

Village of Riverwoods

Woodland Stewardship Contractor Certification Program

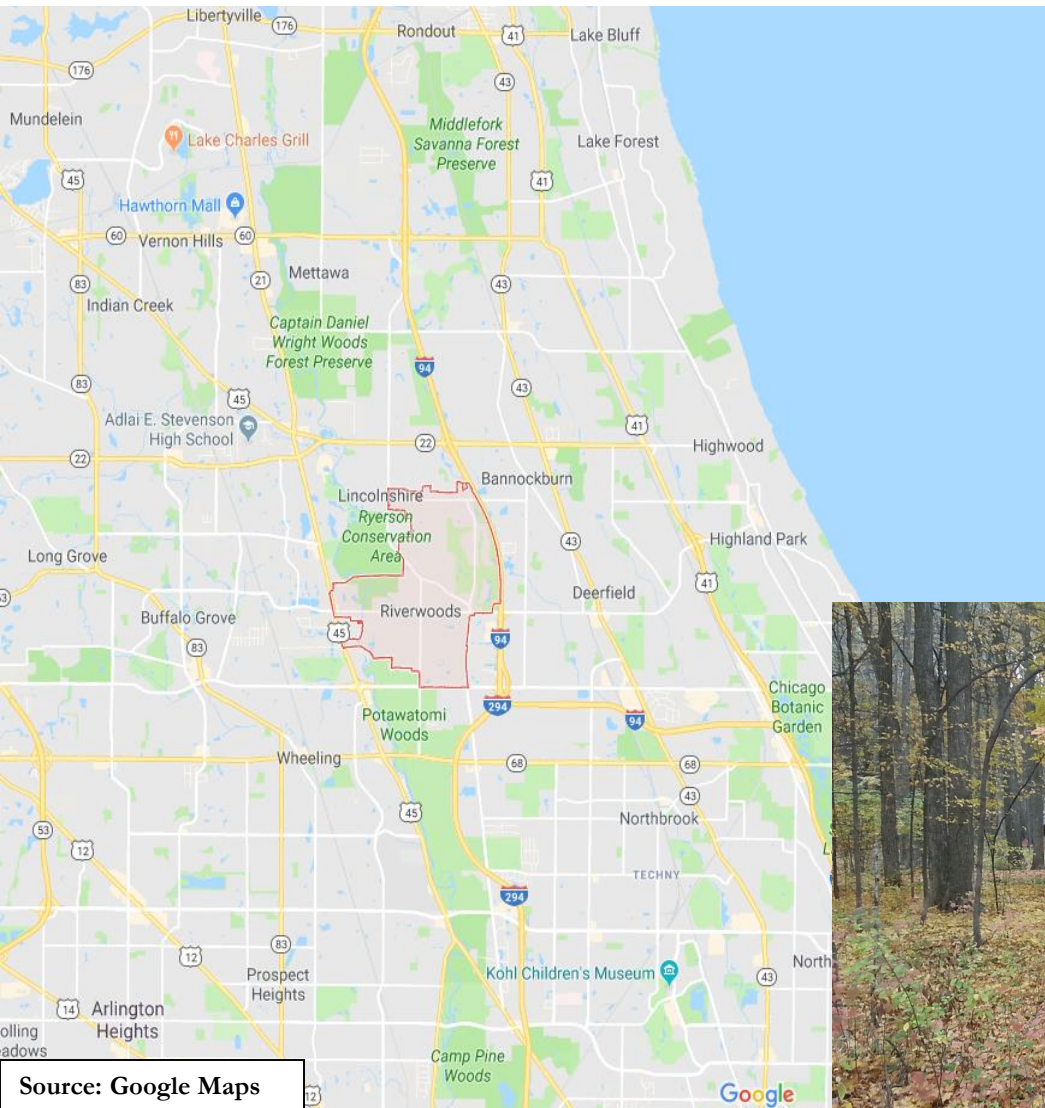
November 7, 2018

By: Steve Zimmerman M.S. (AES Senior Ecologist & Certified Arborist)



About the Village of Riverwoods

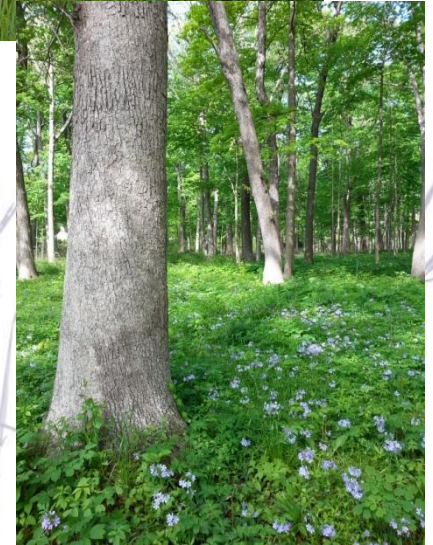
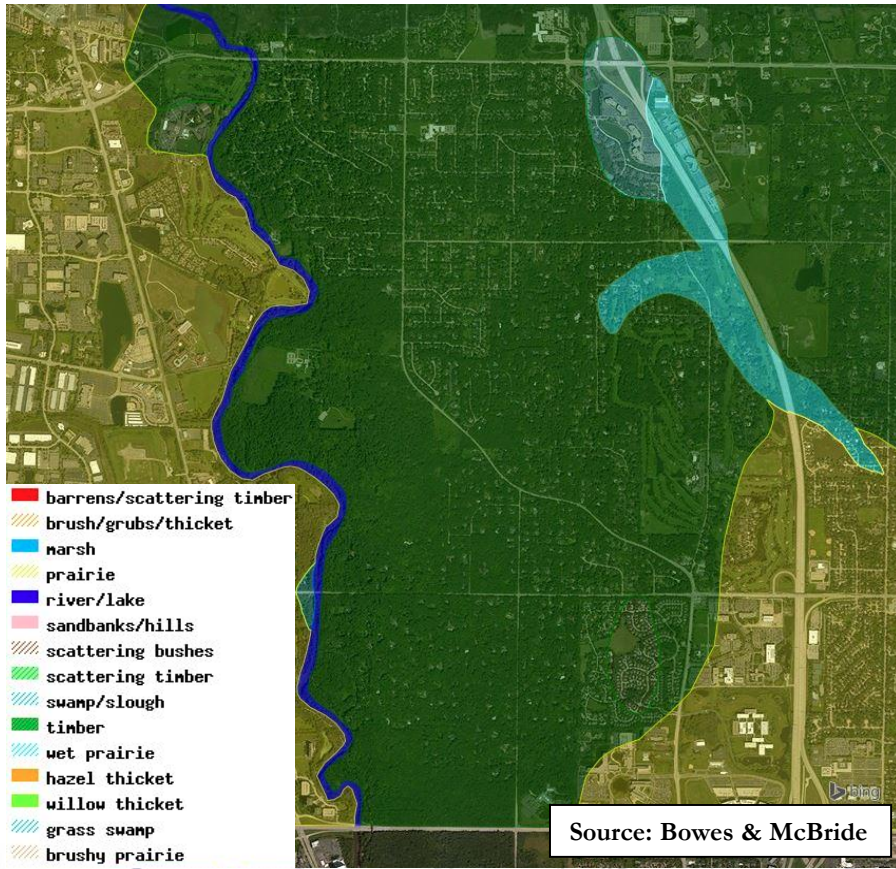
- Unique woodland community founded in 1949
- 3.9 Sq. Miles
- 3,500 Population
- Invested in woodland protection



