Prairie Crossing Homeowner Association Common Areas

LAND MANAGEMENT PLAN SUMMARY 2017

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Liberty Prairie Foundation

Contents

Background and Overview

Within the quilt of affiliated landowners on the original development site, as indicated in the Land Ownership Exhibit, the Prairie Crossing Homeowner's Association (HOA) is responsible for the management of approximately 252 acres of common area land and 27 acres of lakes and ponds. An overview of the land and cover types have been provided in the Land Cover Exhibit.

Principles

In 2002 and again in 2013, the Prairie Crossing Homeowners Association Board adopted the following set of underlying principles for managing the real estate owned by the HOA.

Stewardship

The Prairie Crossing Homeowners' Association is committed to stewarding its common and natural areas such that their ecological health and function improve every year until they reach a "steady state" of sufficient quality that they enhance the surrounding open space in the Liberty Prairie Reserve. We recognize that the successful integration of a vibrant human community with a healthy and diverse native ecosystem requires balance and compromise. At a minimum, all common area management decisions should consider the following points:

1) Aesthetic expectations should be consistent with a **healthy, rural environment**
2) All management decisions should recognize the importance of the interconnections within an ecosystem. The **health of the entire ecosystem** should be the principle criteria
3) It is usually cheaper to **prevent a problem** than to fix it
4) Healthy native ecosystems contain **low levels of weeds**
5) Inputs that are not immediately used entirely by the intended plant community must not be allowed to **run off and become pollutants in downstream areas** and water bodies
6) No pesticides or fertilizers should be applied on common areas without being first reviewed (ingredient list, application procedures, MSD sheets) by the Environmental Consultant
7) All proposed inputs for natural resource management **should enhance the ultimate long-term biodiversity, stability and sustainability of the targeted ecosystem** and affected ecosystems "downstream"

Ecosystems

Each of the landscape types and ecosystems has specific long-term and multi-year management goals which are consistent from year to year. This Land Management Plan Summary is an annual document laying out in detail the work proposed for the year which will advance the long term goals for each area. Ecosystem management is an ongoing program, and the annual management plans are designed to manage these areas for the long-term within the context of annual budgets.

Details on the specifics for each ecosystem are provided in the following pages.

Prairies and Wetlands

The planted prairies, meadows and wetlands were created from sterile chemically dependent farmland. They were planted with a broad variety of adapted native species. Additionally, early successional weed species colonized much of the bare ground in the early years, establishing seed banks. The prairies and wetlands are critical for the treatment of our stormwater, and the maintenance of extremely high water quality in our lakes and ponds. In addition to providing quality habitat for desired insects, birds and other wildlife, they provide aesthetically pleasing vistas that reflect the value the community places on conservation of our natural resources. The prairie and wetland area under HOA management is 203 acres.

Ecosystem Goal

Establish and maintain healthy prairies and wetlands that are stable, functional native ecosystems with broad plant diversity and minimal weed pressure. Healthy prairies and wetlands have minimal woody shrubs and trees, and are not compromised by Eurasian weeds. While fully mature native prairies and wetlands need minimal management with occasional prescribed burns, the planted prairies are still in the establishment phase and still require more active management for the control of weed species.

Current Objective

Facilitate the development of stable, functional native ecosystems with broad plant diversity and minimal weed pressure that provide quality habitat for desired wildlife and aesthetically pleasing vistas. Continue the control of perennial Eurasian weeds (e.g. Sweet Clover, Purple Loosestrife, Canadian Thistle, Phragmites,) and woody invasive species.

Recommended 2017 Tasks/Practices

Prairies and Wetlands		
Task/Practice	*Responsibility*	*Estimated Cost*
Spring Burns On Priority Areas (See PC Burn Priorities 2017 Exhibit)	Applied Ecological Services ETL Managed Volunteers	$15,000
Fall Burns On Priority Areas (See PC Burn Priorities 2017 Exhibit)	ETL Managed Volunteers	included in above
Selectively Herbicide for Specific Weeds on an ongoing basis (See Field Stewardship Activities)	Jim O'Connor team & Volunteers Jim O'Connor team & Volunteers	$15,000
Major site wide control of purple loosestrife and reed canarygrass	Contractors	$25,000
Selectively Cut and Herbicide Invasive Woody Species	Jim O'Connor team & Volunteers	included in above

