with a very specific set of skills to serve as the backbone for the entire initiative. The staff, Board and Council of Partners of KCNPI play multiple roles in order to move the native plant initiative forward such as: Guiding Vision and Strategy; Supporting Aligned Activity; Establishing Shared Measurement Practices; Building Public Will; Advancing Policy; and Mobilizing Funding.

## COMMON AGENDA

During the first half of 2015, the KCNPI partners met bimonthly as a large group to explore their common needs and assets, and define a vision and mission for this initiative. The group endorsed the following as their common agenda.

### *VISION*

A future of beautiful, native landscapes connecting heartland communities where nature and people thrive together.

### *MISSION*

To ignite a regenerative relationship between our native landscapes and heartland communities by acknowledging their beauty, increasing knowledge of how to expand their presence, and cultivating opportunities to work together.

## **ACTIVITIES: WORK GROUP FORMATION and GOAL AREAS**

In the fall of 2015, partners expressed a desire create smaller working groups in an effort to progress the mission of the organization on the ground through mutually beneficial project development. The initial work groups created were: Large Landscapes (focused on maintenance); Small Landscapes (focused on design and maintenance); Education (focused on communications); and Strategic Planning (focused on organizational development and integrated systems). These work groups helped to define priority areas of influence and collaboration for the partners. The four goal areas that emerged from this process are:

### **1. Native Landscape Projects**

Promote and connect native landscaping projects of all scales that strategically increase the quality, quantity, and connectedness of native landscapes in the region.

Measurements to include: Acres, Stems, Quality of Design, Quality of Maintenance, Number of Garden Installations and Restorations, Number of Visitors and Volunteers as well as Ecological Measures such as; species diversity, habitat heterogeneity, pollinator nectar and host plant species, keystone species support

### **2. Education, Marketing, and Advocacy**

Coordination of communications and information, curricula, and educational programming for all ages and stakeholders to stimulate greater appreciation, marketability, and knowledge of the connections between wellbeing and native landscape.

Measurements to include: Attendance at events, Satisfaction, Increase in partners, Number of visits to website and social media, Number of requests for assistance or partnership, Number of events

### **3. Strategic Planning and Policymaking**

Influence local and regional planning, policymaking, and land management toward the implementation and connection of native landscapes of all scales.

Measurements to include: Increasing awareness of influencers and policymakers of KCNPI, Increasing consistency cross-jurisdictionally on native landscape policies, increasing presence of native landscape in public right of way (acres), Involvement of each regional planning and development office in native landscape land management

### **4. Coordination between Existing Organizations**

Coordinate and align goals and strategies between partner organizations that elevate the effectiveness of each and the collective effort of all.

Measurements to include: Satisfaction, Trust, Increased funding from public and private sources, Partners stay involved and numbers grow, a clear system of communication about resources opportunities and outcomes is developed and used, Value of trainings

## **GOVERNANCE**

In the late winter and spring of 2016 partners sought clarification on their structure of operation, looking to several national examples of collective impact organizations. Partners voted to incorporate as a 501c3 in the state of Missouri. The bylaws serve to describe the operation of the organization. The foundational principals of operation rely upon consensus-building in the Council of Partners to guide the direction of KCNPI. The Core Group serves as the Board and handles the day-to-day operations of the organization. The Council of Partners set quarterly meetings and commit to the attendance of three out of four meetings per year as active stakeholders and decision-makers in the work of KCNPI. The Core Group meets bi-monthly and these members are also active on the Development, Partnership, Nomination, Strategic Planning committees. The standing committees play key roles in the governance, funding and growth of the organization. The

Development committee is responsible for seeking short and long term funding sources that respect the existing funding relationships of our partner organizations. KCNPI seeks to increase the funding potential for all partners through expanded opportunities of regional collaboration. The first goal of that committee is to identify funding for the Director and near term (three-year) operations of the organization. The Partnership Committee works to stimulate new collaborative interactions among the Council of Partners as well as increasing the number and diversity of the Council. The Nominating committee stewards a pipeline of Council members to succeed in leadership and collaborative positions as the Core Group and Committees advance and need new members. The Strategic Planning committee is responsible for the annual review of the long-term plan and the creation of the short-term action plan in collaboration with the Director and with input from the Council of Partners.

