GOAL 1 / NATURE

Native landscapes will thrive for generations.

When the Forest Preserves’ creators set out to “protect and preserve” nature, they could not have guessed how important their work would be. Today, more than 100 endangered and threatened species survive in Cook County, and in habitat as rare as the rainforest. The Forest Preserves has a central role to play in keeping these treasures safe for future generations.

To do this, they need our help. While many sites in the preserves have extraordinary ecological significance, only a few thousand acres of the Forest Preserves’ lands are in good or excellent condition today. Just as we recognize that a greater diversity of human cultures, backgrounds, and values enhances communities, the preserves need diversity of plants and animals—and the care of people—to be healthy and thrive.

Scientists, land specialists and volunteers have already demonstrated that careful work and ongoing vigilance and stewardship can bring even badly deteriorated areas back to life. On restored land in preserves such as Somme Prairie and Deer
GOAL 1 / Native landscapes will thrive for generations.

Grove, hundreds of rare plants and animals are now thriving. This kind of success is achievable in preserves all over Cook County. Thousands of additional acres are in the process of being restored. But restoration is not a one-time effort. Just as people need good food, exercise, sleep and regular check-ups with a doctor to ensure their long-term health, nature in an urban setting needs our ongoing care.

The forest preserves are waiting to be transformed. They are already unique: the largest network of urban preserves in the nation, and one of the few places anywhere that offers rare natural beauty side-by-side with the attractions of a global city. Brought to their full potential, the preserves could be one of Cook County's most important landmarks and the pride of dozens of communities. They could help the Chicago region advance its leadership in both ecological restoration and in taking action to adapt to climate change. Most importantly, the preserves could be one of the best gifts this generation will ever give to the future residents of Cook County.

GOAL 1 PRIORITIES

1.1 Invest in restoration and stewardship.

   **BIG IDEA: Land Use Decision-Making System**

1.2 Mobilize people to heal and nurture the land.

   **BIG IDEA: Conservation Corps**

1.3 Connect the Preserves to a wider wilderness.

1.4 Learn from and adapt to a changing environment.
GOAL 1 / Native landscapes will thrive for generations.
1.1. Invest in restoration and stewardship.

PRIORITY 1.1

Invest in restoration and stewardship.

Declining Health of Native Landscapes

The Forest Preserves of Cook County are one of the most under-rated natural treasures in the Midwest, and possibly the nation. Close to the heart of Chicago, the forest preserves protect a stunning range of ecosystems: rare tallgrass prairies where the wildflowers grow up to 12 feet high; quiet forests with small streams that hide tiny blue-polka-dot salamanders; rocky cliffs, where the swallows build nests, that rival the Loop's most stunning architecture; and over a thousand acres, rich in wildlife, of critically endangered oak savanna—some of the last of its kind in the world.

WHAT ARE COOK COUNTY'S NATIVE LANDSCAPES?

PRAIRIES

The Midwestern prairie is remembered in history and literature as a large expanse that stretched to the horizon with waves of wildflowers and tall grasses. By the 1930s most of the Midwestern prairie was converted to corn and pasture or developed into houses and businesses. Tall grasses and wildflowers (big bluestem, yellow coneflower, prairie dock and compass plant) provide a rich and beautiful diversity of life. Birds that thrive in this grassland area include the meadowlark, bobolink and sandpiper.
GOAL 1 / Native landscapes will thrive for generations.
1.1. Invest in restoration and stewardship.

WOODLANDS

Cook County is home to a variety of woodlands. Savannas are grasslands with a few trees, often the iconic but endangered bur oak. Open woodlands, a mix of grassland and forest, are transitional areas that provide habitat for many birds, insects, and reptiles. Forests, the woodlands most densely populated by trees, provide habitat for a variety of life, including many of Cook County’s native mammals—the shrew, white-footed mouse, beaver, river otter, and star-nosed mole, among others. Flatwoods, areas where an underlying layer of clay restricts water absorption, provide safe breeding grounds for amphibians such as salamanders, frogs and toads and habitat for endangered and threatened plant species such as the purple-fringed orchid and dog violet.

WETLANDS

Wetlands—including marshes, bogs, springs, and swamps—provide habitat for plants and animals such as white lady slippers, great blue herons, great egrets, black-crowned night herons and the blue-winged teal. Wetlands also provide human benefits; they serve as “nature’s flood-control centers,” filter water and provide opportunities for recreation such as canoeing and bird watching.
GOAL 1 / Native landscapes will thrive for generations.
1.1. Invest in restoration and stewardship.

WATERS

Cook County’s waters—including Lake Michigan, streams and rivers—sustain rare populations of plants and fish and are key points on the route of millions of migratory birds. Several endangered and threatened species, from small fish like shiners and rainbow darters to mussels like the creek heelsplitter, rely on these waterways. Cook County’s waters also supply clean drinking water, support key industries and offer outdoor recreation. The protection of these waterways is critical to our quality of life and to the preservation of our natural heritage for future generations.


TOWARD MAXIMUM BIODIVERSITY

The Forest Preserves’ founders recognized the beauty and value of these native landscapes and envisioned an agency that would preserve its holdings “as nearly as may be, in their natural state and condition.” Although this “natural state” is difficult to define precisely, researchers agree that the closest measure by today’s scientific standards is maximum biodiversity. In other words, a healthy ecosystem is one that teems with a rich variety of animal and plant life and also provides for humanity’s most fundamental needs—including clean air and water. In contrast, an unhealthy landscape is marked by a lack of diversity: in such areas, only a few species survive, some or many of which may be considered “invasive.”

“... a healthy ecosystem is one that teems with a rich variety of animal and plant life and also provides for humanity’s most fundamental needs—including clean air and water.”

Unfortunately, most of the Forest Preserves’ holdings are considered unhealthy. Due largely to human impact—including development, the importation of ornamental species (such as buckthorn) and negligence—many of the native species that the Forest Preserves’ founders first sought to protect and preserve are dwindling and
will likely die out without careful human intervention through ecological restoration. (See feature below, “What is restoration?”)