Prairies and Wetlands		
Task/Practice	*Responsibility*	*Estimated Cost*
Monitor Presence & Impact of Galerucella Beetles On Purple Loosestrife	Joe Marencik Jim O'Connor Mike Sands	No Additional Charge (NAC)
Continue Selective Prairie Enhancement With Over Seeding of Conservative Forbs.	Jim O'Connor & Volunteers	$1,500 in Materials
Do Spring Monitoring and Addling of Goose Nests. 2017 Permits Received for Egg Addling. Submit Reports and 2017 Permit Application to IDNR	Integrated Lakes Management	$1,500
Conduct Appropriate Homeowner Education Programs Burn school in early spring PC Yard tour mid summer	Environmental Team Environmental Stewardship Committee	NAC
Document All Treatments	Environmental Team	NAC
Mow 2018 Fire Breaks in Dec 2017	LPF Managed Labor	Contract Rates
Apply for 2018 Burn Permits in November (Application for 2017 Permit Submitted, Current Expires 1/5/17)	Environmental Team Leader	NAC
Write and Publish Appropriate Stories in Newsletter On Monthly Basis	Jim O'Connor Environmental Stewardship Committee	NAC

Volunteer Field Stewardship Activities

With the continued caveat of weather conditions, the following is a summary by month of the expected natural area stewardship activities. This work is done by Jim O'Connor, individual contractors, and volunteers. All herbicide use will conform to the guidelines of the Illinois Nature Preserve Commission (the least toxic herbicide at the lowest effective dose).

Field Stewardship	
Month	*Activities*
January	Brush Cutting and Cut Stump Herbicide with Garlon Frost Seeding of Native Species if the Ground Permits (Thaw).
February	Brush and Tree Clearing, as above Wetland Prescribed Burns if Conditions Warrant Order Native Plugs for Spring Delivery
March	Brush Clearing using Herbicide Garlon 4 Herbicide Garlic Mustard at Rosette Stage with Glyphosate 1% before Spring Ephemerals Emerge Frost Seed Prairie and Woodland Seed if Bare Ground Begin Early Spring Prescribed Burn Season
April	Sow Prairie and Woodland Grass Seed Mixes, Rake in if Possible Conduct Prescribed Burns Plant Trees Plant Bare Root Stock of Conservative Forbs Herbicide Cool Season Grasses (Grass Specific Herbicide) Herbicide Reed Canary Grass With Glyphosate 5% Prepare Planting Beds for Plugs

Field Stewardship	
Month	*Activities*
May	Pull Garlic Mustard and Remove Flowering Plants Plant Native Grass and Legume Seed, Rake in on Bare or Burnt Ground. Conduct Late Spring Prescribed Burns Plant Small Oaks Herbicide Sweet Clover, Crown Vetch, Bird's Foot Trefoil, Thistle, Teasel, and Burdock Rosettes preferably with Transline. Pull and Remove Dame's Rocket Plant Conservative Native Plugs
June	Herbicide First Year Patches of Sweet Clover. Pull and Discard Bolting Garlic Mustard, Queen Anne's Lace. Spray Canada Thistle with Transline Herbicide Purple Loosestrife & Reed Canary Grass Begin Cutting and Herbicide Woody Resprouts with 50% Glyphosate
July	Pull Or Cut Flowering Yellow Sweet Clover, and Remove Herbicide Canada Thistle and Purple Loosestrife Cut and Herbicide Woody Resprouts Cut Nodding Thistle, Remove Seed Heads Mow Large Stands of Tall Goldenrod before Flowering
August	Cut Flowering White Sweet Clover, and Remove Cut and Herbicide Honeysuckle, Willows and Buckthorn With 50% Glyphosate Herbicide Purple Loosestrife, Phragmites, Teasel and Thistle Rosettes
September	Collect Seed From Early Flowering Native Plants Continue to Cut and Herbicide Woody Resprouts Herbicide Reed Canary Grass