Source: Google Maps



Riverwoods Prior to European Settlement (1830's)



The land east of the Des Plaines River was woodland; west of Des Plaines was Prairie.

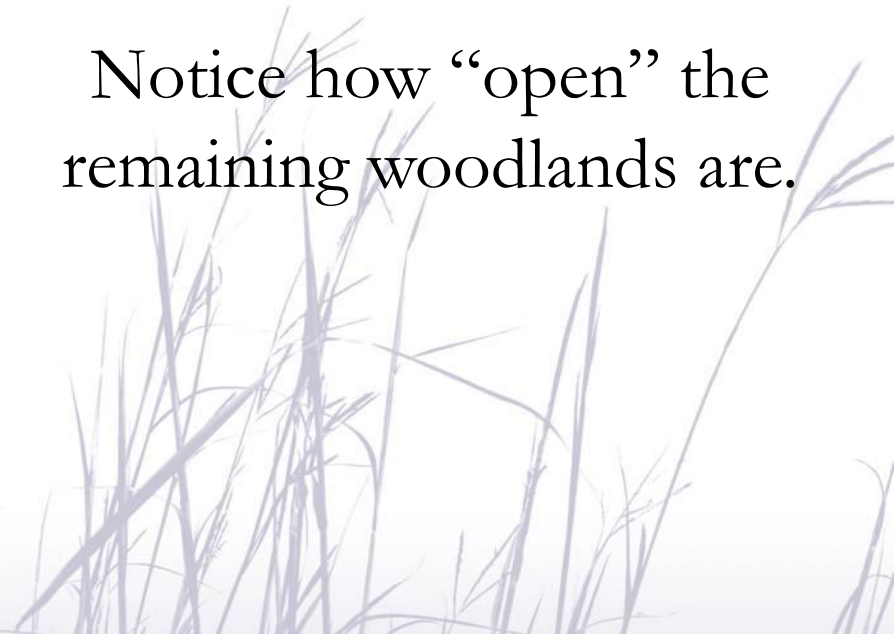


Riverwoods in the 1930's



By the 1930s farming impacted many woodland areas.

Notice how “open” the remaining woodlands are.