## **SHARED MEASUREMENT**

KCNPI seeks to increase the presence of native plants in our region with no adverse ecological outcomes. We seek understanding of the predevelopment conditions of our region in order to address the current development of the area with appropriate solutions. We seek adaptive solutions that will encourage the increased health of the environment at every step, ultimately working towards the widespread use of true native species for beauty, conservation, remediation and stable environments for pollinators.

As activities in each goal area progress and as regional research is collected, measureable goals will be set in each goal area for: Habitat, Food, Air, Water, Health and Wellness, and Collaboration. We will seek accurate and current information on climate change adaptation and assure that our goals are set to account for as many adaptation factors as known. KCNPI is also focused on increasing the diversity of our partner organizations to accurately and equitably reflect our region and continue to integrate and expand equity and diversity goals within our action plan. Doing our part to ensure that all in our region feel included and welcome to participate as partners, volunteers and visitors to native plant habitat areas is an important goal area to expand.

### **Habitat**

Native plants are the foundation for thriving life and a healthy diverse ecosystem. They provide appropriate habitats for native species of butterflies, birds, pollinators, and other wildlife. Native plants and wildlife evolved together to form an interdependent, sustainable and healthy network that thrive best together. Planting nonnative plants introduces foreign elements into the ecosystem often resulting in invasive pests and the loss of native wildlife.

Green spaces and native vegetation in the metropolitan area are essential for biological and hydrological balance. Native vegetation creates natural habitats and allows better absorption of rainwater by natural means, which suggests savings in water management. Green areas and vegetation also play an important part in reducing air pollution and in creating more suitable climatic conditions, thereby improving the living environment within the city and region.

Through demonstration, education, and policy influence KCNPI can further the movement towards more sustainable habitat for native species of butterflies, birds, pollinators, and other wildlife. KCNPI will identify research to measure our regional baseline and establish measures for habitat improvement in each goal area.

Example: Increase available season-long pollinator habitat, with special attention to the imperiled Monarch butterfly migration, by planting native plants that provide food for pollinators. Our unique position in the heart of the I-35 Monarch corridor and a central position between the largest remaining tallgrass prairie (Flint Hills ecoregion in Kansas) and the largest deep soil tallgrass prairie (Dunn Ranch and Grand River Grasslands in Missouri). Our measurable criteria could be: Establish greater than 50% cover of native plant species that are host and nectar plants for monarch butterflies and pollinators.

## **Food**

Localized healthy food systems not only provide fresher, more nutritious food to our communities, but result in healthier more productive people. KCPNI seeks to develop regional cooperation for a healthy food system and secure a healthier future for the land, the people and the economy.

Exploring the direct relationships between native plant species and our healthy local food system is another set of metrics that KCPNI would like to have regional data to identify and measure in each goal area.

Example: Through education and marketing encourage consumers to know where, how and by whom their food is produced. Our measurable criteria could be: Increase number of school gardens by 30%.

## **Air Quality**

Native plant landscaping can help improve air quality on local, regional and global levels. Locally, smog and air toxins can be radically reduced by eliminating of the need for lawn maintenance equipment like lawn mowers, weed edgers and leaf blowers which are usually fueled by gasoline, electricity or batteries. All of these fuel types are associated with the emissions of the following air pollutants: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrous oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), VOCs (volatile organic compounds) and air toxics such as benzene. Gasoline lawn and garden equipment, on average, produces 5% of ozone-forming VOCs in areas with smog problems. This equipment also emits toxics and particulates. Gasoline spilled while refueling lawn and garden equipment also contributes a substantial amount of VOC pollution. [1] Native trees and plants can also help as a mitigation strategy when planted in strategic locations around buildings or to shade pavement in parking lots and on streets and also improve air quality by removing air pollutants and store and sequester carbon dioxide. Trees provide shade for buildings, reducing their heating and cooling costs and therefore improving air quality by producing less emissions from energy use.

Education on native landscaping, and supportive policy changes that require use of native plants in large landscapes will have measureable impacts on air quality. However, defining our regional baseline in this non-point source metric, and establishing measureable goals for improvement will be challenging.

Example: Improve air quality and lower greenhouse gas emissions by reducing energy demand by encouraging the planting of more native trees and vegetation decreasing the production of associated air pollution and greenhouse gas emissions. Our measurable criteria could be: Increase number of native trees and vegetation planted in urban areas by 40%.

