



The Office of Land Stewardship

What we're doing for Indianapolis

Acknowledgements

This document was created to illustrate the Office of Land Stewardship's activities, successes, and plans in order to help the public and other City offices understand our role in protecting Indianapolis' natural areas. The land managed by the Office of Land Stewardship plays a vital role in addressing the City's environmental health, and it offers some of the best opportunities for residents and visitors to enjoy Central Indiana's natural heritage. The Office of Land Stewardship staff is grateful for the opportunity to serve the City in this capacity.

The three members of the Land Stewardship staff - Don Miller, Brenda Howard, and Jacob Brinkman - were integral to the planning process and ongoing implementation of the Office's mission. They were joined in the development of this plan by Spencer Goehl and Phil Oser from Eco Logic LLC, a Bloomington-based restoration and management firm. The planning process and development of ongoing public engagement opportunities were led by Jill Hoffman and Scott Minor from Indianapolis-based Empower Results, an environmental planning and outreach firm.

www.indy.gov/landstewardship





Widow skimmer dragonfly

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What is the Office of Land Stewardship?



Wild blue indigo, *Baptisia australis*

Land Stewardship in Indianapolis

Within the City of Indianapolis, the Office of Land Stewardship is housed under the Department of Public Works and maintains a partnership with the Department of Parks and Recreation.

Funding for Land Stewardship comes from the City's annual operating budget as well as through fees assessed as part of the City's stormwater program. Land Stewardship also works with funds from grants and a variety of organizations.

Land Stewardship's partners include Purdue University, Indiana University-Purdue University Indianapolis (IUPUI), Butler University, and the Indiana Native Plant and Wildflower Society.

Across 37 properties, the Office of Land Stewardship manages approximately 1600 acres of park natural areas and green infrastructure installations that filter stormwater runoff.

Land Stewardship's work helps preserve critical wildlife habitat, provide passive recreation opportunities, protect air quality, and address stormwater issues related to water quality. In recent years, the Office of Land Stewardship has become a regional leader in protecting natural areas and helped Indianapolis become one of the National Wildlife Federation's Top 10 Cities for Wildlife in 2015.

Mission

Land Stewardship protects and manages natural habitats for people, wildlife, clean air, and clean water.



Don Miller, Land Stewardship Manager

Don oversees the restoration of park and greenway lands. He holds a degree in Park Administration from Indiana State University and completed graduate studies at IUPUI in remote sensing. His experience restoring forests, prairies and wetlands in Marion County gives him a unique understanding of the challenges of restoration. Don has 25 years of experience in ecological restoration and was instrumental in reintroducing the State Endangered Kirtland's snake to Eagle Creek Park, now the focus of a large wetland restoration.

Favorite property: Raymond Park

Favorite wildlife: Black-capped chickadee (*Poecile atricapillus*)

Favorite plant: Beak grass (*Diarrhena americana*)



Brenda Howard, Senior Ecologist

Brenda leads natural resource management duties, writes conservation management plans, manages office data through GIS applications, and tracks the office budget. She has a Bachelor's Degree in General Studies with a minor in geography and an environmental concentration. Brenda has worked in ecological restoration since 2004 and was key in implementing the deer management program at Eagle Creek Park.

Favorite property: Paul Ruster Park

Favorite wildlife: Eastern box turtle, (*Terrapene carolina Carolina*)

Favorite plant: Rattlesnake master (*Eryngium yuccifolium*)



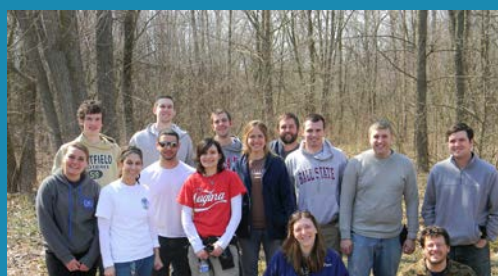
Jacob Brinkman, Ecologist

Jacob assists with ecological restoration planning, field work, and natural resource management duties. He graduated from Indiana University in 2004, earning a Bachelor's Degree in Public Affairs with a major in Environmental Management. Jacob has over fifteen years of experience in the environmental field including education, restoration, and scientific data collection.

Favorite property: Eagle Creek Park

Favorite wildlife: Red fox (*Vulpes vulpes*)

Favorite plant: American ginseng (*Panax quinquefolius*)



Our contractors, partners, and volunteers



Where We've Been and Where We're Going



Our History: Past Successes

The first restoration in Indianapolis parks started in an old agricultural field in the spring of 1992 at Eagle Creek Park. School students planted acorns in a 13-acre field in partnership with the US Fish and Wildlife Service. From this small start, Land Stewardship's management areas have grown to nearly 1,600 acres in 37 parks today. A closer look at the numbers shows that Land Stewardship:

- Increased wetlands from 2.5 acres to 43 acres
- Increased planted prairies from 12 acres to 295 acres
- Increased woodland restoration from 160 acres to 882 acres
- Increased the number of invasive plant species managed from just a few to 70
- Converted more than 718 acres from turf and agriculture to native plantings

Vision

The Office of Land Stewardship will protect, manage, restore, and expand natural areas in Indianapolis in order to increase the ecological services they provide, improve the natural landscape for wildlife and passive recreation, and foster a conservation ethic to inspire current and future generations to value these special places.



Before and After: Paul Ruster Park, Turf-to-Native Conversion



The Function of Natural Areas

Did you know...

The City of Indianapolis is comprised of about 4.3% parkland, excluding state and unincorporated lands. Of that, about 34% is woodland. This includes 402 acres of forest remnants across 10 parks.



The Critical Nature of Our Work

Ecosystem Services

There is more to natural areas than picturesque landscapes or a place to picnic. Natural areas actually perform important functions for us. These ecosystem services include stormwater management and other water quality benefits, clean air to breathe, removal and storage of carbon dioxide, and providing space with aesthetic, healthful, and recreational value.

When human activity eliminates natural areas, these ecosystem services are disrupted, often severely. It then becomes the job of engineers, planners, and designers to figure out how to simulate those services in the built landscape. Human-made solutions rarely perform as well as the natural systems in providing these services.

Water Quality

Stormwater, the volume of water in a rain event, is a serious problem for many communities. Before natural areas were settled and developed, about 50% of the rain that fell was absorbed by the soil and recharged the groundwater. Today that number is closer to 15% due to impervious surfaces such as buildings, pavement, and compacted soils. Rain that was once captured in forests and wetlands now falls on roofs, roads, and parking lots. All of that extra

The Function of Natural Areas



water has to be engineered off the landscape so every storm doesn't result in widespread flooding. These man-made solutions can result in pollution as rainwater often runs over contaminated surfaces and drains into waterways. Because much of our drinking water comes from surface sources like rivers and reservoirs, water treatment plants incur greater costs to make water clean for drinking. Surprisingly, sediment is the number one pollutant of rivers, lakes, and streams in Indiana. Native vegetation with deep root systems holds the soil in place, reducing erosion and keeping our streams cleaner. Land Stewardship uses native plants in their restoration work and rain gardens, which allows for infiltration of stormwater into the ground and help protect water quality in our watershed.