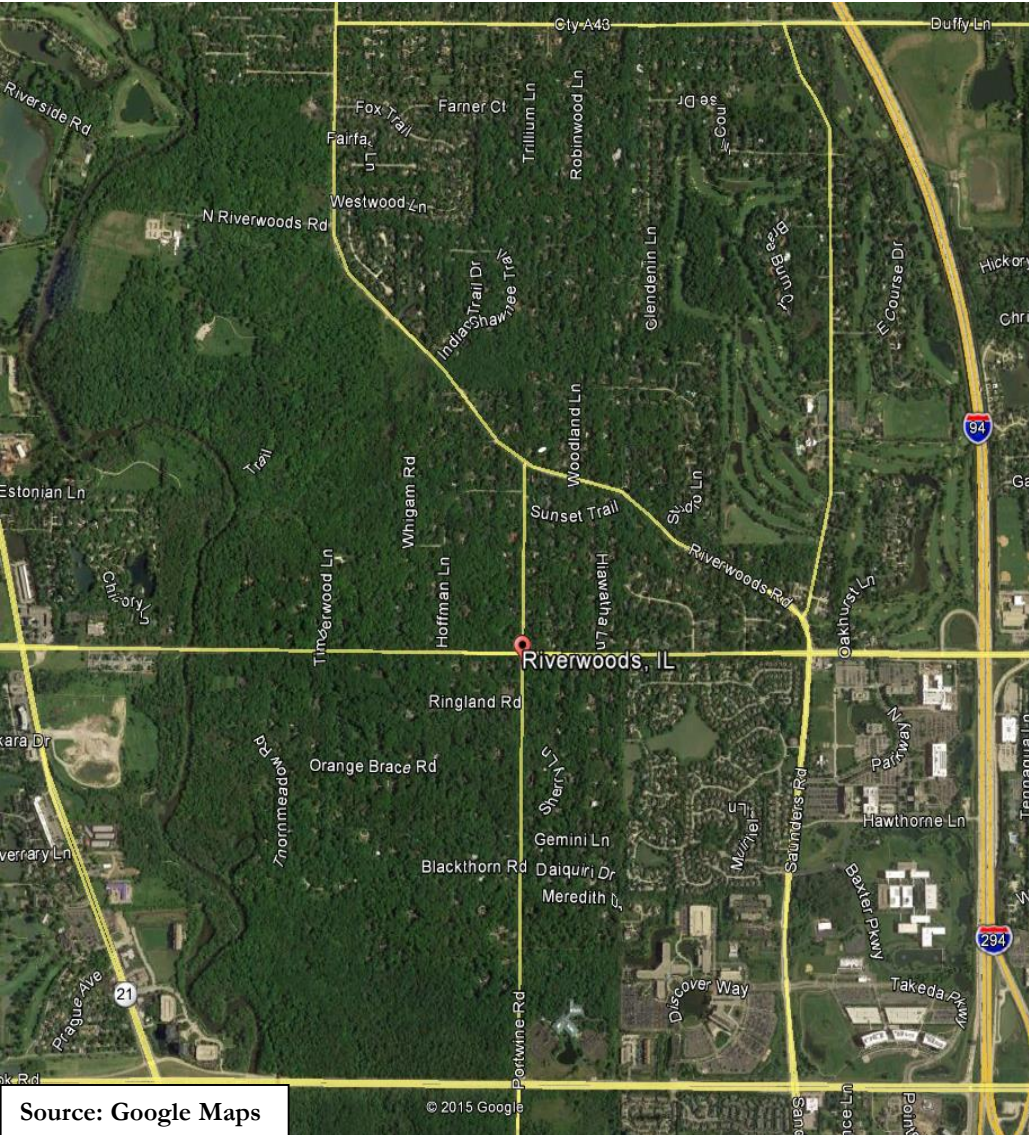


Source: Illinois Clearing House Historical Images



APPLIED ECOLOGICAL SERVICES, INC.

Riverwoods Today

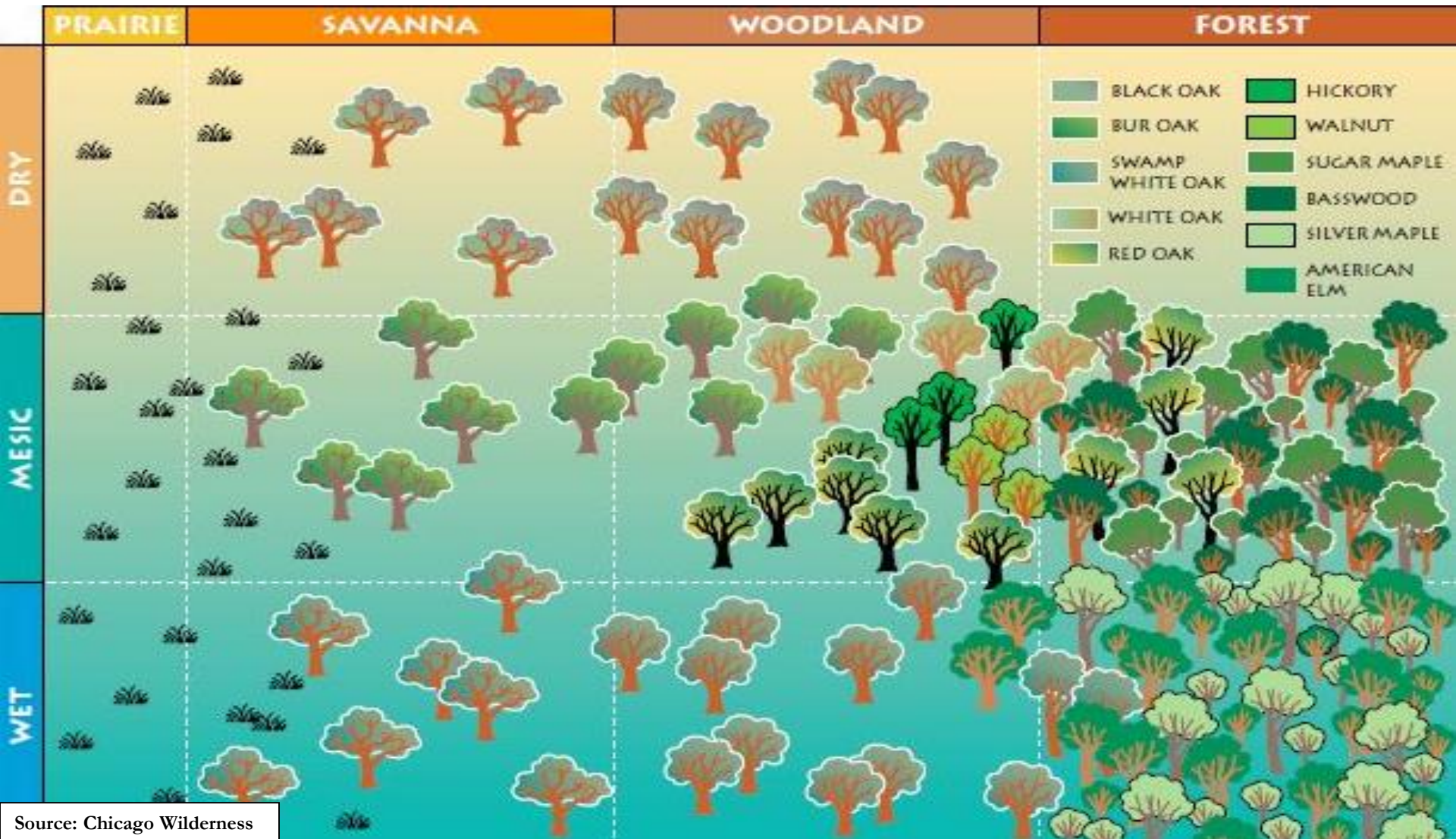


Note how dense the woodland areas have become.

Shade tolerant species such as sugar maple and basswood are beginning to dominate the historic oak woodlands.