WHAT IS RESTORATION?

When settlers first arrived in Illinois, their camps and towns were islands in a sea of nature. Bison roamed the tallgrass prairies and oak savannas; wildflowers blanketed open fields. Today, nature exists as tiny islands in a sea of people: agriculture and urban development have fragmented and in some cases eliminated naturally occurring landscapes.

As people have become aware of the loss of these habitats and their unique value to our area, efforts have been made to revive them through ecological restoration—the process of returning landscapes to health using scientific knowledge and recognized techniques to create an ecosystem teeming with all kinds of plant and animal life.

Land stewards remove harmful or overgrown plant species. They scatter seeds of native plants, rejuvenating the carpet of flowers and grasses. One of the most cost-effective methods is the careful use of fire by certified specialists. Prescribed burns perform a natural “spring cleaning,” clearing unwanted brush, letting in sunlight, and recycling nutrients to stimulate the growth and germination of native plants.

POOR CONDITIONS REVEALED IN LAND AUDITS AND ASSESSMENTS

In 2001, Friends of the Forest Preserves and Friends of the Parks—along with on-the-ground field scientists—conducted the first-ever land audit of the agency’s countywide natural land areas. Their assessment found that many of the Forest Preserves’ natural areas were in poor condition, worsened by the ten-year moratorium (1996-2006) on restoration work.
GOAL 1 / Native landscapes will thrive for generations.
1.1. Invest in restoration and stewardship.

Using the 2001 audit as a baseline, scientists from the Illinois Natural History Survey, Audubon-Chicago Region and the Forest Preserves conducted a follow-up study in 2007 and 2008. According to this most recent land audit, only 25% of high-priority conservation areas (approximately 3,500 of 14,000 high-priority acres, or about 5% of the Forest Preserves’ total holdings) were found to be in good or excellent condition.iii Given the ongoing deterioration of the Preserves’ biodiversity, the restoration and maintenance of the natural areas is a matter of the utmost urgency. We are deciding—right now—whether the preserves will still have oak savannas when our grandchildren go to visit.

“We are deciding—right now—whether the Preserves will still have oak savannas when our grandchildren go to visit.”

With the return of active management, vigilant stewardship, and ecological restoration activities over the long term, the health of the Preserves’ natural areas will improve substantially.

RESTORATION: THE KEY TO THE PRESERVES’ HEALTH

The research and analysis needed to guide a sweeping restoration of the Forest Preserves’ land is already available. The Illinois Natural Areas Inventory has identified the most critical sites.iv The Biodiversity Recovery Plan produced by Chicago Wilderness in 1999, along with the Climate Change update in 2012, offers detailed recommendations on how to proceed.v Where restoration and maintenance work has been undertaken consistently and well, the health of the preserves’ has improved in ways that are sometimes spectacular. To choose only one example, the Somme Prairie grove, a 90-acre natural area near Northbrook, Illinois, began undergoing restoration in 1981. Its rare ecosystems are now thriving and support many rare species of plant and animal life.vi This kind of transformation is possible throughout the Preserves’ natural areas.
GOAL 1 / Native landscapes will thrive for generations.
1.1. Invest in restoration and stewardship.

PRIORITY 1.1: Action Steps

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<tr>
<th>Action</th>
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<tr>
<td>Manage all lands to support both biodiversity and public engagement, and tie activities to the ecological quality of the landscape.</td>
<td>See the BIG IDEA: Land Use Decision-Making System.</td>
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<tr>
<td>Conduct a thorough evaluation of current holdings with experts through the development of the Natural and Cultural Resources Master Plan.</td>
<td>The Forest Preserves have contracted with the Illinois Natural History Survey to provide an accurate assessment of what exists in the forest preserves today. The biggest challenge to addressing restoration needs is the lack of current information and what specific actions need to be prioritized to protect which species and restore which ecosystems. The Natural and Cultural Resources Master Plan will provide important information currently missing and desperately needed to move forward with the ambitious restoration goals.</td>
</tr>
<tr>
<td>Double the acreage currently being restored to attain 30,000 acres in good or excellent ecological condition.</td>
<td>Thirty thousand acres will include rare and irreplaceable habitats and places, native landscapes and healthy restored landscapes. An urbanized Forest Preserve needs to provide land for multiple uses and prioritize activities to address the ecological challenges of its holdings. Given the significant need, it is reasonable to expect the Forest Preserves to invest in restoration for these categories and approximately 43% of their current holdings.</td>
</tr>
<tr>
<td>Allocate, raise and invest $40 million a year—eight times the current investment—for nature restoration and stewardship.</td>
<td>The preserves require a significant investment to truly assure their health for now and future generations. (See the cost estimates in Goal 4.)</td>
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</table>
Recognize and dedicate restored forest preserve sites through designation of the highest level of protection in Illinois: Illinois Nature Preserves and Land and Water Reserves.

Illinois Nature Preserve and Land and Water Reserve status confers a standard of excellence regarding habitat for plant and animal species in Illinois. This is a benchmark which indicates that the Preserves are serious and intentional about their restoration efforts.

Promote the value of restored landscapes as safe, well maintained and inviting.

The Preserves will teach people about restoration activities through volunteer opportunities, educational curriculum, outreach and interpretive signage at restoration sites.
GOAL 1 / Native landscapes will thrive for generations.
1.1. Invest in restoration and stewardship.

WHY INVEST IN RESTORATION AND STEWARDSHIP?

NATURE—To promote healthy, diverse, natural ecosystems

Ecological restoration revives nature that has been damaged by human impact and neglect. It creates healthy habitats that support native wildlife and increases species’ ability to cope with stresses like climate change. Loss of habitat is the greatest threat to our birds, butterflies and flowers that need diverse ecosystems to survive.