Air Quality

A mature tree can absorb 10 pounds of air pollution every year and more than a ton of carbon dioxide over its lifetime. Unfortunately, forest clearing and increased vehicle use has resulted in more air pollution and greater carbon dioxide emissions - just one gallon of gas creates about 20 pounds of CO₂!

Communities where natural areas have been reduced or are absent are seeking ways to clean the air and sequester carbon dioxide. Indianapolis parks are part of the solution by providing 6,522 acres of tree canopy, which makes up 60% of the land cover in parks. These trees remove 410,139 pounds of air pollutants annually with a monetary benefit of \$1,475,387. In addition, they sequester 53,299,942 pounds of carbon with a monetary benefit of \$967,679. This is a combined value of \$2,443,066 every year - all from the tree canopy in Indianapolis parks!

Passive Recreation

Numerous studies show that passive recreation in natural areas has many health benefits such as reducing stress and blood pressure. Activities like hiking, birdwatching, and nature observation are increasingly popular ways to experience the natural environment and connect to the landscape. Indianapolis parks provide residents and visitors access to some of the highest-quality passive recreation in the region.

Natural areas are essential for a healthy community and Land Stewardship is proud to be managing the land that provides these important benefits.

Biodiversity

Natural areas are equally important for the survival of most of our native plants and animals. While some animals have adapted to the built environment, most wildlife need a different community; one that includes a diversity of trees, shrubs, wildflowers, insects, and other organisms. For example, a single oak tree may support as many as 500 butterfly and moth species. As human development removes



Trillium (red), larkspur (purple), and anemone (white) at Southwestway Park



The Function of Natural Areas

this kind of native asset and replaces it with exotic species of trees such as Bradford pear, there is an exponential loss of wildlife that native plants support. For example, butterfly and moth larvae support bird populations, birds spread wildflower seeds, wildflowers support pollinators, and pollinators are necessary for ecosystem health and human food production. Everything is connected and interdependent!

We are committed to protecting Indianapolis' natural areas in order to provide habitat and community for our native flora and fauna. Indianapolis is home to about 50 rare, threatened, or endangered animals and 9 rare, threatened, or endangered plants. Land Stewardship has protected over 1,600 acres of habitat for them to date.

Passing on a Conservation Ethic

Forest cover in Indiana has increased since the 1960s, but that isn't the case in Indianapolis. Development pressure continues to threaten remaining natural areas, and it's hard to reverse the trend of lost woodlands in Marion County. The Office of Land Stewardship works to engage volunteers and educate the public about the inherent value of our local natural areas. Awareness of these treasured areas is their best defense.



Lizard's tail, *Saururus cernuus*, Raymond Park



How We Focus Our Efforts

Did you know...

The Office of Land Stewardship doesn't just manage large natural areas. Curbside bioswales, rain gardens, and other green infrastructure elements are also part of our work.



The Office of Land Stewardship has successfully managed urban natural areas for 25 years. The value of natural areas in Indianapolis parks has been demonstrated through five key areas: stormwater runoff reduction, climate change mitigation, pollinator support, protection of species of special concern, and invasive species control. The benefits of natural areas are becoming better known today, and Land Stewardship believes our parks deserve greater recognition and value for all they offer to the Indianapolis community.



White River at Southwestway Park

Stormwater

Land Stewardship's efforts to address the increasing problems caused by stormwater involve several different approaches. Agricultural fields and turf grass have been converted to native habitats like woodlands and wetlands, which naturally manage a large volume of stormwater. We also protect existing natural areas which are already performing this task. In our forests, big trees that make up the canopy intercept around 60,000 gallons of stormwater per acre every year. That's a \$2.2 million value annually and doesn't even include the understory trees, shrubs, vines, herbaceous layer, and soil; all of which have an enormous effect on rainwater interception. Soil alone holds about 27,000 gallons of stormwater per acre on an annual basis. And we manage over 1200 acres of woodlands!

Land Stewardship also manages 43 acres of wetlands. Wetlands can be described as nature's kidneys, acting like sponges to hold and release water in order to prevent damaging flows. Our wetlands can store up to an estimated 64,500,000 gallons of stormwater annually, filtering up to 95% of sediments and treating environmental pollutants.

Green infrastructure elements such as rain gardens and bioswales also divert rainwater from storm sewers and waterways and put it back into the ground. Rain gardens can filter some 30,000 gallons of stormwater per year per acre. The Office of Land Stewardship maintains 58 rain gardens in Indianapolis totaling 90,469 square feet.

Providing natural ways to reduce stormwater runoff has additional benefits for water quality in Indianapolis and communities downstream. Water running off roofs, yards, streets, and

parking lots picks up large quantities of pollutants, even during small storms. All of these contaminants are quickly flushed into our surface waters—the drinking water source for 90% of Indianapolis. The more stormwater that soaks into the ground, the fewer pollutants enter our waterways, and that means cleaner water for drinking and recreation.

By promoting naturalized stream buffers and undeveloped flood plains, Land Stewardship helps ensure that stormwater can adhere to a normal water cycle. This provides further protection to our watershed by reducing flooding and contributing to better water quality.



Rain garden, or bioretention basin, at Jefferson Avenue on the Near East Side

Climate Resiliency

Natural areas have an impact on factors that contribute to the continued warming of our climate past historic norms. Trees not only exchange carbon for oxygen, but the very biological material that makes up a woodland, grassland, or wetland stores carbon indefinitely within its biomass. Some studies show that while turf grass may sequester 800 pounds of carbon per acre every year, native forests are storing at least twice that amount. An older forest may sequester nearly 5 times as much carbon, and wetlands and floodplains may be even more effective. The Office of Land Stewardship currently manages about 1,600 acres of natural area, which offset the effects of climate change in Indianapolis.

Converting land to native flora from turf, agriculture, or other uses has another big benefit for the climate. Turf has to be mowed many times throughout the growing season, and agricultural fields require the repeated use of gas-powered machinery. The link between fuel combustion and climate change is well established, and the Office of Land Stewardship is converting as much land as possible to uses that require less gas for maintenance. To date, we have transitioned nearly 720 acres from turf or agriculture to native woodlands, prairies, and wetlands. That amounts to roughly 1.2-2.8 million pounds of carbon that is no longer entering the atmosphere every year.

Our properties also provide many benefits to air quality, with forested areas alone absorbing around 5,292 tons of carbon dioxide every year and 420 tons of air pollutants. Forests, wetlands, and prairies also provide clean air and help cool the environment. Trees in particular have a big impact by lowering the ambient air temperature.