Field Stewardship	
Month	*Activities*
October	Collect Seed for Storage and Use in 2018 Herbicide Woody Invasives, Sweet Clover 1rst Yr, Teasel Rosettes, and Reed Canary Grass (5% Glyphosate) Frost Seed Forbs From Late October Through Late March
November	Conduct Fall Burns, Especially Wetlands Frost Seed Forbs Herbicide Garlic Mustard Rosettes, Cut Brush Herbicide with Garlon 4
December	Frost Seeding Forbs Cut Teasel Heads and Remove Continue Brush Clearing and Herbicide Cut Stumps Conduct Burns if Weather Permits

Lakes and Ponds

The ponds and lake were dug as part of the initial residential development. While serving as the primary storage for storm water, their relationship with the wetlands and prairies allows for high quality habitat. In addition to their use as stormwater detention and wildlife habitat, the lakes are used for swimming, winter skating, fishing, and non-motorized boat traffic. The water quality has been maintained at a high standard, such that the IL DNR has stocked the ponds with 4 species of State Threatened or Endangered fish species. The natural progression for a lake or pond is to gradually fill with dead plant material and become a wetland or bog.

Ecosystem Goal

In addition to their use as habitat, the lakes are used for swimming, skating, fishing, and non-motorized boat traffic. We will maintain a high standard of water quality, diversity of native aquatic vegetation and integrity of the shorelines. While native aquatic vegetation is critical to maintaining water clarity, excessive Eurasian weeds (e.g. Eurasian milfoil) and algae both detract from the habitat value and the attractiveness of the lake. Managing base nutrient levels is a critical component of the lake management to interrupt the natural succession process and maintain the high quality open water status. This may entail periodic removal of relatively small amounts of nutrient rich sediment.

Current Objective

Continue to improve the diversity of aquatic vegetation, and integrity of the shorelines.

Recommended 2017 Tasks/Practices

Lakes and Ponds		
Task/Practice	*Responsibility*	*Estimated Cost*
Conduct new bathymetric studies of Lake Leopold to prioritize future sediment removal	Joe Marencik Integrated Lakes Management	$3,200
Conduct initial bathymetric surveys in 3 ponds	Joe Marencik Integrated Lakes Management	$5,300
Monitor Lake Leopold Eurasian Milfoil and Other Aquatic Weeds As They Rebound from the Whole Lake Treatment of Early 2012	Joe Marencik Integrated Lakes Management	NAC
Aquathol Treatment of Area off Beach, Cresent Overlook for Aquatic Weed Control	Integrated Lakes Management	$4,000
Nuisance aquatic plant control - harvesting/back treatments/spot treatments.	Integrated Lake Management Joe Marencik	$7,000

Lakes and Ponds		
Task/Practice	*Responsibility*	*Estimated Cost*
Monitor Filamentous Algae Populations for Potential Spot Treatments	Integrated Lake Management Joe Marencik	NAC
Continue to Monitor Water Quality Monthly in Leopold Lake and 2 downstream ponds (DO, BOD, N, P, Cl, Temperature, Clarity, Algae and Zooplankton Species Composition). Record Lake Levels.		$500
Clean beach 2x weekly from Memorial Day through Labor Day	Contractor? LPF?	$1,000
Monitor Beach Bacteria Levels	County Health Dept	NAC
Monitor for Potentially Toxic Blue Algae Blooms	Joe Marencik Integrated Lakes Management	NAC
Conduct 1 Water Quality Evaluation of Sanctuary Pond	Joe Marencik	NAC
Spot Treatment of Aquatic Weeds in 1 Shoreline Location for T&E Fish Sampling in Sanctuary Pond	Integrated Lakes Management	
Conduct 3rd Cycle of Muskrat Control	Contractor Joe Marencik	$3,500
Stock catfish in Lake Leopold to increase diversity	Environmental Team	$1,000
Create appropriate educational pieces 1 article in Meadow Mix re Lake Leopold	Environmental Team	NAC
Document All Treatments	Environmental Team	NAC

Turf, Trees, and Shrubs

The major turf areas with landscape trees and formal planting include the Village Green, Station Village Green, Road Edges, and Center Courts of home clusters for a total of approximately 30 acres.