PEOPLE—To foster learning and engagement

From a child’s first views of butterflies, to a high school student’s observations of plants and animals, to a researcher’s study of the impacts of climate change, restored landscapes are unparalleled “living laboratories.” Restoration gives people a direct connection to nature – hands on activities are invigorating, and offer great opportunities to learn while having fun. Urban youth who participate in a conservation corps share in these connections and gain valuable job skills. And the people who walk the nature trails, discover new birds, or even drive by the expansive preserves enjoy respite from the sprawling concrete of our dense metropolis.

ECONOMY—To increase property values and reduce the costs of a changing climate

Property values are enhanced by proximity to vibrant woodlands and prairies. A significant investment in ecological restoration now will help avoid costs of severe weather in the future. A healthy mixture of native grasses, trees, and flowers provides multiple benefits such as cleaner air and water (filtered by the deep root systems of prairie plants); decreased storm water runoff and reduced flooding; and the absorption of carbon dioxide that would otherwise enter the atmosphere.

LEADERSHIP—To be a global leader in urban conservation

Metropolitan areas everywhere are recognizing the importance of restoring and reviving natural areas to enrich the lives of their residents and to adapt to the impacts of climate change. As part of the pioneering Chicago Wilderness consortium, the Preserves are in a position to be a national and international model for restoration in an urban context.

NOTES

i. 70 ILCS 810/7

GOAL 1 / Native landscapes will thrive for generations.
1.1. Invest in restoration and stewardship.


BIG IDEA: Land Use Decision-Making System

In matters related to land use, the Forest Preserves should develop a framework for decision-making that takes all available data into account, and weights that information with defined organizational priorities.

Why It’s Important

In 1929, the Forest Preserves of Cook County established its first comprehensive land-use policy, which evolved from a recommendation of the District’s Citizens Advisory Committee. The committee’s *Recommended Plans for the Forest Preserves of Cook County* classified the Preserves’ holdings into two categories: (1) existing or potential natural areas, and (2) sites for development as recreational, administrative or educational facilities.

THE 80/20 RULE

According to the report’s assessment, the existing ratio of land in the two categories was approximately 80/20. The Preserves—struggling to keep up with the rapid land acquisition of the early decades—simply made this ratio its rule for the future. The “80/20 Rule” remains the overarching land-use policy for the Forest Preserves today.

The 80/20 Rule proved its value early in the agency’s history when, in the words of one Forest Preserves administrator,

... elected officials were swamped with pressures and demands: demands for jobs; demands for special privileges; demands for structures or improper development of certain areas; demands for grazing lands; demands for firewood; demands for locations to dump spoil and debris; and many, many more. vii

The rule’s hard numbers serve as basic assurances that nature protection will always remain the heart of the Forest Preserves’ mission.
BEYOND THE 80/20 RULE

As a guide for land-use decisions, however, the 80/20 Rule lacks nuance. In which category does a native seed nursery belong? Or a brownfield site? Which natural areas can and should be restored? When? And how? Can a natural area include a zipline? Can it be used for geocaching or adventure races? And where exactly should recreation facilities be—near the county’s youngest populations? Its most underserved? Its unhealthiest? Should current land prices play a role in land acquisition? Should accessibility be a factor?

These are the kinds of land-use decisions that the Forest Preserves has been grappling with for 100 years—and because its holdings are widely scattered around Cook County, the agency’s decisions must often take into account the agendas of other agencies, local governments, and private individuals who control adjacent lands. At the same time, the Forest Preserves’ core conservation mission demands that they use proven best practices for maintaining and restoring the lands under their protection. While the Forest Preserves’ responsibility to protect nature is absolutely clear, the decisions are often dauntingly complex, politically sensitive and highly technical in nature.

FINDING “BEST FIT” LAND-USE SOLUTIONS

The Forest Preserves should have a well-defined process for finding “best fit” land-use solutions, which make the most of each site’s potential for carrying the Forest Preserves’ mission forward. The process should be grounded in specific information and concerns directly related to community characteristics, including physical attributes of the built and natural environment, and social attributes such as population density, income, race and ethnicity. Some baseline data has already been collected in the development of the Preserves’ 2013 Recreation Master Plan.
Guidelines for the Development and Deployment of a Land Use Decision-Making Framework:

- Map available data, using several criteria to assess ecological integrity, carrying capacity, and existing and adjacent uses of land parcels.

- Identify compatible priorities for the land parcels and implement the mission based on the carrying capacity and ecological sensitivity of the land (see figure 1A, “Landscape Continuum Model”):
  - Prioritize conservation of land with the highest ecological value (critical habitat, corridors and connections, for example).
  - Locate recreational and educational uses in areas most accessible to users (because of transit access, parking availability or ADA compliance, for example).

- Employ universal design (design compatible with the needs of older people and people with disabilities) in new built areas. In existing and new developed areas, the Forest Preserves should strive to use universal inclusive design principles to meet the accessibility needs of the greatest number of people while still protecting the sensitivity of the land.

- Adhere to existing permitted and prohibited uses policies.

- Evaluate the public-engagement benefits of new proposed uses by considering their proximity to underserved communities.

- Consider whether the new proposed use could be accommodated by nearby public parks if the use is only open to one particular type of user. For example, the creation of a dog park limits the use of that particular site to that specific user group to the exclusion of others.

- Partner with adjacent community service facilities to provide new entry points for users of the preserves. Evaluate new proposed land uses based on their likelihood of generating new revenue that could be used for restoration purposes.

- Partner with the Chicago Botanic Garden, Brookfield Zoo, the Chicago Park District and other municipal park districts and departments in Cook County to encourage their patrons to visit to the forest preserves.
FIGURE 1A: LANDSCAPE CONTINUUM MODEL

The model below suggests a graphic method of evaluating uses for particular landscape types in the Forest Preserves. The diamond shape illustrates how the small triangles at the top and bottom represent small acreages of the very pristine and rare landscapes (at the top) and the highly developed areas (at the bottom). In general most of the preserve sites will fall within the larger section of the diamond as they are being restored. The examples and the opportunities for people to engage with nature at these different levels are described to the right. The surrounding area marked buffer also calls attention to the need to provide space around the healthy native ecosystems and the rare habitats in order to protect their biodiversity. Buffer lands play an important role in ecosystem restoration.