Common milkweed, *Asclepias syriaca*

Pollinator Protection

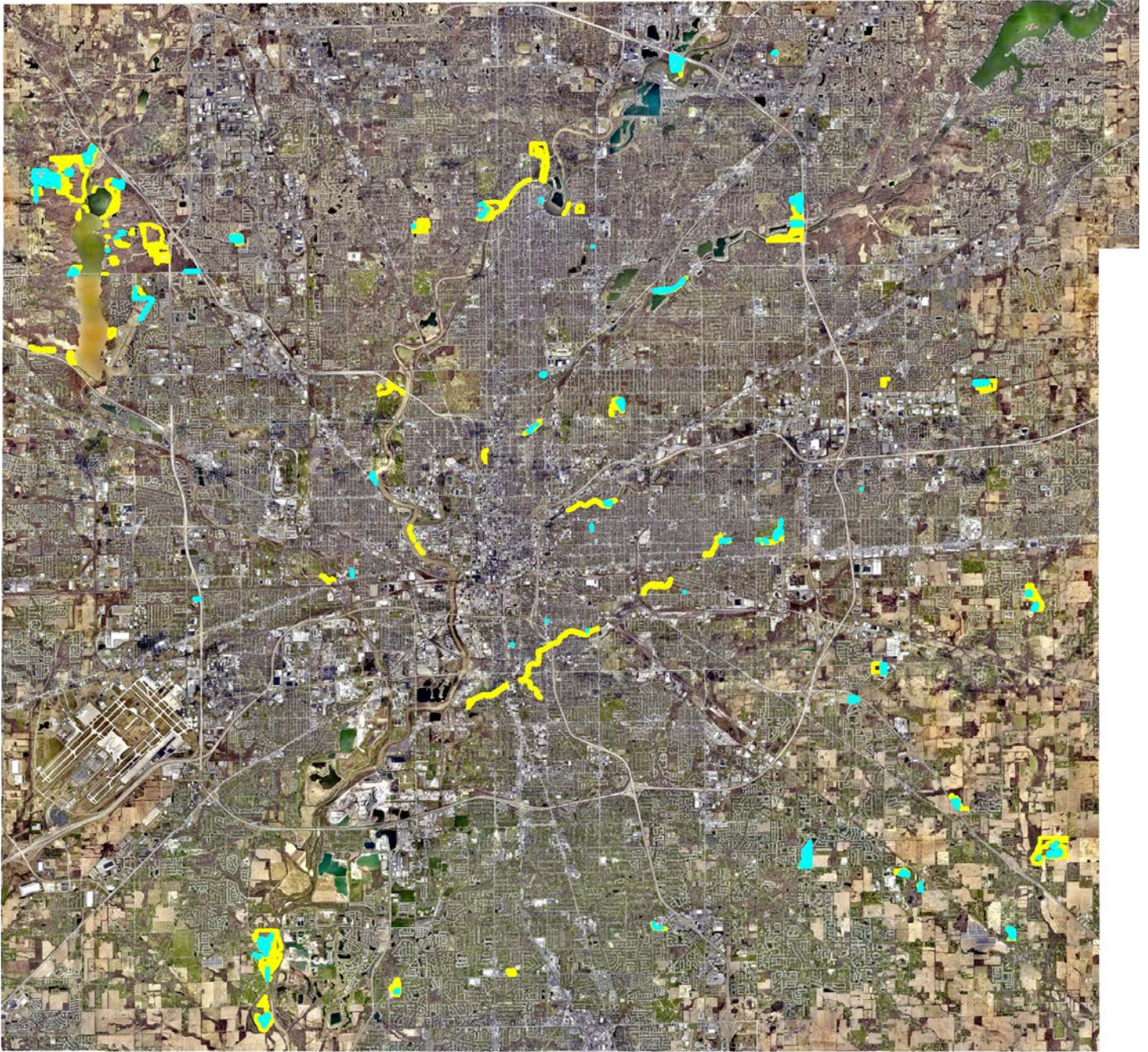
There are many threats to pollinator species (think bees, butterflies, and moths), and the loss of habitat from development or invasive species ranks near the top. No organization is doing more to reverse this trend in Indianapolis than Land Stewardship. Not only do the 1600 acres we protect offer invaluable habitat for pollinators, but we are also converting fallow landscapes to species-rich pollinator plantings and enhancing edge habitat with native flora that supports pollinator populations.

Come visit one of our wetlands or prairies in the summer, and you will see an amazing array of butterflies, beetles, hummingbirds, and bees. Or journey deep into the woods and discover how our native oak trees support a diversity of beneficial insects!



Pollinators at work (clockwise from top left): tiger swallowtail butterfly, ruby-throated hummingbird, honeybee, and hummingbird clearwing moth.

Managed Pollinator Habitat



Pollinator Habitat Managed by Land Stewardship

- 340 acres of planted prairie, rain gardens, and turf-to-native landscaping
- 1115 acres of wetland, reforestation, and woodland management

Species of Special Concern

Indianapolis is home to a number of species of plants and wildlife classified as rare, threatened, or endangered. These include the Kirtland's snake, Henslow's sparrow, Northern leopard frog, and American ginseng, all of which depend on higher quality natural areas with minimal disturbance. Much of what we do—converting landscapes to native flora and protecting our remaining natural areas—is aimed at preserving the conditions these species need to survive. For example, 43% of threatened or endangered plants and animals in the U.S. live in or depend on wetlands. We are working hard to restore these conditions, as well as those found in our native forests and grasslands, in order to preserve as many species as possible.



Photo courtesy of Jim Horton

Species of special concern (clockwise from top left): Cerulean warbler, goldenseal, Northern leopard frog, and Kirtland's snake.

Invasive Species Control

"On a global basis...the two great destroyers of biodiversity are, first, habitat destruction and, second, invasion by exotic species." – E.O. Wilson

Managing invasive species is at the center of what Land Stewardship does, as invasives have a negative impact on species of special concern, pollinators, and water quality. Non-native, invasive species are plants or animals whose introduction to an ecosystem causes environmental or economic harm. They can enter the landscape as a result of development, poor land management, accidental release, or escape from cultivation. Unfortunately, once invasive species get established, they can cause an ecosystem to deteriorate and outcompete native species, reducing the diversity of plants and animals. Land Stewardship and its contractors manage over 70 different invasive species today.

Management of invasive species creates better habitat for native flora and fauna. And healthy habitats allow for increased infiltration of stormwater, reducing runoff and erosion, which improves water quality.

Invasive species management also gives us an opportunity to get volunteers involved in our work, and many Indianapolis residents want to help improve the environment. We use our restoration efforts as a way to educate people about ecosystems and how all the components work together.



Invasive species management at Spades Park



Our Properties

Did You Know...

When Land Stewardship opened in 1992, it managed less than 50 acres. Today it manages nearly 1,600 acres.

Land Stewardship ecological restoration projects cost less per acre than contracted lawn mowing services.



We've worked hard since our inception in 1992 to protect existing natural areas as well as adding new ones. This includes taking over management of park spaces and converting other land types to natural areas. Over 700 acres of former agricultural land and turf lawns are now providing valuable habitat and performing important ecological services.

The Office of Land Stewardship manages natural areas in 37 Indy Parks properties throughout Indianapolis. The Property Features table on the next page lists the parks we work in, park amenities, and the types of habitats protected. It is followed by some property highlights with park history and management details.