Ecosystem Goal

Provide aesthetically pleasing and comfortable recreational surfaces, using no irrigation and minimal fertilization and pesticides. Turf areas should be healthy with no noxious weeds and reflect well on the appearance of the community.

Current Objective

Continue to build the health of the soil and plant systems to provide resilience to drought and other stresses. Enhance the health and vitality of the landscape trees and shrubs.

Recommended 2017 Tasks/Practices

Turf, Trees, and Shrubs		
Task/Practice	*Responsibility*	*Estimated Cost*
Two Site Inspections with LPF, LCM & Premier Management (April & September)	LPF Landscape Concepts Premier Management	NAC
Mow Weekly (At 3-4") April 15 – Nov 30 Focal Point of April Site Inspection will be to Reduce Any Unnecessary Mowing Around Light Poles, Boulders, etc along the Rows and Trails	Landscape Concepts	$39,016
Use 2#/1000 sq ft of Liquid N Plus Atriplex In Split Application (June & September)	Landscape Concepts	NAC
Enhancement of the Native Beds at Jones Point and Prairie Smoke, & around the gazebo.	Landscape Concepts	$3,000
Fertilize All Landscape Trees in Sept/Oct with Liquid Slow Release N Plus Atriplex	Landscape Concepts	NAC
Selective Tree Work (Replacing Dead Trees, Safety Pruning)	Contractor	$4,000
Expand Mulch Areas around Landscape Trees	Contractor	$2,000
Refurbish all Existing Mulch Areas	Contractor	$18,000

Turf, Trees, and Shrubs		
Task/Practice	*Responsibility*	*Estimated Cost*
Monitor Use of Bluebird Nesting Structures	Volunteers	NAC
Post All MSDS On Web Site	Environmental Team Leader	NAC
Write and Publish Appropriate Stories In Newsletter	Environmental Stewardship Committee	NAC
Document All Applications	Environmental Team Leader	NAC

Hedgerows

The hedgerows are remnants from the prior use of the farm land. These hedgerows were planted by early settlers. The principal tree species are Osage Orange, Hackberry, Black Cherry, Mulberry, Norway Maple, Red Maple, Box Elder and Silver Maples. The lower shrub layer is dominated by Buckthorn, Honeysuckle and Wild Grape. The current acreage is approximately 4 acres.

During the winter of 2013, Landscape Concepts Management aggressively weeded all hedgerows. These hedgerows are now divided into separate areas to allow for a 4 year rotational focus on specific areas.

Ecosystem Goal

Convert the hedgerows to predominantly healthy native tree species that provide attractive landscape features and high quality habitat for desired wildlife. Weedier species (Norway Maple, Mulberry, Box Elders etc) will be slowly replaced by high quality native species. Understory shrubs will be native species with no Eurasian weed species (Buckthorn, Honeysuckle, Multiflora Rose, Tree of Heaven etc).

The process of removing weedier species, safety pruning of older branches, and replanting with native species is ongoing with a rotation of focus areas each year. Each hedgerow will receive priority attention every 4 years.

Current Objective

Encourage the growth of healthy native tree species that provide attractive landscape features and quality habitat for desired wildlife with a minimum of weed species.

Recommended 2017 Tasks/Practices

Hedgerows		
Task/Practice	*Responsibility*	*Estimated Cost*
Remove Both Species of Buckthorn, Honeysuckle in Hedgerows North of Prairie Trail (Red on Hedgerow and Tree Management Exhibit). Cut and Apply Garlon to Stumps. Wick Application of Garlon On Small Plants	Jim O'Connor Environmental Stewardship Committee	NAC
Plant Native Tree and Shrub Species in Hedgerows	Contractors Volunteers	$5,000
Prune As Necessary to Eliminate Dangerous Snags. Leave Snags for Wildlife Habitat where they present No Human Danger	Landscape Concepts Management	$1,500
Document All Treatments	Environmental Team Leader	NAC

Trails and Fences

Over 10 miles of crushed gravel surface trails have been constructed at Prairie Crossing. The perimeter trail running from Lake Forest Hospital around to the Train Station, and the trail along Harris Road are public regional trails that have been conveyed to the Village of Grayslake. The internal trails are the property of the HOA. The trails provide recreational opportunities for walking, jogging, bicycling, and limited horseback riding. Additionally, they provide pedestrian and bicycle commuting opportunities.