For a larger image, please see www.nextcenturyconservationplan.org/landcontinuum.
GOAL 1 / Native landscapes will thrive for generations.
> BIG IDEA: Land Use Decision-Making System

NOTES

vii. Roberts Mann, “Landscape Engineering in the Forest Preserve District of Cook County,” paper given before the Western Society of Engineers (Chicago, Illinois, December 6, 1943), 7. Mann was Superintendent of Maintenance for the Forest Preserves at this time. See FPDCC 03 05 0059 1474 001, Forest Preserve District of Cook County Records, University of Illinois at Chicago Library.

viii. For more information and recommendations on regional partnerships, see pages 28-32.

PRIORITY 1.2

Mobilize people to heal and nurture the land.

Restoration as a Labor-Intensive Process

Restoring and maintaining natural areas is labor intensive. Most of the areas in the Forest Preserves of Cook County are in poor condition (see Priority 1.1), and bringing them back to health will require an extensive supply of staff, volunteer-stewards and outside contractors.

As of 2013, the Forest Preserves of Cook County employs a small group of expert staff to conduct restoration work on sites throughout the county. These staff members are responsible for ecological restoration activities on a broad spectrum of natural communities from prairies to oak savannas to wetlands. Restoration actions are not prioritized to intensively address keeping the most pristine landscapes pristine but rather to do some activity at many sites. This process leads to frustration as it is difficult to then keep invasive plants in check. In addition, the temporary restoration moratorium (see p. 19) rolled back progress on many sites.

Although volunteer numbers fluctuate, there is a core group of regular volunteer stewards and a few dozen occasional volunteers who contribute to restoration projects in the preserves. Although the commitment and spirit among stewards is strong, there simply are not enough people available to do the work required to restore the preserves to health.

A conservative estimate for the number of volunteer-stewards, staff or contractors needed to restore an acre of land is five people. This can include weekend activities such as brush removal, spraying invasives, cutting buckthorn, seeding etc. by volunteers. In addition some sites require staff and contract services with machinery, such as to re-meander a stream. The number of people needed increases with different types of work. Hydrology related projects, for example, are extremely labor-intensive.

For the Forest Preserves to restore 27,000 acres of land to good or excellent condition, approximately 135,000 people will be needed over the next twenty-five years.
Inspiring People to Care for Nature

The Preserves, of course, cannot reasonably be expected to hire the 135,000 people required to restore the land—but the agency can reasonably be expected to engage and support volunteer stewardship efforts, and to encourage the larger community to care for nature in Cook County through outreach efforts and institutional priorities.

ENGAGING VOLUNTEERS AND THE PUBLIC IN RESTORATION EFFORTS

Volunteers have been largely responsible for the restoration efforts in the five percent of the Forest Preserves’ lands that are considered in “good” or “excellent” condition. The Forest Preserves of Cook County has both an opportunity and responsibility to build public support, encourage volunteer engagement for the long term and build partnerships with other organizations to engage as many people as possible.

The moratorium on restoration from 1996 to 2006 provides a stark example of what the Forest Preserves’ leadership should strive to avoid in the next century. The suspension of restoration efforts jeopardized the health of the preserves and the volunteer-stewardship efforts that were ramping up in the early 1990s after the District appointed its first land manager, Ralph Thornton; shortly after, the District hired a volunteer stewardship coordinator. The moratorium was enacted, in large part, because of a lack of public awareness and understanding. Protestors objected
to the use of restoration techniques such as burning, cutting down undesirable trees, and culling deer because they saw these activities as harming rather than preserving nature. (See feature “What is Restoration?” in Priority 1.1.) The challenge was then—and remains still—to teach the general public, politicians, and the media that these procedures help rather than harm: they reverse years of degradation and result in a newly healthy and thriving ecosystem.

Continued volunteer-stewardship is critical to protecting the significant investment in restoration through ongoing management of the sites. Once the initial restoration work is complete, volunteers can make a significant impact through routine invasive species removal (pulling garlic mustard and cutting down buckthorn as it reemerges) and seed gathering and propagation. This work requires minimal skills or staff supervision, but volunteers find it rewarding as a one-time event or a regular weekend activity.

**CONSERVATION CORPS**

In addition, the Forest Preserves of Cook County and its partner land managers throughout the region have a unique opportunity to expand their capacity for restoring and protecting nature while contributing to a core driver of regional economic strength: a trained workforce. A permanent conservation corps could provide an ongoing supply of trained workers to restore thousands of acres and keep them thriving. (See the BIG IDEA: Conservation Corps, following Priority 1.2.)
### PRIORITY 1.2: Action Steps

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<tr>
<td><strong>Set high standards and increase resources for restoration by expert staff and contractors.</strong></td>
<td>Increasing effectiveness and cohesion of work completed by staff and contractors will ensure cost-effective, proactive, and strategic restoration projects and long-term outcomes.</td>
</tr>
<tr>
<td><strong>Dramatically increase volunteer engagement by partnering with community leaders and organizations.</strong></td>
<td>It takes at least five trained people to restore an acre of land, and to realize the Plan’s vision of restoring nearly 30,000 acres, the Forest Preserves need the help of over a hundred thousand people. Engaging and training volunteer-stewards is a demonstrated successful approach to scaling up the restoration potential in the Forest Preserves of Cook County.</td>
</tr>
<tr>
<td><strong>Create a permanent Conservation Corps, working in partnership with workforce, justice system and community agencies to engage and train the next generation to restore and steward the land.</strong></td>
<td>See the <strong>BIG IDEA: Conservation Corps</strong></td>
</tr>
</tbody>
</table>
BIG IDEA: Conservation Corps

The Forest Preserves should lead in the creation of permanent, paid conservation corps to help restore and maintain the forest preserves, connect youth to nature and provide job-readiness skills and work experience.