Natural Plant Community Profile





CONSULTING



CONTRACTING



NURSERY

AES's vision is to bring the science of ecology to all land use decisions

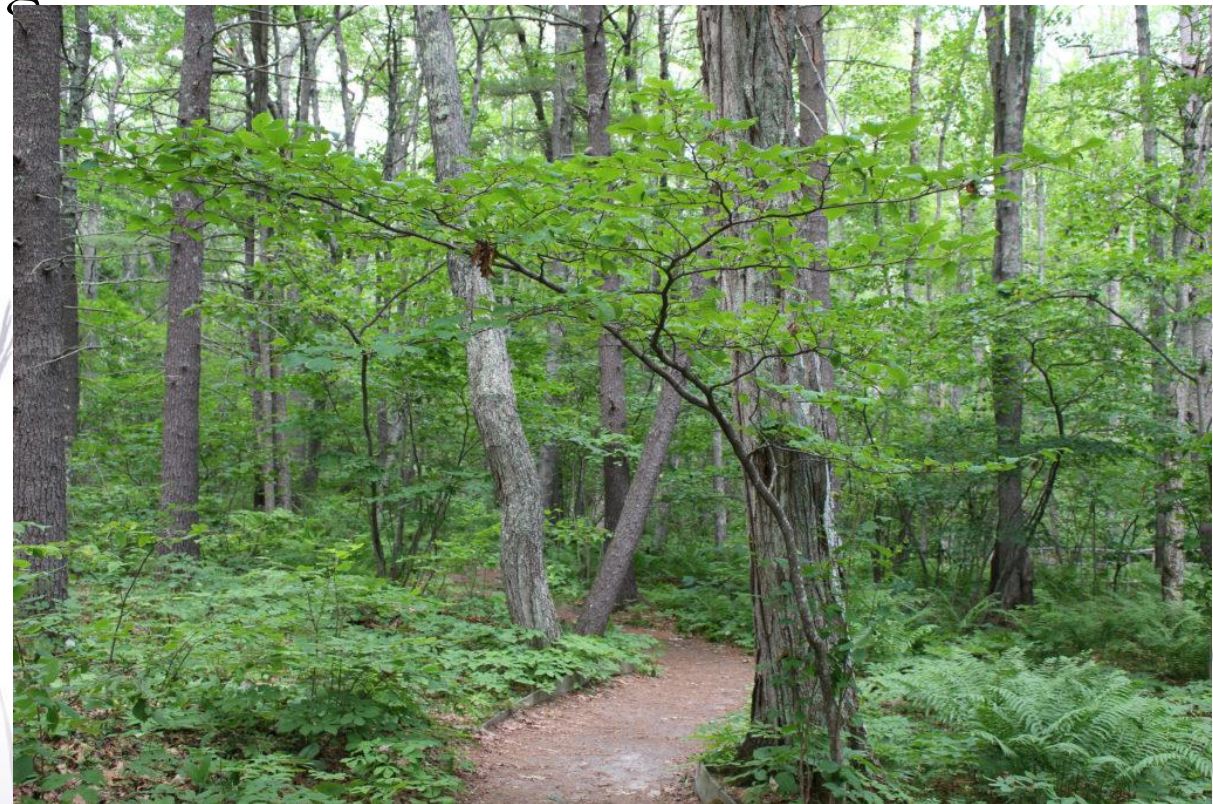
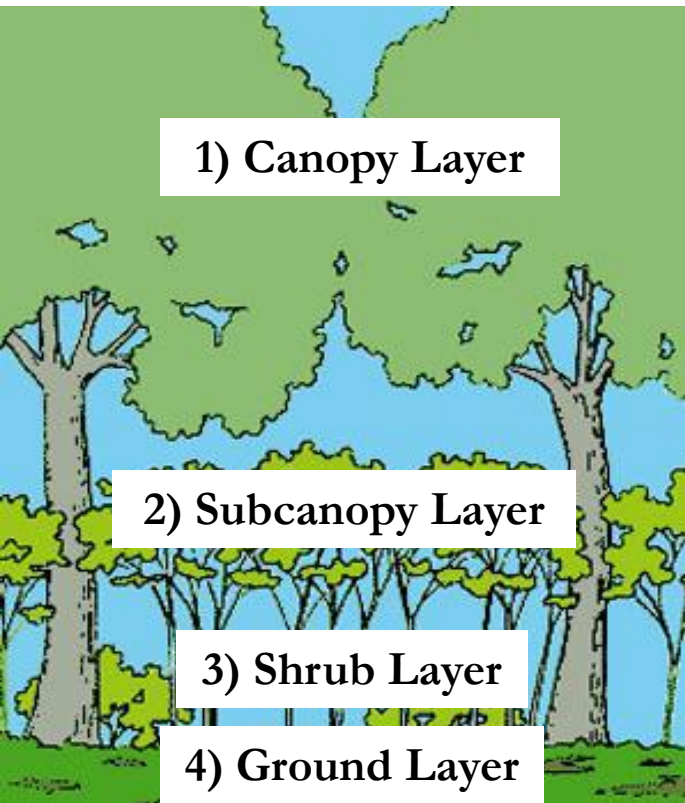