Pleasant Run

Office of Land Stewardship

Property Features

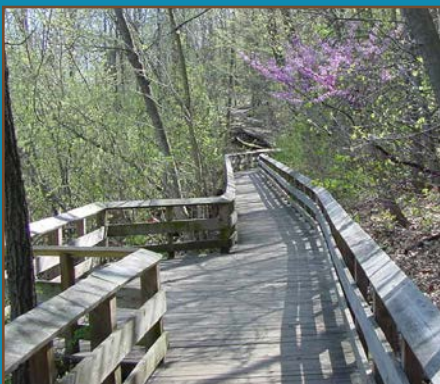
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Property Name (year acquired) and Location	Features				Ecotypes					
	Trails	Bathrooms	Parking	Handicap Accessible	Upland Forest	Forested Wetland	Open Wetland	Open Space (Turf)	Grassland (Prairie)	Water
Acton Park (2004), 7400 Acton Rd			●		●	●		●	●	●
Barton Park (1946), 2334 N Capital Ave			●			●		●		●
Blickman Educational Trail Park (2005), 6399 N Meridian St					●	●		●		●
Broad Ripple Park (1946), 1500 Broad Ripple Ave	●	●	●	●	●			●		●
Christian Park (1921), 4125 English Ave	●	●	●	●	●			●		●
Dubarry Park (1967), 3698 Dubarry Rd					●			●		●
Eagle Creek Park (1962), 7840 W 56th St	●	●	●	●	●	●	●	●	●	●
Ellenberger Park (1911), 5301 E St. Clair St	●	●	●	●				●	●	●
Fall Creek & 30th Park (1910), 2925 E Fall Creek Pkwy NDr	●		●	●		●		●		●
Five Points & Edgewood Park (2011), 5750 Five Points Rd	●			●		●			●	●
Franklin Township Community Park (1970), 8801 E Edgewood Ave	●		●	●		●		●	●	●
Garfield Park (1873), 2450 S Shelby St	●		●	●				●		●
Glenns Valley Nature Park (1991), 8015 Bluff Rd	●	○	●		●			●	●	
Grassy Creek Regional Park (1971), 10510 E 30th St	●		●	●			●	●	●	●
Gray Park (1999), Southport Rd & Sherman Dr	●		●				●	●	●	●
Greenway - Fall Creek (1909-2000)	●	○	●	●		●		●	●	●
Greenway - Pleasant Run	●			●		●		●		●
Hanover North Park (2006), 7731 Sebastian Pl	●		●	●				●	●	
Holliday Park (1916), 6349 Spring Mill Rd	●	●	●	●	●	●			●	●
Juan Solomon Park (1971), 6100 Grandview Dr	●	○	●		●	●		●		●
Krannert Park (1972), 605 S High School Rd			●						●	
Marott Park (1945), 7350 N College Ave	●		●		●	●		●		●
Municipal Gardens Memorial Grove (1908), 1831 N Lafayette Rd	●		●		●				●	●
Northwestway Park (1957), 5253 W 62nd St	●	●	●	●		●		●	●	●
Paul Ruster Park (1970), 11300 E Prospect St	●	○	●		●	●		●	●	●
Perry Park (1961), 451 E Stop 11	●	●	●		●			●		
Pleasant Run Golf Course (1922), 601 N Arlington Ave		●	●					●	●	●
Raymond Park (1971), 8300 Raymond St	●		●			●	●	●	●	●
Skiles Test Nature Park (1974), 6828 Fall Creek Rd	●		●	●	●	●			●	●
Southeastway Park (1961), 5624 S Carroll Rd	●	●	●	●	●	●	●	●	●	●
Southwestway Park (1961), 8400 S Mann Rd	●	○	●		●	●	●	●	●	●
Spades Park (1898), 1800 Nowland Ave	●					●		●	●	●
Town Run Trail Park South (2000), 5325 E 96th St	●				●	●	●	●	●	
Washington Park (1923), 3130 E 30th St	●	●	●	●	●					
Watson Road Bird Preserve (1925), 900 Watson Rd								●	●	
Wolf Run Park (2013), 10050 E Thompson Rd	●	○	●	●	●	●	●	●		●
Woollens Gardens (1909), 6800 E Fall Creek Pkwy N Dr					●	●				●



Holliday Park



Holliday Park

This 94-acre park is situated along the White River just six miles north of downtown Indianapolis. The century-old park has many amenities, including a nature center, the ruins plaza, and a large playground. The trees in this area are labeled for easy identification, and a guide is available in the nature center. The wooded natural area contains 15 acres considered older-second growth and 24 acres of young second growth with a healthy population of understory trees, shrubs, vines, and herbaceous layer.

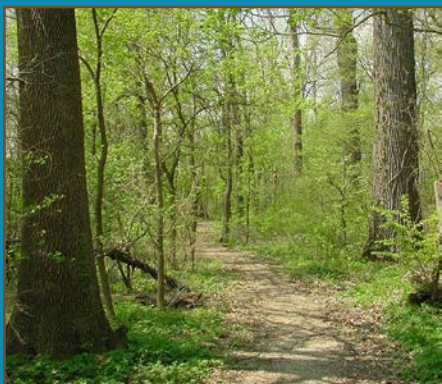
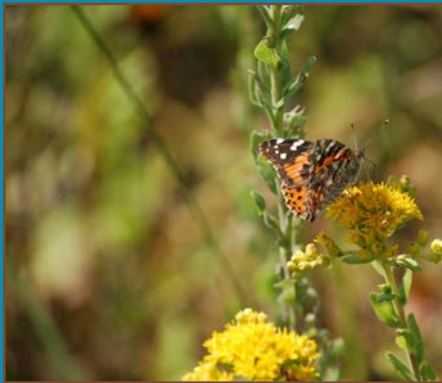
The Office of Land Stewardship had its first major invasive plant control in this park in 1994 with the help of many volunteers. Prior to our management, invasive bush honeysuckle and wintercreeper had all but completely taken over the native groundcover and set back the natural process of forest regeneration for many decades. Thanks to this early work and regular maintenance and volunteer efforts since then, the Holliday Park natural area is rich in native flora and thriving. In addition to invasive species control, regular habitat management includes over-seeding with local genotype native species (in areas of prior cultural disturbance), fixing trail shortcuts and the stabilization of ravine tributary banks from incoming storm drain flows and off-trail user impacts.

Special Features

- Largest forested calcareous seep in the county (~8 acres)
- Tufa deposits (unusual carbonate mineral formations)
- Ravine topography
- Eastern box turtle
- Ground-nesting birds
- Skunk cabbage and spring wildflowers
- Older second-growth forest



Raymond Park



Raymond Park

Established in 1971, Raymond Park is a hidden gem in Indianapolis' park system. A 35-acre natural area located adjacent to two Indianapolis public schools, Raymond Park includes a trail for meandering the property and taking in some of our local wildlife.

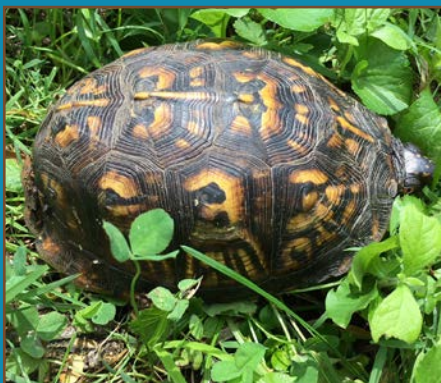
The Office of Land Stewardship manages the entirety of the natural area at the park. The flatwoods forest has an abundance of spicebush and interesting wet woods plants like lizard's tail. Students from the adjoining middle school helped plant hundreds of wetland plugs when the pond and sedge meadow wetland was established. Blue and green heron have been spotted lurking along the pond's shoreline. The accompanying mesic prairie is exceptional in the summer with its multitudes of blooming flowers.