Why It’s Important

Restoring and sustaining ecosystems requires extensive hands-on work. Just as the Civilian Conservation Corps of the 1930s brought people to improve the Preserves, a 21st century conservation corps could be a force for advancing restoration. It also is a good fit with the Forest Preserves’ goal to engage new audiences. Youth who have hands-on restoration experience are more likely to continue to benefit from engagement with nature over the course of their lives.

BUILDING FOUNDATIONS FOR A SUCCESSFUL WORK LIFE

In 2012, the unemployment rate for Illinois residents aged 16 to 24 years was 18.5 percent—among the highest in the nation. Cook County has some of the nation’s best prepared workers, but at the same time, it has a large population of adults with only or less than a high school diploma—a population that is nearly twice as likely to experience unemployment.

In addition, many Chicago-region employers report that they have difficulty filling empty positions because of poor job-readiness among their potential employees. By offering young Cook County residents structured opportunities to learn good work habits and basic skills, and by partnering with existing workforce development agencies, a permanent conservation corps could provide young adults with the foundations of a successful work life and a connection to existing job opportunities.

The Forest Preserves has identified the following goals for a corps program:

- Remove invasive species that put native oak trees, prairie plants, and animal habitats at risk;
GOAL 1 / Native landscapes will thrive for generations.
BIG IDEA: Youth Conservation Corps

- Restore prairies, wetlands, and savannas with their native plants and trees; and
- Build the next generation of local conservation leaders that will spearhead an appreciation of nature and its relevance to their lives.

A number of conservation organizations and agencies are already partnering with the Forest Preserves on similar programs, but these are funded year-by-year and do not reach a scale that can have a major impact on restoration efforts.

A SPECIAL OPPORTUNITY FOR COOK COUNTY: PARTNERING THE FOREST PRESERVES WITH THE JUSTICE SYSTEM

Because of Cook County’s responsibility for the justice system, there is a particular opportunity to develop programs that can serve justice-involved youth, a group that rarely has access to meaningful workforce experience. Based on 2013 data, there are approximately 4,500 youth on probation in Cook County for non-violent offenses, and an average of 300 youth detained per day in the Cook County Juvenile Temporary Detention Center. On average, it costs more than $90,000 to incarcerate one youth offender for a year.

Alternatives to incarceration are both cost effective and have more positive outcomes for youth. But programs for justice-involved youth often have difficulty accessing work experience. A Conservation Corps can be a unique opportunity to meet this need—and collaboration with the county and state justice systems could help to bring necessary financial resources to the table. Conservation corps programs are not inexpensive—they can cost between $20-30,000 per individual for a full year of paid work—but compared to the costs of repeated incarceration, they can be highly effective.

Partnering with the justice system should be one component of a larger conservation corps program that builds on the many national models for partnership and blended public and private funding.

Key Elements for Developing a Successful Conservation Corps:

- **Permanence and scale:** While funding sources may vary, the Preserves should seek to make a Conservation Corps a permanent part of its restoration workforce. The target should be to employ 1000 youth per year in six-month programs (or more in summer programs).
Meaningful workforce experience:

- Expert supervision (estimated at least one supervisor per 10 crew members)
- Training and credentials—the Forest Preserves has identified the following opportunities depending on the age and abilities of participants:
  - Conservation Invasives 101
  - Herbicides 101 (two state certifications available)
  - Conservation 102
  - Brush Pile 101
  - Herbicides 102
  - Prescription burn assistance
  - Chainsaw
  - Commercial Drivers License (CDL) certification
  - Advanced Burn
- Life and workforce skills, including:
  - Goal setting and planning skills
  - Values and needs determination skills
  - Alternative dispute resolution techniques
  - Team work
  - Problem solving, critical thinking
  - Self-awareness, self-confidence, assertiveness
  - Career assessment
  - Resume Writing 101
  - Interview Prep 101
  - Customer Service 101
  - Introduction to Computer Course 101
  - Portfolio of FPDCC Work prepared to mesh with career opportunities
- Stipend or hourly wage
- Performance evaluation
- Post-placement opportunities
- Transportation to work sites from central hubs that are accessible to Corps members communities
GOAL 1 / Native landscapes will thrive for generations.
BIG IDEA: Youth Conservation Corps

- Connections to employers for mentoring and career path education. Note that there are conservation job opportunities, but there are many transferable skills that result from Conservation Corps experience in industries such as manufacturing, construction and others. In addition, soft skills are important for almost any career path.

- **Special programs for justice-involved youth:**
  - GED/high school diploma opportunities.
  - Wrap-around services to address counseling and mental health and other social service needs.
  - Success measures based on both positive youth outcomes and restoration outcomes.

**Relevant Models**

Around the nation, there are multiple models of Conservation Corps programs, including the three that follow:

**CALIFORNIA CONSERVATION CORPS**

The California Conservation Corps (CCC) is a department of the government of California that falls under the California Resources Agency. It is a work development program for men and women between the ages of 18-25 and provides opportunities in environmental conservation, fire protection, land maintenance and emergency response to natural disasters. It employs approximately 3000 corps members each year and most stay for nine months. The annual budget is $62 million, including 38 percent from the state general fund, 22 percent from bond sales and 40 percent from reimbursement funds from other agencies for corps project work.