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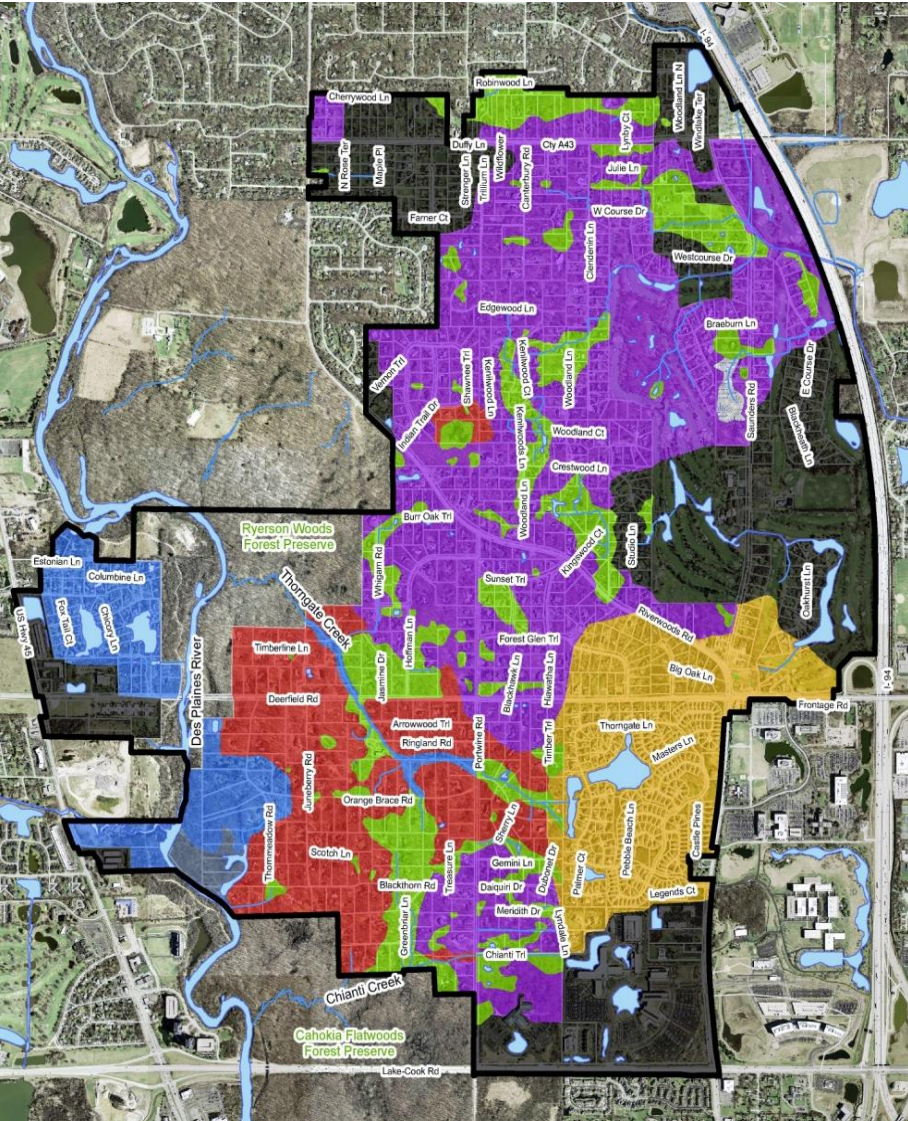
What is a Woodland?

Up to four layers: 1) Canopy, 2) Subcanopy, 3) Shrub, and 4) Ground.

* Canopy & ground layers must be present for the woodland to “regenerate” over time.



Woodland Communities in Riverwoods



Riverwoods Woodland Delineation Maps

AES delineated the woodland boundary on each parcel using multi-spectral aerial imaging followed by site inspections.

* Woodland must have at least a canopy of native trees & unmaintained ground layer.



Riverwoods Woodland Delineation by Parcel (April 8, 2017)

2760 RIVERWOODS ROAD

Legend

-  Parcel Boundaries
-  Delineated Woodlands (April 8, 2017)
-  Water bodies

PARCEL NUMBER: 1525401002

PARCEL ACREAGE: 1.37

WOODLAND ACREAGE: 0.56

% WOODLAND COVER: 40.6%

0 15 30 60
Feet

AES Project #: 16-1011
Mapped by: CMC
Date: 9/8/2017

Coordinate System:
U.S. State Plane S, NAD83 US Foot



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What will Happen without Woodland Stewardship?



The Woodlands are being Altered



Tree & Woodland Protection Ordinance

- 2018: Tree & Woodland Ords. were updated and combined.
- Woodland Ord. limits removal of “Protected Woodland” to no more than 20% based on 2017 Woodland Delineation Maps.
- “Regulated Tree”: at least 1.5” dia. & ≥ 6 feet tall.
- All trees are “Regulated” but only “Desirable Native Trees” & are protected as well as 80% of their Critical Root Zones.
- Removal of “Desirable Native Trees” requires mitigation:
 - fee based on diameter of desirable tree(s)
 - $\geq \$5K$ -option to implement an **“Ecological Mitigation Plan”**