Special Features

- High-quality, flatwoods forest
- Pond and sedge meadow
- Wet-mesic prairie



Paul Ruster Park



Paul Ruster Park

This often overlooked, 82-acre park was acquired in 1970 and features pleasant woodland trails, a pond, playground, sledding hill and dog park, making it a popular attraction on the east and south sides of Indianapolis.

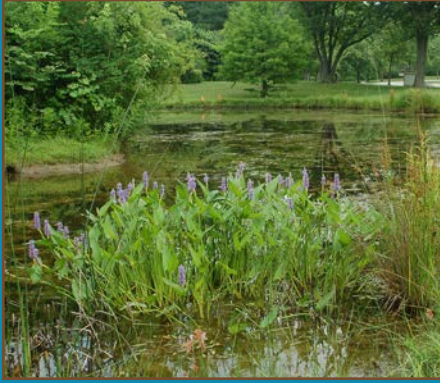
While restoration is ongoing at the park, the north end is a high-quality, older woods with drifts of spring wildflowers like drooping trillium, bellwort and wild hyacinth. The pond features aquatic turtles, frogs, tadpoles, dragonflies and the occasional ducks and herons. Around the pond can be found seasonal wetlands which furnish much needed habitat for amphibians and reptiles. Recent stream mitigation work included removing a small dam which helped restore the ecology of the picturesque creek. There are also two prairie meadow plantings which provide summer and fall flowers used by butterflies and bees.

Special Features

- High-quality, older, second-growth upland woods
- Abundant spring wildflowers
- Interesting native plants including eastern wahoo, running strawberry, drooping trillium and wild hyacinth
- Pond with aquatic turtles, frogs and wetland birds
- Ephemeral wet woods



Southeastway Park



Southeastway Park

Southeastway Park is a 188-acre regional park located in the southeast corner of Marion County. The park focuses on the natural environment with a stronger emphasis on passive recreation and offers a variety of programs for all ages year-round. There is a network of both paved and natural surface trails for hiking and nature observation.

Roughly half of the park acreage is natural area. The Office of Land Stewardship manages a variety of habitats on the property including high quality forest, a pond with adjoining wetland, reforestation plots, prairie meadow plantings and the riparian area of Buck Creek. The woods are especially striking in the spring with an abundance of wildflowers.

Special Features

- High-quality, second-growth mesic woods
- Exceptional spring wildflowers
- Restored floodplain woods
- Short-grass and tall-grass prairie plantings
- Pond and wetland
- Environmental Education programs for all ages
- Diversity of birds, especially during migration periods



Scott Starling Nature Sanctuary



Scott Starling Nature Sanctuary at Eagle Creek Park

The land was originally settled in the early 1820s and used for agriculture, which continued after the City purchased the property for park space in 1966. Coinciding with the formation of the City's Office of Land Stewardship in 1992, reforestation started here through a partnership with the U.S. Fish and Wildlife Service. Students from Pike High School planted thousands of trees over a 5-year period. In 2004, Land Stewardship staff and the IUPUI Center for Earth and Environmental Science began work on the fen restoration, a wetland area which was previously lawn. Field tile was removed and many species of wetland plants were installed to replace the turf lawn. An adjacent woodland that was formerly grazed was planted with native understory vegetation in 2007. Old agricultural fields on the property were planted with native grasses and hardwood trees. The main management focus now is bush honeysuckle and other invasive plant control, allowing for natural succession while improving wildlife habitat and water quality.

Grab your binoculars and explore this wild area. Two observation decks overlook the reservoir and Fishback Creek. Today, the 103-acre nature sanctuary includes a restored fen, sedge meadow wetland, and associated woodland habitats along the Fishback Creek riparian corridor.

Special Features

- Rare fen seep restoration
- Adjoining Eagle's Crest Woods Nature Preserve
- High bluffs along Fishback creek
- USDA plant ID training site
- High bird diversity along the reservoir edges and throughout the property

Manage and Protect

For each park managed by the Office of Land Stewardship, annual management plans are created through a collaborative effort between Land Stewardship staff, consultants, and other stakeholders. The main focus of these plans is to provide a framework for the ecological restoration practices that will occur during each calendar year. The majority of the work involves invasive species control and mapping, as well as native plant community establishment and maintenance. Site-specific conservation management plans are also created to protect target species of plants, wildlife, and the park ecosystem as a whole.



Streambank restoration at Marott Park

Annual site visits, work history, contractor reports, and public input are all considered when developing a site management plan for any park. Special consideration is given to rare, threatened, and endangered species of plants and animals, as well as locally and globally threatened habitats. Parks that contain these special features are prioritized over lower quality areas in order to safeguard these unique places against irreversible change.

Managing Our Properties

Site management plans are implemented by ecological restoration professionals who understand the goals of the project and are familiar with industry standards. Ecological restoration technicians use GPS units to track their daily progress and collect important data. This information is stored in a database that is used to evaluate the effects of restoration efforts, track work progress and billing, and aid in future planning. New locations of invasive species are tracked and controlled through an Early Detection, Rapid Response (EDRR) approach.



A Strategic Path Forward

Did you know...

The Office of Land Stewardship was directly involved in the reintroduction of the Kirtland's snake to part of its historic range in Marion County.