## **Water**

### **Quality**

Water quality is improved by increasing the volume of native plants to the landscape. Native plants hold soil in place with deeper roots than nonnative plants therefore erosion is reduced and soil is less likely to erode. Because plants adapted to their environment (native plants) often require fewer pesticide and fertilizer treatments, herbicides, pesticides, and fertilizers can be reduced or eliminated from the runoff equation. Native plants also help with the purification and filtering of contaminants that would otherwise find their way into the water supply. Collecting empirical research that shows the difference in quality and identifies plants that are best suited to different types of phytoremediation will help to establish measureable goals for water quality.

Example: Improve water quality by planting native species that require less fertilizers and pesticides than non-native plants, reducing chemical run-off into local streams. Our measurable criteria: Reduce the quantity of commercial fertilizers used on site by 90%.

## **Quantity**

It is estimated that the annual rainfall in the area will increase from 38.8” to 44.6” per year. Green infrastructure methodologies will become increasingly important to our regional infrastructure for productively absorbing this rainfall, and redistributing it to recharge aquifers and/or store it for reuse. Regional research in this area will help to identify key focus areas for measurement.

Another benefit of native landscape is that it requires less water to thrive, so water and cost savings for landscape maintenance are also measureable goals to set. [2]

Example: Improve water quantity management (e.g. flood water retention) by establishing attractive raingardens infused with native plants. Our measurable criteria: Increase the number of raingardens in urban flood areas by 50% within the next 5 years.

## **Periodicity**

While overall rainfall increases the estimated dry spells in between rainfalls are also increasing from 30.9 to 39.5 days a year. [2] Less frequent rainfall means that there is a greater buildup of toxins on the surface of the soil that are normally absorbed into the soil and filtered out after a rainfall. With less frequent rainfall and a greater amount of rain these toxins are more likely to be carried away by runoff and into the water supply instead of absorbed and processed by the region’s natural cleansing system. Native plants will help neutralize the accumulated acidity and are more likely to survive dry spells than nonnative plants. The deep root systems of many native Midwestern plants increase the soil’s capacity to store water and help prevent erosion during rainier periods.

Understanding trends and variations of current and historical hydroclimatic variables is pertinent to the future development and sustainable management of water resources in the Kansas City area. Information regarding hydroclimatological issues is important within the context of global warming, water and energy cycles and the increasing demand for water due to population and economic growth. Changes in the climate system and land cover have been widely accepted to have important consequences for regional to global water resources management and conservation. [3] Further research will need to be conducted in this area to inform the best approach and ways in which Kansas City can better prepare for the future.

Example: Reduce soil erosion by expanding the use of native plant species that will develop strong extensive root structures to hold soil in place. Our measurable criteria: Reduce soil loss to less than 5 Mg/ha per year.

## **Health and Wellness**

Access to green space on a daily basis has proven to be beneficial and vital to the mental, physical and emotional wellbeing of people of all ages. Access to nature has been related to lower levels of mortality and illness, higher levels of outdoor physical activity, restoration from stress, a greater sense of well-being, and greater social capital. There are strong links between healthy child development and access to green space activities and interaction with nature and animals is important to child development [4]. Natural elements that promote well-being include trees, diverse vegetation, local biodiversity, water features, parks, natural playscapes, and community and school gardens.

The integration of nature into towns and cities has secondary benefits that contribute to better health and more sustainable societies. Trees and vegetation capture carbon dioxide and mitigate global warming and assist greatly with heat island effects. They buffer noise, offer shade, reduce the effect of heat islands, and trap particulates and other airborne pollutants. Parks and other natural areas filter groundwater, reduce stormwater runoff, and prevent combined sewer overflows, improving the functioning of both public and private water systems.

Stimulating partnerships between cross sector organizations such as public health practitioners, policymakers, parks departments, planning and development departments, housing agencies, greening and garden organizations, cooperative extension services, school districts, and nature centers could result in increased access to natural areas, productive landscapes, and other green spaces for people of all ages, income levels, and abilities. Increased information on the health benefits of outdoor exercise, personal and community gardening, and nature-based play and recreation would also benefit our communities. [5]

KCNPI will collect regional data on health benefits and native landscape to set measurable goals.