Ecological Cost Share Programs

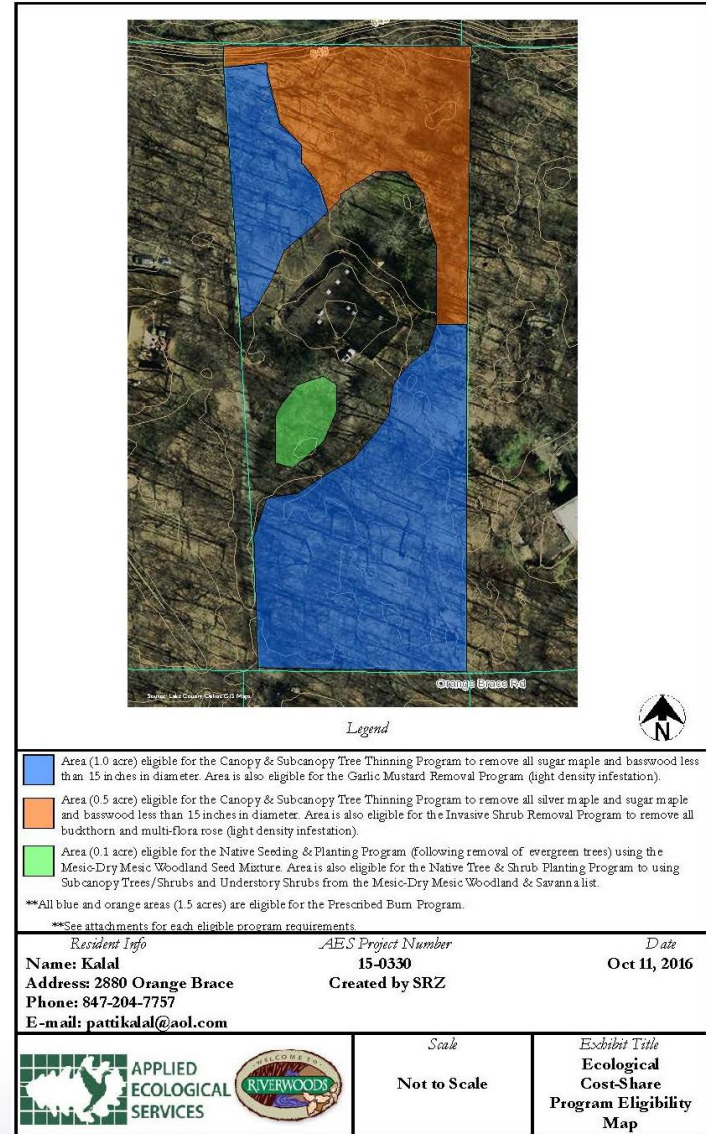
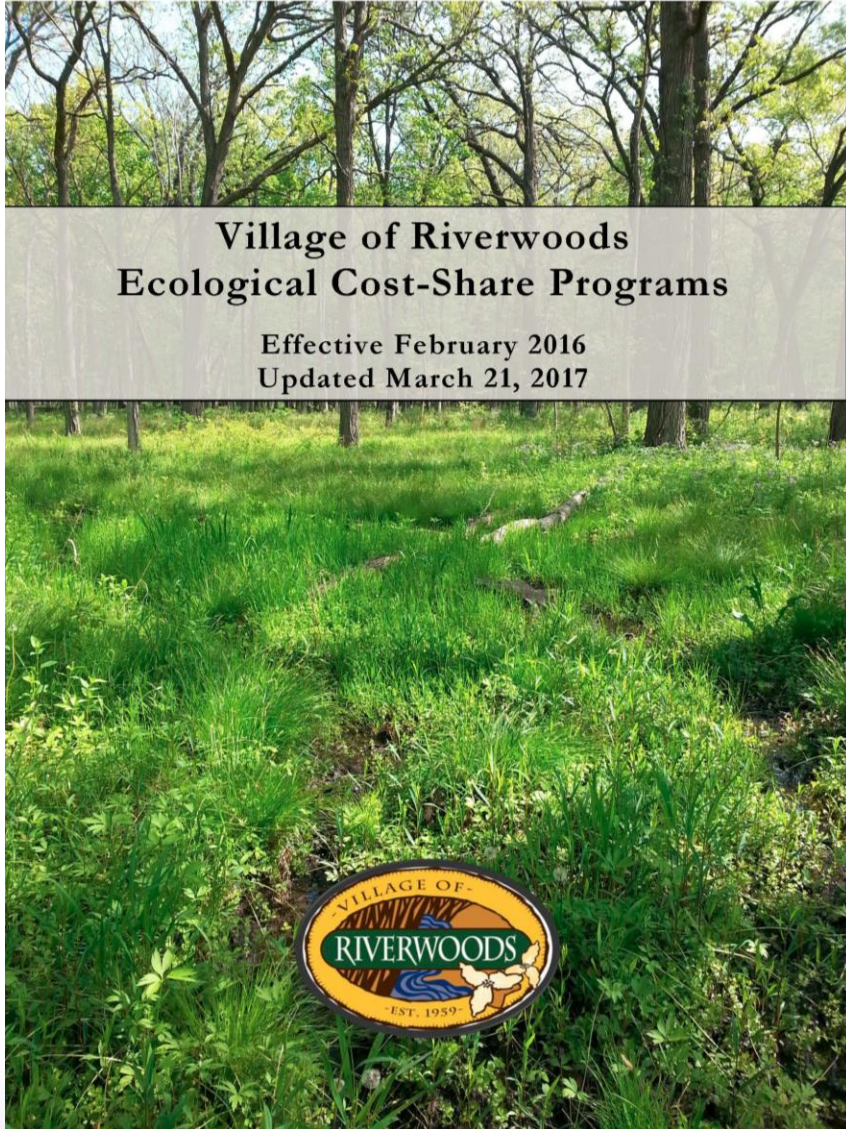
Program that encourages residents to be good stewards by improving the ecological health of woodlands.

There are seven Ecological Cost Share Programs:

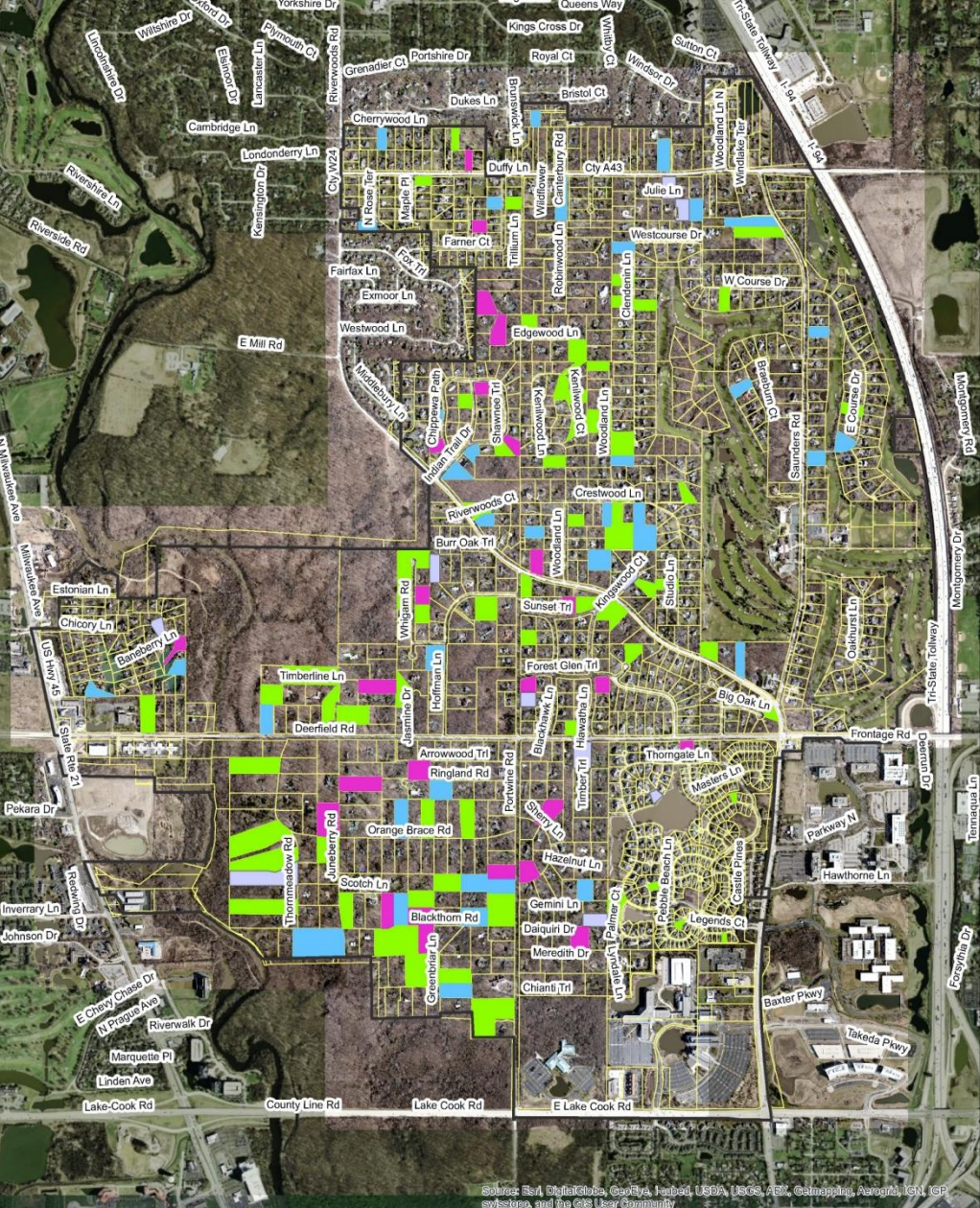
- 1) Canopy & Subcanopy Tree Thinning
- 2) Invasive Shrub Removal
- 3) Garlic Mustard Removal
- 4) Native Tree & Shrub Planting
- 5) Native Seeding
- 6) Rain Garden Installation
- 7) Prescribed Burning