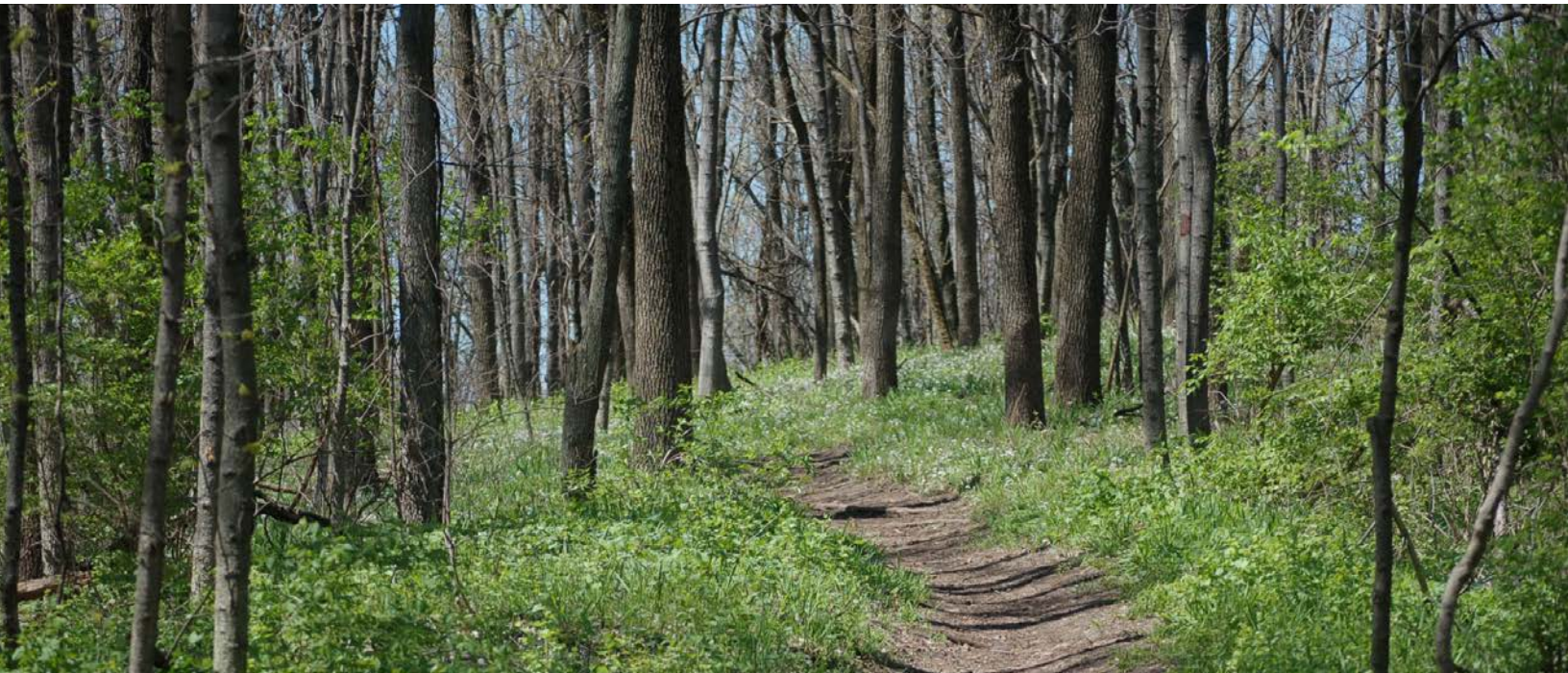


What We're Working On

The Office of Land Stewardship has outlined a broad set of goals to help them advance their mission in a more organized, transparent, and effective way. These next pages highlight some of those goals, along with information about new properties, public programming plans, and a community call to action.



Prairie grasses at Eagle Creek Park

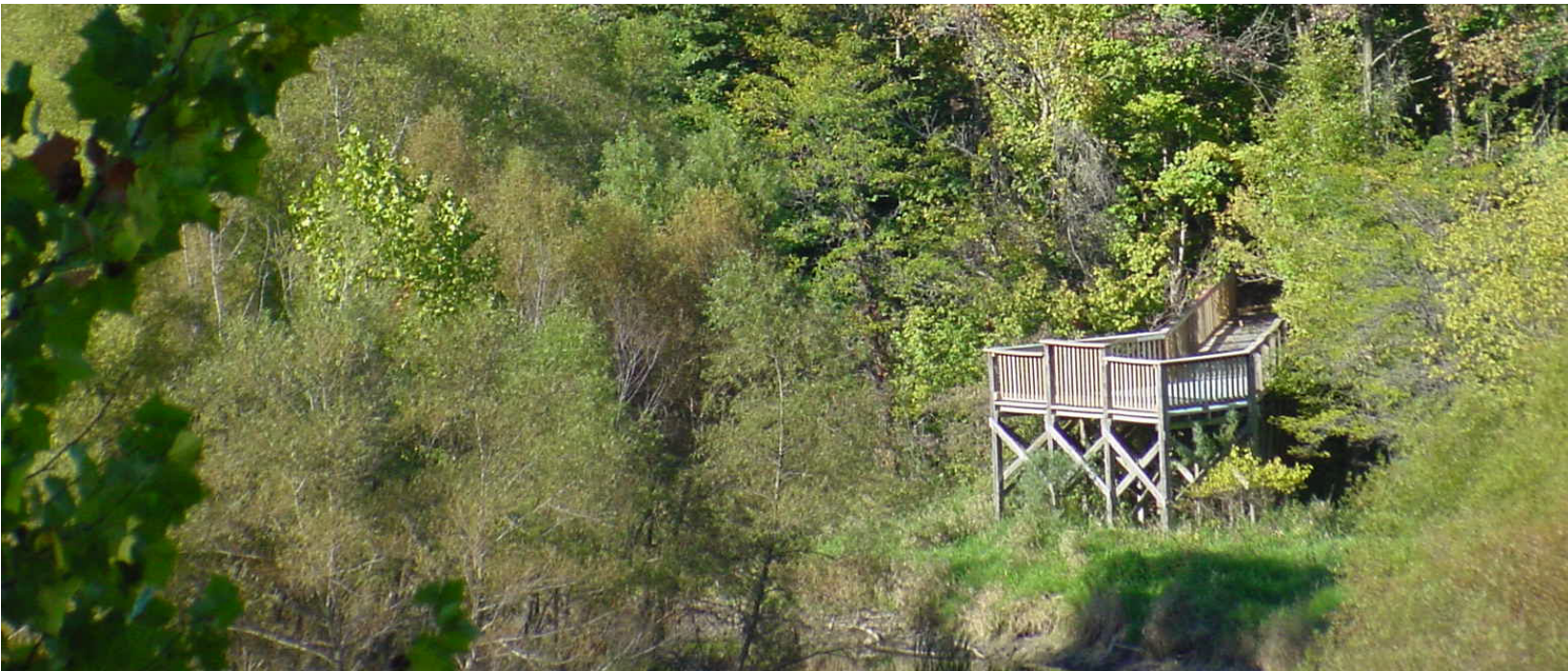


Southwestway Park

Grow and Manage Natural Habitats

Our natural areas are performing important functions for the residents of Indianapolis and beyond—capturing and treating stormwater, cleaning air pollution, and providing habitat and beauty. We will build on our past successes and continue to improve and protect natural areas.

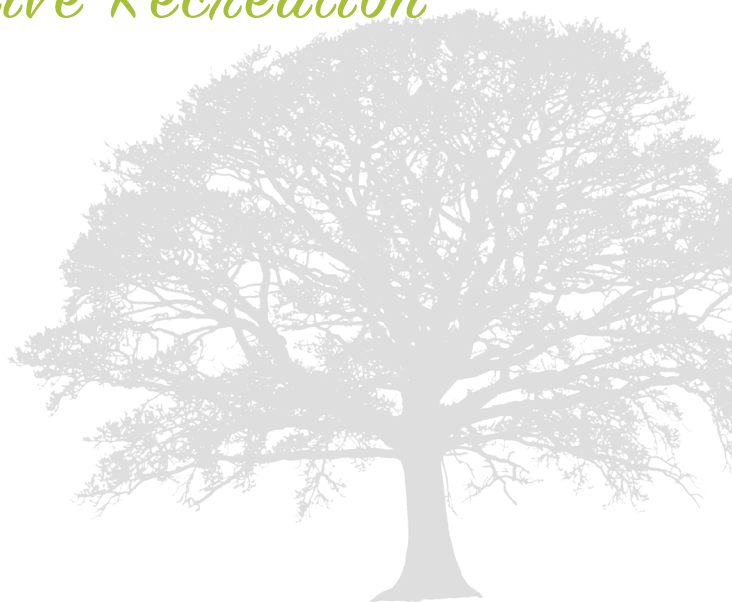




Scott Starling Nature Sanctuary

Provide High-Quality Passive Recreation

We want the public to be able to enjoy and appreciate the amazing natural areas we manage. An important part of this plan is an increased focus on improving access to our parks and providing educational opportunities that will enrich the experience for visitors.