**LA CONSERVATION CORPS (LOS ANGELES, CA)**

The LA Conservation Corps (LACC) is a stand-alone nonprofit founded by business leaders in 1986. It currently operates a full-time young adult program and a part-time middle and high school “Clean & Green” program while maintaining a steadily increasing budget each year. Its Young Adult Conservation Corps serves an average of 584 people each year and contracts with agencies such as the California Department of Conservation, the City of Los Angeles’ Community Development Department and the U.S. Environmental Protection Agency to provide workers for their projects. Participants, ages 18-24, have the opportunity to participate in a high school diploma program and receive paid on-the-job training, life skills training, and
GOAL 1 / Native landscapes will thrive for generations.
BIG IDEA: Youth Conservation Corps

support services during the program and during a transitional period. The Budget is approximately $10-12 million annually, with a per-participant cost of about $17,000 for an eight-month program. The LA Conservation Corps also operates a number of other programs for younger participants.

MINNESOTA & IOWA CONSERVATION CORPS

The mission of the Minnesota and Iowa Conservation Corps program is to help young people from diverse backgrounds become more connected to the environment, engaged in conservation, involved in the community and prepared for future employment. The organization operates a program for approximately 165 young adults ages 18-25 who work on 8-10 month projects including restoration and emergency response. Funding is provided through AmeriCorps and the annual budget is approximately $5 million. The organization also has a summer youth program and an after school program.

NEW YORK CITY JUSTICE CORPS

While the New York City Justice Corps program is not solely conservation focused, it is a model to learn from. It is a collaborative effort between the NYC Department of Corrections, the John Jay College of Criminal Justice and the NYC Center for Economic Opportunity. The purpose is to support successful reintegration of individuals involved in the justice system and to reduce recidivism and poverty. It serves approximately 300 young adults (ages 18-24) annually who participate for six months, working on community development projects such as murals, weatherization and renovation. Services provided include case management, job readiness, job placement and/or educational program enrollment and 6-8 week employment internships after the program. Participants receive post-placement support for six months. The cost per participant is approximately $14,250 for a six-month program.

Local Initiatives to Build Upon

The following programs are already underway with Forest Preserves’ partners, and should be integrated into an overall effort to scale up and bring permanence to a conservation corps program.

CHICAGO CONSERVATION LEADERSHIP CORPS

The Friends of the Forest Preserves and the Student Conservation Association (SCA) have launched a summer Chicago Conservation Leadership Corps for high school students. The Forest Preserves provide grant funding to this program, which serves approximately 50-70 diverse students annually for a 6-7 week summer program.
There were 700 applicants in summer 2013, and there is great opportunity to expand the program. The Friends and SCA also served five 18-20 year olds in their eight-month Young Adult Program funded with corporate and foundation dollars.

**GREENCORPS CHICAGO**

Run by the City of Chicago’s Department of Transportation, Greencorps is a comprehensive nine-month program that serves 40-50 young adults each year, many of whom are ex-offenders. In 2013, Greencorps also received $2.5 million in funding to provide a six-week summer program to 600 at-risk high school students. Greencorps engages 30-50 participants annually. They are ages 18 and over, and approximately 90 percent are ex-offenders or “hard to employ” youth. They work on many different sites.

The Forest Preserves has a successful relationship with Greencorps and funded $250,000 worth of work in the summer of 2013, which included removal of woody invasive species with chainsaws, managing invasive species and performing prescribed burns. Greencorps provided training, including chainsaw use, pesticide application and plant identification, and the Forest Preserves provided prescription burn training.

**WINDY CITY HARVEST TRANSITIONAL JOBS PROGRAM**

This transitional jobs program is a partnership of the Chicago Botanic Garden and Vocational Rehabilitation Impact Center with Daley College. Its focus is local food growing, but there are many lessons to be learned and partnerships that can be built on for a restoration program. The program includes paid work experience, professional development, environmental literacy certification and support services including childcare, housing and counseling. The Chicago Botanic Garden can be an excellent resource for the Forest Preserves, sharing their learning from the Windy City Harvest program.

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**NOTES**


xi. *Partnering for Prosperity: An Economic Growth Action Agenda for Cook County.* Cook County, April 2013, p.33 For more on workforce and labor market dynamics in the Chicago region, see for example [http://www.cmap.illinois.gov/c/document_library/get_file?uuid=74061f61-1899-4650-830f-3286b1a9f154&groupId=20583](http://www.cmap.illinois.gov/c/document_library/get_file?uuid=74061f61-1899-4650-830f-3286b1a9f154&groupId=20583)
GOAL 1 / Native landscapes will thrive for generations.
1.3. Connect the Preserves to a wider wilderness.

PRIORITY 1.3

Connect the Preserves to a wider wilderness.

Fragmented Lands Governed by Many Stakeholders

Natural systems do not recognize human-made borders: the Forest Preserves’ natural areas are related to others all over the region, the country and the globe. Birds migrate to the preserves from as far away as the southern tip of South America. The preserves’ waters are joined to the Great Lakes and the nation’s largest river systems. Within the region, the forest preserves’ seeds, insects, birds and animals circulate across territories that traverse political and organizational boundaries.

The Chicago Wilderness region, an interconnected natural area along the crescent of Lake Michigan, comprises lands in Wisconsin, Illinois, Indiana and Michigan. These lands are shared by many stakeholders—including local governments, conservation organizations, private landowners and others—whose direct jurisdiction ends at each legal boundary.
GOAL 1 / Native landscapes will thrive for generations.
1.3. Connect the Preserves to a wider wilderness.

EFFECTS OF FRAGMENTATION ON RESTORATION EFFORTS AND RECREATION

Because each group has limited jurisdiction, the restoration and stewardship work essential to natural area preservation is fragmented and inconsistent. In particular, essential but potentially controversial practices, such as tree removal for the restoration of natural prairie or controlled burns for the long-term health of plant life, tend to be applied in isolation based on local policies and pressures. Volunteers rooting out garlic mustard on one acre, for example, may not have permission to continue clearing it on the next; engineers restoring natural streams on one property may not have authorization to continue their work downstream.

“...surrounding habitat that is not restored and maintained can make trails appear uninviting or unsafe to people who use them.”