Ecological Cost Share Report & Map



2015-2017: nearly 200 residents had an ecological consultation & approx. 50% of these residents applied for a cost share program.



Source: Esri, DigitalGlobe, GeoEye, Earthstar (USA), USGS, Aero, GeoMapping, AeroGRID, IGN, Esri, swisstopo, and the GIS User Community



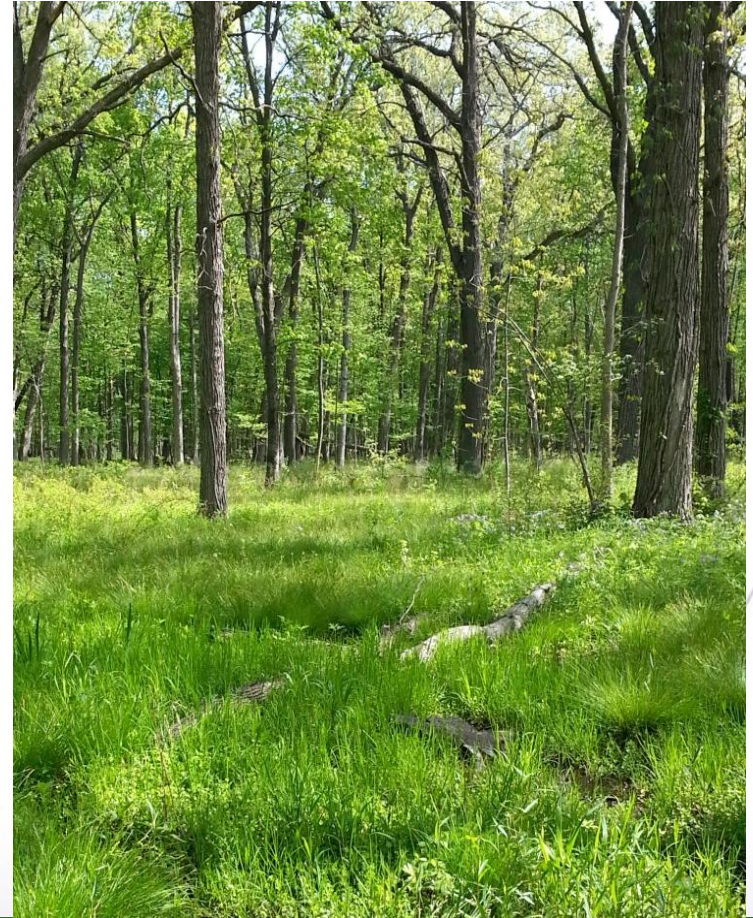
Village's Contractor Certification Program

- Attendance at workshop was required to become “Certified” to work under the Village’s Ecological Cost Share Programs.
- Explain why & how Riverwoods is protecting woodlands.
- Orient contractors to Village’s Tree/Woodland Ordinance.
- Orient contractors to Village’s Ecological Cost Share Programs.
- Process resident & contractor go through when applying.
- Contractor implementation of each Cost Share Program.



Canopy & Subcanopy Tree Thinning Program

Goal is to provide for select removal of canopy & subcanopy trees such as elm, sugar maple, and basswood to reduce shading.



Invasive Shrub & Garlic Mustard Removal Programs

Goal is to remove invasive shrubs & garlic mustard to reduce shading and competition with natives.



Native Tree & Shrub Planting Program



Native Seeding Program

Goal is to establish or diversify native ground layer plants.



Rain Garden Program

Goal is to capture rainwater from downspouts/sumps



Prescribed Burn Program

Goal is to provide residents with a long term management tool to maintain woodland health.



Ecological Cost Share Process

Step 1: Resident conducts Ecological Consultation w/ Village Ecologist & receives map/report.

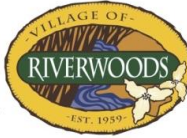
Step 2: Resident meets w/ “Certified” contractor then submits app./proposal to Village.

Step 3: Village Ecologist reviews app./proposal, issues permit, then “Certified” contractor performs work.

Step 4: Village Ecologist inspects & approves work & resident is reimbursed.

ECOLOGICAL COST SHARE PROGRAMS

In the late 1990s, the Village of Riverwoods began encouraging residents to be good stewards of their properties through ecological cost-share programs. The goal is to improve property values by caring for each of our natural vegetation communities. In 2016, the Village updated these programs to make them more systematic and easier to understand and implement. Additional updates were made on March 21, 2017. There is a program available to suit every property type.