Paul Ruster Park

Foster a Conservation Ethic

We can't do this work without you. It is the community's appreciation of natural areas that drives efforts to safeguard them and add more park land. We continue to find new ways to involve the community in our activity while we inspire a new generation of conservationists.





Scott Starling Nature Sanctuary

Strengthen and Promote the Office of Land Stewardship

We believe in our work, and we want to make sure others know how important natural areas are to the overall health and well-being of our community. We hope our voice will become more prominent as Land Stewardship policy and programming expand.



Acquisition and Management of New Properties

Land Stewardship hopes to add new, high-quality properties over the next few years. The two described here will have a big impact on our efforts to protect Central Indiana's natural heritage and improve the ecosystem services on which we all rely.

Grassy Creek Regional Park

Work at Grassy Creek will continue with cyclic treatment for control of invasive plants, as well as planting of native trees, shrubs and wildflowers when appropriate. A new trail installed in 2016 provides access to recreational users who walk and run for exercise and for those who want to bird watch at one of the largest open wetlands in the county.

Expansion of management at Grassy Creek will improve habitat that may support conservative species of breeding birds on the decline. Restoration efforts will increase the quality of the experience for park users as the diversity of native vegetation and wildlife increases.

Management efforts here seek to balance the need for important wildlife corridors and habitat with various recreational opportunities in an underserved neighborhood.

New Properties

Wolf Run

Acquired by the Department of Parks and Recreation in 2013, most of Wolf Run Park will be kept natural with only the southeast corner developed with a playground, parking lot, shelter, basketball half-courts, and paved walking trail. The remainder of the park is comprised of old, second-growth riparian woods, disturbed younger woods, a stream, and wetlands.

Observations have revealed a large variety of wildlife are using the wetlands and surrounding area for food, water, shelter, and nesting. Migrating waterfowl also use the wetlands, and herons, plovers, rails, woodpeckers, hawks, kestrels, and owls have all been seen on site. An osprey was even spotted several times perched on trees near the wetlands. In addition, frogs, snakes, turtles, red fox, and coyote are actively using the habitat offered here.

Big Run stream appears to have diverse aquatic life with varied habitat types and riparian buffers to support a healthy community of fish and macroinvertebrates. The woodlot contains oaks, hickories, sugar maple, sycamore, and cottonwoods, including some large specimens.

Restoration work for control of invasive plants at Wolf Run has just begun. Expansion of management work will increase the quality of the habitat at the park for wildlife and the enjoyment of park users.

What's Next for Land Stewardship in the Community

Expanding opportunities for the public to be directly engaged in our efforts will help ensure that a conservation ethic will take root and that the Indianapolis community will help take care of our local natural areas.

Strike Team

Interested in helping protect natural areas from harmful invasive species? Join the Invasive Species Strike Team at Eagle Creek Park! Most of our local natural areas experience pressure from invasive species such as bush honeysuckle, garlic mustard, and wintercreeper. The Strike Team is a group of dedicated volunteers that don't mind getting their hands dirty cutting, pulling, and/or spraying these invasive species in target areas. Volunteer opportunities occur at least monthly, and no routine commitment is necessary – help when you can. Sign up for Strike Team events by contacting Brenda Howard, Brenda.Howard@indy.gov.

New Programs

Volunteer Site Stewardship

Interested in helping make sure natural areas are regularly monitored and maintained? Become a volunteer Site Steward! Natural areas are always changing, and it can be helpful to have more eyes on the ground identifying maintenance needs, downed or dangerous trees, new invasive species threats, erosion problems, needed infrastructure improvements, or other concerns and ideas. Site Stewards commit to walking their preferred property monthly and submitting a checklist report to Land Stewardship staff. Sign up for Site Steward locations by contacting Jacob Brinkman, Jacob.Brinkman@indy.gov.

Pollinator Protectors Program – COMING IN 2019

Interested in protecting pollinators and the source of so much of our food? One thing you can do right now is visit Indiana.ClearChoicesCleanWater.org/Plants and take a Pollinator Protection action pledge. Other opportunities will be available soon to better support pollinators in our natural areas. Pollinator protection efforts are underway to develop educational programming, establish and keep active hives, and produce local honey. To stay current on these efforts, be sure to follow us on Facebook @IndyLandStewardship.

Habitat for Humans – COMING IN 2020

Interested in helping make natural areas more enjoyable places to visit? Keep an eye out for Habitat for Humans volunteer opportunities. Natural areas offer great passive recreation opportunities, but many lack the simple infrastructure that provides a place to rest, enjoy views, birdwatch, or provide year-round access. Habitat for Humans crews will lend their carpentry or design skills on projects like bridges, boardwalks, and benches. Other volunteer needs include trail maintenance and mapping. Projects will be determined and assigned to interested volunteers on an as-needed basis.

Volunteer for Land Stewardship

Land Stewardship takes great pride in the volunteers that help with various projects in our parks. Here are some of the volunteer groups that have been involved with Land Stewardship:

CEES

IUPUI's Center for Earth and Environmental Science (CEES) organizes several service learning days a year, where students remove invasive plants like bush honeysuckle or collect native plant seed. They learn about the ecological impacts invasive species have on natural areas and water quality, as well as restoration efforts in our parks.



A rain garden, or bioretention basin, at Lincoln St. and Alabama St. on Indianapolis' south side

Invasive Species Strike Team

The Invasive Species Strike Team is a group of committed volunteers that control invasive plants at Eagle Creek Park. They have also planted native shrubs and trees throughout the park. Contact Brenda Howard, Brenda.Howard@indy.gov to get involved!

INPAWS

The Indiana Native Plant and Wildflower Society (INPAWS) has been involved with a number of volunteer projects at various Indy Parks locations. They typically help with invasive species control.

Get Involved!

Indy Do Day

Indy Do Day is a community-wide volunteer event in Indianapolis sponsored by local businesses and organizations. In 2016, Lilly's Day of Service gave Lilly employees an opportunity to help with projects such as picking up litter, painting picnic tables, and landscaping at a number of Indy Parks locations.

Others

Multiple volunteer groups have been involved with pulling garlic mustard, another invasive plant species, at Marott Park for the past several years. These efforts help to prevent garlic mustard from spreading and taking over large areas of the park.

Contribute to Our Community

We hope you are excited about all the Office of Land Stewardship is doing to protect and manage natural areas in Indianapolis. There are lots of ways to help us accomplish our mission.

Donate

You can give money directly to Land Stewardship through the Indianapolis Parks Foundation. Donations help us continue our conservation objectives, like controlling invasive species and restoring critical habitats, which utilize about 80% of our budget. We also use funds to acquire new property and improve amenities on those properties. Secure donations can be made at www.indyparksfoundation.org. Please specify in the comments section that you would like your donation to go to the Land Stewardship fund.