Fragmentation also affects people who encounter gaps in physical trails when hiking, biking, or canoeing within and beyond the Forest Preserves trails system. The Forest Preserves provide three types of trails—multi-purpose, water, and hiking—but these trails lack continuity within and beyond the Forest Preserves system. Even where trails exist, surrounding habitat that is not restored and maintained can make trails appear uninviting or unsafe to people who use them.

EFFECTS OF FRAGMENTATION ON ECOTOURISM

The lack of regional, multi-state, and national hiking trail connections also prevents Cook County from enjoying the full benefits of ecotourism. The Northeastern Illinois Regional Greenway and Trails Plan Update (2009) and Northeastern Illinois Water Trails Plan (1999) offer guidance on where to implement trail connections, but it is up to the Forest Preserves of Cook County to advance these efforts.

Partnership and Leadership within Chicago Wilderness

Chicago Wilderness is a regional alliance that includes more than 300 nonprofit and corporate stakeholders working together to restore and connect nature in this region. The Forest Preserves of Cook County, with its widespread geographic presence, has an opportunity to play a critical leadership role in the already existing structure of Chicago Wilderness.

“As a leader among local organizations, the Forest Preserves could help others navigate the county’s
GOAL 1 / Native landscapes will thrive for generations.
1.3. Connect the Preserves to a wider wilderness.

complex political landscape and help provide successful outcomes for both people and nature.”

By formalizing partnerships with local park districts, the Preserves can investigate opportunities for collaborative grants, promote better connectivity and share services. As a leader among local organizations, the Forest Preserves could help others navigate the county’s complex political landscape and help provide successful outcomes for both people and nature.
FIGURE 1B: EXISTING TRAILS WITHIN THE FOREST PRESERVES OF COOK COUNTY

In the next century, the Forest Preserves could initiate efforts to formalize a hiking trail through the Chicago Wilderness region and connect it to the American Discovery Trail—a recreational trail that stretches from the Atlantic to the Pacific Oceans. Such a trail would bring additional recreational opportunities and ecotourism to Cook County. (See www.discoverytrail.org.)

Map source: Fregonese Associates.
**PRIORITY 1.3: Action Steps**

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<td><strong>Expand the Preserves by 24 percent to 90,000 acres, prioritizing acquisition of lands with high ecological value, lands under threat of irretrievable loss, lands that secure our water quality and quantity, and lands that can engage new audiences.</strong></td>
<td>Currently, the preserves comprise 11.4 percent of the county’s landmass. This land area is eight times the size of the Chicago Park District, and 80 times the size of New York’s Central Park. But much of this land was acquired in the early decades of the Forest Preserves’ history. It’s time to reinvigorate acquisition efforts to acquire up to the current limit of 75,000 acres and pursue legislative change to increase the statutory limit. New acquisitions will provide more Cook County residents equitable access to the preserves and will help bridge gaps in ecological corridors and recreational trail systems.</td>
</tr>
<tr>
<td><strong>Support ecosystem, greenway and trail connections, enabling people, animals, water and seeds to move easily through the Chicago Wilderness region.</strong></td>
<td>Creating green space corridors in accordance with the Green Infrastructure Vision 2.0 and new trail connections within and beyond the preserves’ boundaries can help plants, animals and people move more easily within the greater Chicago Wilderness region. Lack of connectivity limits plants and animals ability to adapt to climate change. Limited trail connections stifle opportunities for active commuting and ecotourism. It takes about 5 years to complete the many tasks necessary to create a multi-use trail including raising Federal funding and developing engineering plans, negotiating cross-jurisdictional agreements and acquiring land for the trail connection. That’s why it’s important to start now.</td>
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<td>Expand innovative partnerships with the Cook County Land Bank, NeighborSpace, and local park districts, and capitalized on connections with government agencies and conservation organizations at neighborhood, regional and state levels to protect land and engage people.</td>
<td>Well-developed partnerships with other conservation organizations can offer the Preserves new opportunities to improve connectivity among the county’s natural areas—linking together habitats, trail systems and programming to reflect the natural systems at work within them, rather than the administrative boundaries that divide them.</td>
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The Challenge of Climate Change

People and animals in Cook County are already experiencing the effects of a changing climate. Scientific evidence reveals a shifting precipitation pattern in the region marked by wetter winters and springs along with drier summers. The seasonal patterns are changing, too, with anticipated milder winters and earlier spring arrivals. Overall, studies expect an increase in extreme weather events: high-intensity rains that can flood our natural areas, homes and businesses along with longer-lasting periods of drought.

It is difficult to predict how or the rate at which native species in the forest preserves will respond to changing temperature and water availability. Without ramping up the Forest Preserves’ restoration and adaption efforts—removing invasive plants and planting more resilient, deep-rooted native plants like compass plant, heath aster, white wild indigo, purple prairie clover, cylindric blazing star, and Indian grass—native ecosystems will face severe challenges in the face of climate change.

EFFECTS ON BIRDS AND POLLINATORS

In particular, animal species including many birds and pollinators will suffer because of climate change. By the end of the 21st century, up to 44 native bird species like tree swallows and yellow warblers may stop breeding in Illinois because of temperature shifts. Pollinators will have difficulty locating their food source if plants bloom earlier in the year based on shifting temperatures.

INCREASED STORM DAMAGE

Without immediate efforts to restore the natural hydrology in the Preserves, increased storm intensity will likely have a damaging effect on wetland ecosystems and the surrounding communities. For instance, high-intensity storms will inundate
these systems with more non-point source pollution from agricultural and urban areas, threatening the wetlands’ water quality. The increased volume of rainwater can also overwhelm wetlands’ natural ability to act as a sponge, leading to more storm water runoff and strains on our combined sewer systems. People are directly impacted by flooded basements and combined sewer overflows when untreated water is released into our river systems and Lake Michigan. Wetlands also face threats from droughts and rising temperatures that affect evaporation rates.