Ecological Consultation

An Ecological Consultation is required as a gateway first step to apply for the Village Ecological Cost-Share Programs. Residents get the opportunity to spend an hour with the Village Ecologist on their property to obtain an in-depth ecological assessment and determination of which Cost-Share Programs the resident is eligible for. Residents learn what will grow best on their property and how to care for it. A Program Eligibility Map/Report is provided to the resident which summarizes the consultation, outlines all Cost Share Programs eligible to the resident, and how to implement the work. Next, the resident hires a qualified contractor to implement the work and gets reimbursed by the Village when the work is complete. All programs are a 50/50 cost share with a Village reimbursement maximum of \$2,000 to \$4,000, depending on the program.

- Call the Village's Executive Assistant at 847-945-3990 to request a consult with the Village Ecologist.
- Ecological Consultations can be conducted year round but are best done from April through November.
- The Ecological Consultation cost to the resident is \$75.

The Programs

Canopy & Subcanopy Tree Thinning Program

The intent of this program is to provide for the removal of selected canopy & subcanopy trees such as sugar maple and basswood in order to reduce shade levels and competition for desirable native species.

Invasive Shrub Removal Program

This program helps residents improve ecological health by removing invasive shrubs such as buckthorn and honeysuckle thereby increasing the opportunity for desirable native species.

Garlic Mustard Removal Program

This program encourages residents to remove invasive garlic mustard from their property to allow native woodland understory species to thrive.

Prescribed Burn Program

The Prescribed Burn Program provides a tool for residents with healthy woodlands and/or prairies to maintain these areas using fire. Prescribed burn management helps improve the health of a woodland or prairie by removing duff, replenishing the soil with nutrients, and by allowing native plants to thrive.

Native Tree & Shrub Planting Program

Residents can improve the ecological health of their property by planting native trees and shrubs appropriate for the ecological setting.

Native Seeding Program

The intent of this program is twofold. First the Village Ecologist may recommend that an area be seeded and /or planted with native species following garlic mustard removal or invasive shrub removal. Second, residents may wish to seed a woodland understory, prairie, or wetland to increase native species diversity or to fill in bare areas.

Rain Garden Program

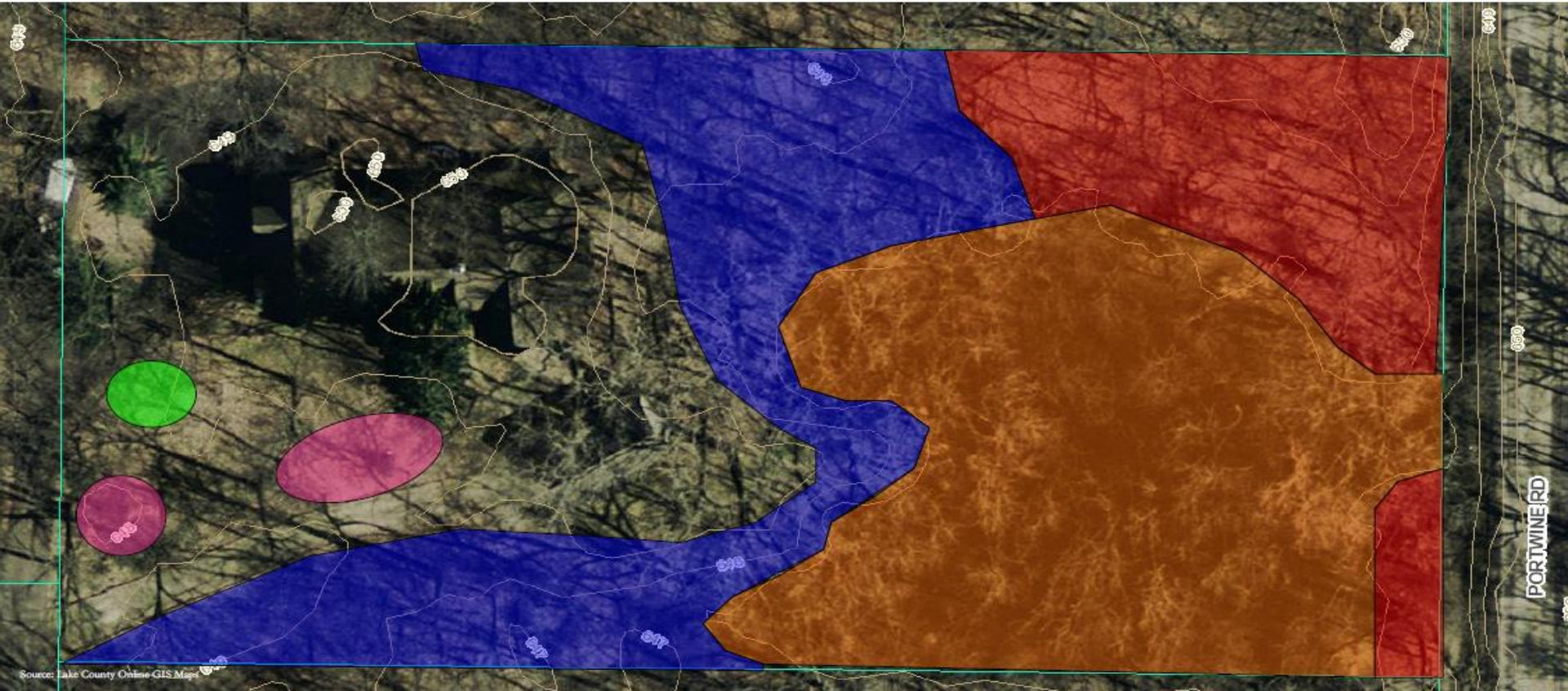
The Rain Garden Program encourages residents to install rain gardens on private property to “micro-manage” stormwater runoff as close to the source (like downspouts, driveways, sump pump discharges) as possible. A rain garden is a shallow depression that is planted with deep-rooted native plants. It functions by capturing and infiltrating stormwater runoff into the ground thereby reducing the flows to nearby streams and other drainage ways.

Funds available for each program will be re-evaluated by the Board of Trustees on an annual basis. Help make our programs a success and apply today!



What is an Ecological Mitigation Plan?

Plan to improve health of existing woodlands using ecological management strategies similar to the Cost Share Programs.



Questions