A Call-to-Action

Use Native Plants

Native plants offer so many benefits over typical landscaping and manicured lawns. Consider rethinking your own landscaping to incorporate native plants. Individual properties with native plantings help patch together habitat for birds and pollinators across our City's landscape, linking nearby parks to habitat in your own yard. This is important for supporting biodiversity, maintaining urban wildlife, and protecting local water resources. More information can be found on the Indiana Native Plant and Wildflower Society website at <http://www.inpaws.org>.

Control Invasive Plants on Your Own Property

Many invasive species persist because they are well established on private property. You can help reduce the spread of these plants by making sure they are unwelcome in your own yard.

Wipe Your Boots

Seeds are easily moved from site to site by getting stuck in mud that is carried away on boot soles. If you are visiting one of our properties—or any other natural area—make sure you aren't tracking in unwanted seeds!

Volunteer

Come help us steward our parks! Dedicated volunteers work with us to clear invasive species and pick up trash in our parks, as well as assist with plantings, trails, or other needs. Watch our social media accounts or visit www.indy.gov/landstewardship to learn more about volunteer opportunities.

Get out and explore Indy's natural areas!

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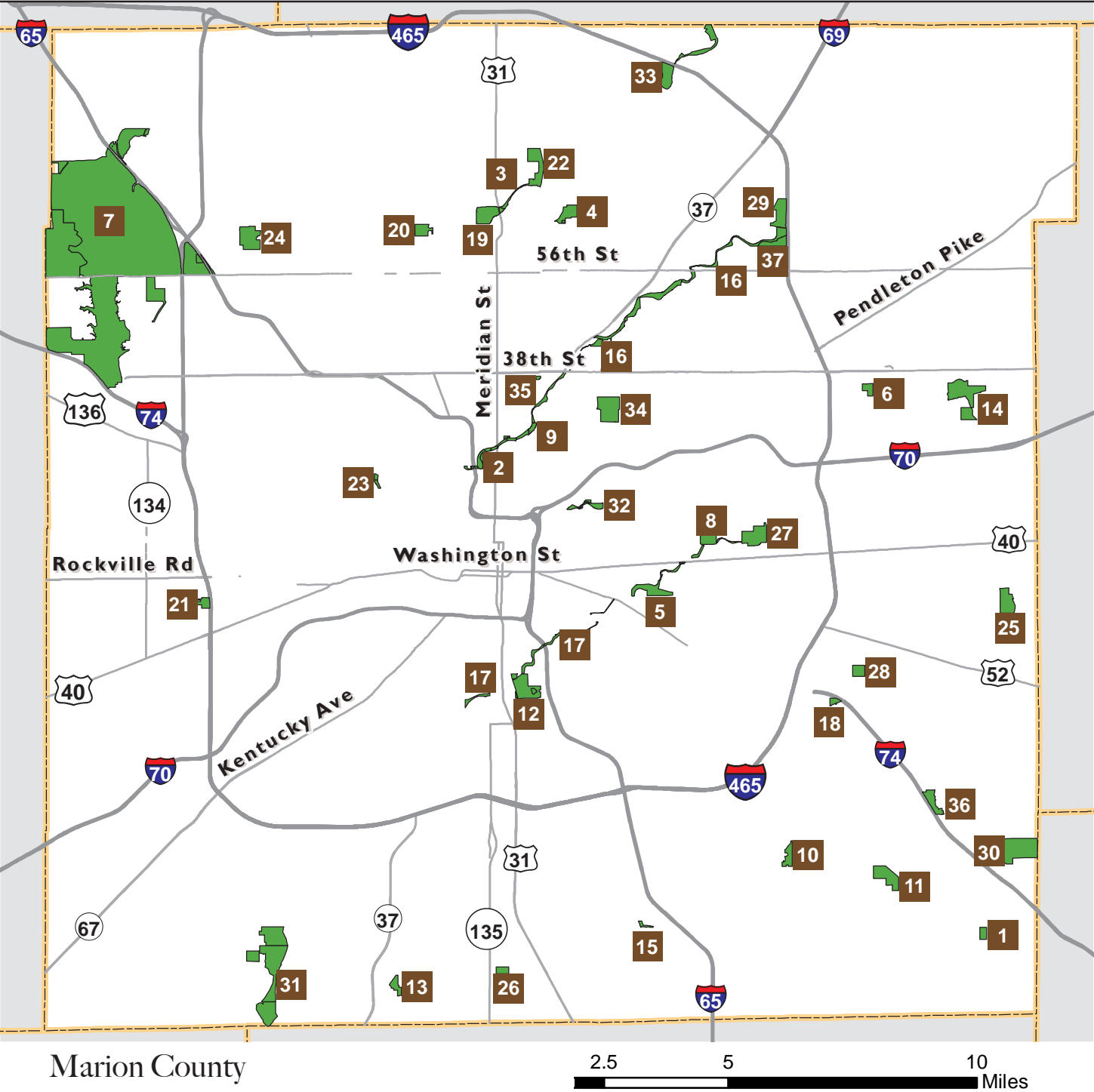
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Land Stewardship Managed Areas



Legend

Managed Parks

2

Property ID Number



Office of Land Stewardship

Property Location Key

1. Acton Park 7400 Acton Rd	14. Grassy Creek Regional Park 10510 E 30th St	28. Raymond Park 8300 Raymond St
2. Barton Park 2334 N Capital Ave	15. Gray Park Southport Rd & Sherman Dr	29. Skiles Test Nature Park 6828 Fall Creek Rd
3. Blickman Educational Trail Park 6399 N Meridian St	16. Greenway - Fall Creek	30. Southeastway Park 5624 S Carroll Rd
4. Broad Ripple Park 1500 Broad Ripple Ave	17. Greenway - Pleasant Run	31. Southwestway Park 8400 S Mann Rd
5. Christian Park 4125 English Ave	18. Hanover North Park 7731 Sebastian Place	32. Spades Park 1800 Nowland Ave
6. Dubarry Park 3698 Dubarry Rd	19. Holliday Park 6349 Spring Mill Rd	33. Town Run Trail Park South 5325 E 96th St
7. Eagle Creek Park 7840 W 56th St	20. Juan Solomon Park 6100 Grandview Dr	34. Washington Park 3130 E 30th St
8. Ellenberger Park 5301 E St. Clair St	21. Krannert Park 605 S High School Rd	35. Watson Road Bird Preserve 900 Watson Rd
9. Fall Creek & 30th Park 2925 E Fall Creek Pkwy NDr	22. Marott Park 7350 N College Ave	36. Wolf Run Park 10050 E Thompson Rd
10. Five Points & Edgewood Park 5750 Five Points Rd	23. Municipal Gardens Memorial Grove 1831 N Lafayette Rd	37. Woollens Gardens 6800 E Fall Creek Pkwy N Dr
11. Franklin Township Community Park 8801 E Edgewood Ave	24. Northwestway Park 5253 W 62nd St	
12. Garfield Park 2450 S Shelby St	25. Paul Ruster Park 11300 E Prospect St	
13. Glens Valley Nature Park 8015 Bluff Rd	26. Perry Park 451 E Stop 11	
	27. Pleasant Run Golf Course 601 N Arlington Ave	