Example: Through education and increasing awareness of the health benefits associated with spending time outdoors, encourage the use of and increase the demand for beautiful native plant infused green spaces. Our measurable criteria: Increase number of visitors to green spaces and habitats.

### **Collaboration**

As a collective impact group KCNPI relies on its ability to collaborate with a large and diverse group of organization, partners, stakeholders and agencies. Continuing to expand the members of the organization and the productivity of the collaborations will allow KCNPI access to more resources and funding opportunities and enables members to connect with organizations and projects in ways that would not have been possible previously. This type of collaboration allows greater ability for long lasting impact on the future health of the area. Measuring the capacity of our current collaboration and setting goals for increased potential and diversity will be key metrics in understanding the success of the organization and continually adapting to the changing partnership.

Example: To reach a broader audience and increase the opportunities for collaboration, establish and maintain a native plant blog for native plant growers and landscapers. Our measurable criteria: Monitor the number of visitors to the site and increase viewership or participants by 30% annually.

## **INFORMING THE WORK**

Continuing to build knowledge of the regional assets and challenges of native landscape as well as advocating and educating a wide audience on the importance of native landscape is imperative to our partners. Providing opportunities to gather and educate a growing multi-sector partnership is a driving force of the first years of KCNPI. These educational sessions should provide rationale and garner commitment, and be planned for maximum attendance.

As the awareness and success of KCNPI grows, more organizations call upon us for information, services and partnership. Establishing a clear path of action and collaboration is key to responding effectively and building trust among the partners. The primary areas of current requests, knowledge base and champions are:

**Prairie restoration and maintenance**

**Riparian restoration and maintenance**

**Monarch habitat including milkweed, asters, and goldenrod (all-season plants for caterpillars and migration) and education on pollinators**

**Stream bank stabilization education**

**Invasive species management**

**Conservation and education**

**Regional data and policy**

**Working with municipalities for informed revision of landscape ordinance**

**Green infrastructure solutions, best stormwater practices**

**Native plant database and suppliers**

**Garden design and maintenance**

**Tree program and education**

**Community gardens and orchards**

**Design services**

As partnership grows and collaborative relationships develop, the list of champions and areas of expertise will continue to grow. The champion in each area will have the primary responsibility for addressing the request and/or beginning the process of project development.

## **CRITERIA FOR PROJECT DEVELOPMENT**

Prioritizing work in the early days of KCNPI will be a negotiated process between partners based on maintaining a diversified approach across goal areas, and responding organically to requests for assistance. Projects or programs that have the most support, momentum, and potential for success will rise to the top. Once an Director is hired, their specific skill sets and networks will factor into project attraction and implementation.

Projects that have been developed to the point of grant submission including detailed descriptions, committed partners, metrics, and cost estimates are the easiest to bring forward to the Council of Partnership for support and assistance. These may be presented at quarterly Council of Partners meetings or submitted to the agenda of monthly Core Group meetings to be reviewed and distributed to the Council of Partners. The fundamental criteria for a project to move forward are:

1. Collaboration between at least two partner organizations
2. Majority support from Council of Partners
3. If proposed by a partner:
  - a. Clearly aligns with Mission and Goal Areas AND
  - b. Originate from regional research OR
  - c. Creates a regional catalyst project
4. If proposed by KCNPI Board or Committee, must:
  - a. Originate from regional research OR
  - b. Create a regional catalyst project
  - c. Must align and build upon partners resources, schedules and processes
5. Measured outcomes must be defined based on strategic plan goal areas and measurement categories

## **PARTNER COLLABORATION FRAMEWORK**

As a collective impact backbone organization, KCNPI seeks to increase the potential of each partner organization through collaboration, advocacy and shared resources. As embodied in the criteria for collective impact organizations stated earlier in this document, it usually takes a number of years for partner organizations to build productive and trusting collaborative relationships. A key part of jumpstarting the

potential of these relationships is having clear communication about the areas of expertise and expectations of each organization.

The protocol KCNPI has established to build common understanding includes each new partner organization filling out a Partnership Declaration form at the beginning of their tenure. The purpose of this declaration form is to create a description of value, both value to KCNPI and KCNPI's value to their organization. This process and information expresses intentionality of engagement and commitment. The resulting document and the larger summary document of all declaration information, makes it easier for new partners to find each other and easier to track the diversity of the Council of Partners.

## References

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