**Building Resiliency in the Forest Preserves**

The Forest Preserves of Cook County need to engage in critical research and adopt suitable conservation strategies that ensure the resiliency of native plant and animal species in the Preserves in the face of shifting climatic conditions. Chicago Wilderness’ Climate Change Update to the Biodiversity Recovery Plan offers an important tool to assist land managers, policy makers, and individuals in creating and implementing strategies for biodiversity recovery and adaptation in the Chicago Wilderness region.

**IMPLEMENTING MEASURES FROM THE SUSTAINABILITY DOCTRINE**

The Forest Preserves of Cook County have taken initial steps to recognize the importance of addressing climate change by implementing sustainability practices. To this end, the Preserves adopted the Sustainability Doctrine, which is intended to “guide and instruct present and future stewards of FPDCC to nurture our lands to the benefit of all, in perpetuity” (p. 18). As the Annual Budget Ordinance of 2012 shows, the Preserves have already completed certain measures to implement sustainable practices related to operating their facilities. Given the scale of their land and water holdings, it is vital that they ramp up climate adaptation practices to restore and sustain healthy ecosystems.

**LEARNING FROM PARTNER INSTITUTIONS: CHICAGO ZOOLOGICAL SOCIETY AND CHICAGO BOTANIC GARDEN**

In light of uncertainty, the Forest Preserves should take proactive steps and learn from their partner institutions—the Chicago Zoological Society and the Chicago Botanic Garden—about effective approaches in sustainable building retrofitting, climate change education, and land-based adaptation practices. Both the Zoo and Garden are reducing contributions to greenhouse gas emissions by incorporating green building standards into construction projects, phasing in more fuel efficient vehicles, promoting recycling and re-use of materials and non-potable water and using low carbon energy sources.
GOAL 1 / Native landscapes will thrive for generations.
1.4 Learn from and adapt to a changing environment.

Additionally, the Zoological Society is pioneering climate change education initiatives. It received a $1 million grant in 2012 from the National Science Foundation to develop the national Climate Literacy Zoo Education Network and new approaches to connecting Brookfield Zoo visitors to polar animals that are endangered by climate change.

The Botanic Garden is also doing impressive, cutting-edge climate adaptation work, such as native seed banking and plant management and monitoring.

The Plants of Concern program monitors several hundred rare plant species in the greater Chicago region with the help of citizen scientists.

Additionally, the Garden is pursuing phenology monitoring (the study of plant life cycles under specific conditions), modeling how plant ranges will shift under climate change scenarios and researching the best seed sources for more tolerant plants. Based on this research, it can strategically direct human-assisted plant migration (seed collection and dispersal) to best suit the changing climate of this area.

These strategic initiatives provide opportunities to leverage the work and partnerships with the Forest Preserves and scale up climate change adaptation strategies on their holdings as well.
PRIORITY 1.4: Action Steps

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<td>Building on the research capacity of the Chicago Botanic Garden, Chicago Zoological Society and other institutions, advance our scientific knowledge of plants, animals, water and natural areas in a changing climate.</td>
<td>The Zoo and Garden are taking important steps to address climate change by taking action to reduce contributions to greenhouse gas emissions and leading climate change education and land adaptation research and practices. This research can inform the Forest Preserves’ restoration and management efforts.</td>
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<tr>
<td>Practice water conservation, native landscaping and energy efficiency throughout the forest preserves, and be a leader in adapting to and mitigating climate change.</td>
<td>Ecological restoration is by far the best action the Forest Preserves can take to brace for climate change. Read more about restoration under Priority 1.1.</td>
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<td>Pursue LEED certification for new construction and redevelopment of properties, and pursue SITES certification for landscape design.</td>
<td>By following LEED and SITES guidelines, the Forest Preserves will reduce energy consumption and greenhouse gas emissions.</td>
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<td>Expand relationships with sustainability advocates to repurpose abandoned or buffer properties for restored ecological functions, local food growing and native landscaping.</td>
<td>Take derelict property and generate a dual benefit to people and wildlife, the first as a space to grow food, and as a compatible land use to co-locate next to preserves. Both local food growing and native landscaping reduce resource use and greenhouse gas emissions.</td>
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A Timeline of Transformation

How will we measure success? The highlights here provide a sample of all the Forest Preserves should expect to achieve, and the agency should assess progress and set new targets every five years.

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<th>IN 5 YEARS: MEASURE PROGRESS</th>
<th>CELEBRATE OUTCOMES</th>
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<tr>
<td>Gain a comprehensive understanding of the Forest Preserves’ ecology and conditions by completing the Natural and Cultural Resources Master Plan (initiated in 2013).</td>
<td>All 10,000 acres that are dedicated Illinois Nature Preserves and Land and Water Reserves will be improved and restored to good or excellent quality.</td>
<td>At least 30,000 acres will reach Illinois Natural Areas Inventory quality and be restored to thriving, high-quality natural areas and maintained over the long term.</td>
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<td>Adopt a plan to increase the number of acres in the Illinois Nature Preserves and Land and Water Reserves to 10,000 acres by 2015 and 20,000 acres by 2025 (from a baseline of 7,900 acres in 2013).</td>
<td>Financial and management resources will be dedicated to restoring half the Forest Preserves’ land by 2040.</td>
<td>Healthy, transitional natural areas will account for most of the remaining 60,000 acres in the preserves, offering a variety of habitat, buffer areas, and low-impact recreation opportunities, such as trails.</td>
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<td>Implement a consistent and thoughtful decision process for determining appropriate activities for specific lands based on their characteristics.</td>
<td>Forest Preserve restoration crews will work side by side with at least 500 conservation corps members—providing supportive workforce training for at-risk youth and young adults.</td>
<td>All built “portals” that invite the public, such as nature centers, picnic areas, pavilions and more will be landscaped to support nature.</td>
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<td></td>
<td>Increase the statutory limit for land acquisition from 75,000 to 90,000 acres.</td>
<td>Four hundred expert volunteer stewards will supervise thousands of volunteers to restore and maintain the health of at least 30,000 acres.</td>
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