Amenity Goal

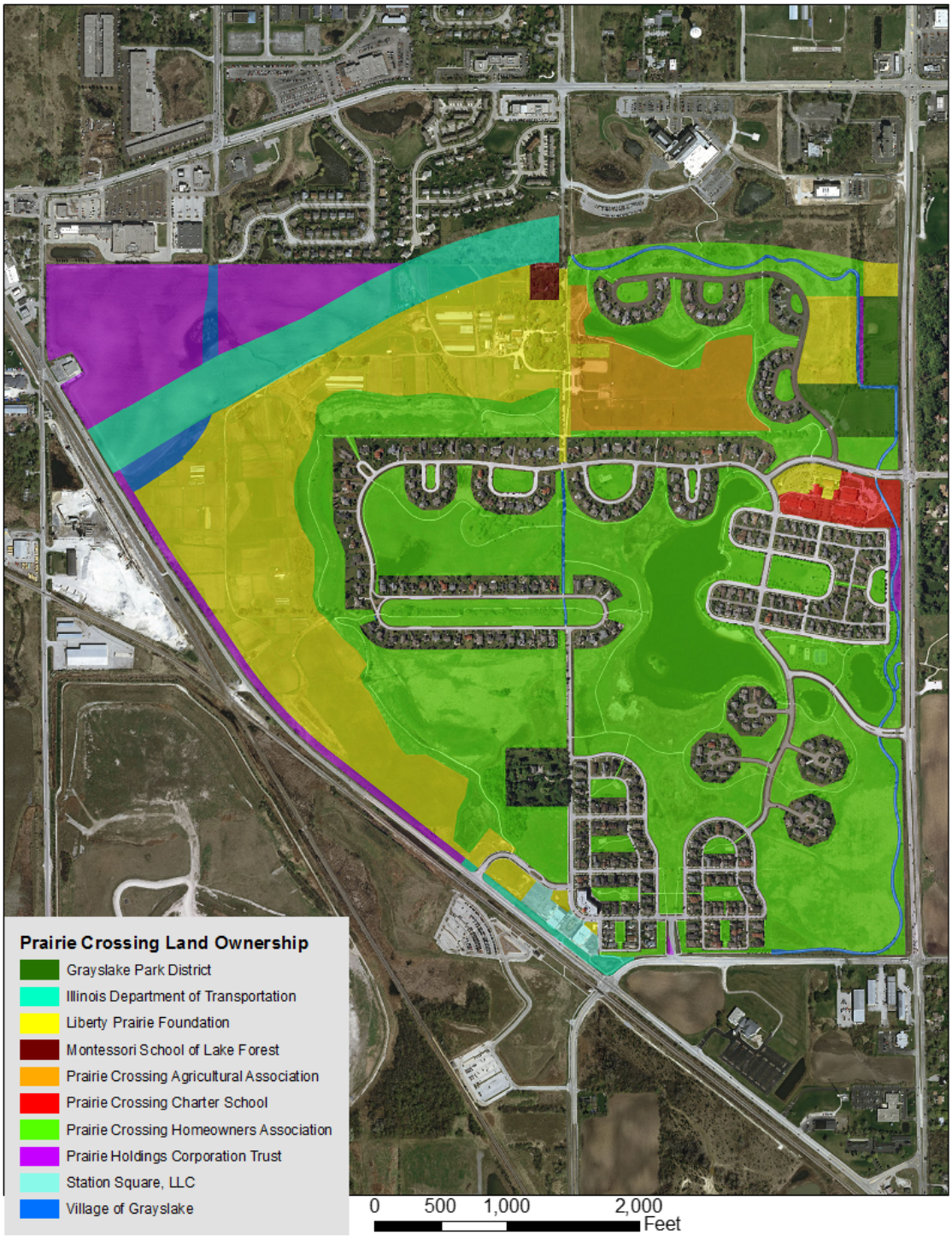
Maintain the trails and fences so they are attractive and safe to be used during all but the most extreme weather events. As trails are composed of gravel aggregate, they require regular management for weeds and structural integrity.

Recommended 2017 Tasks/Practices

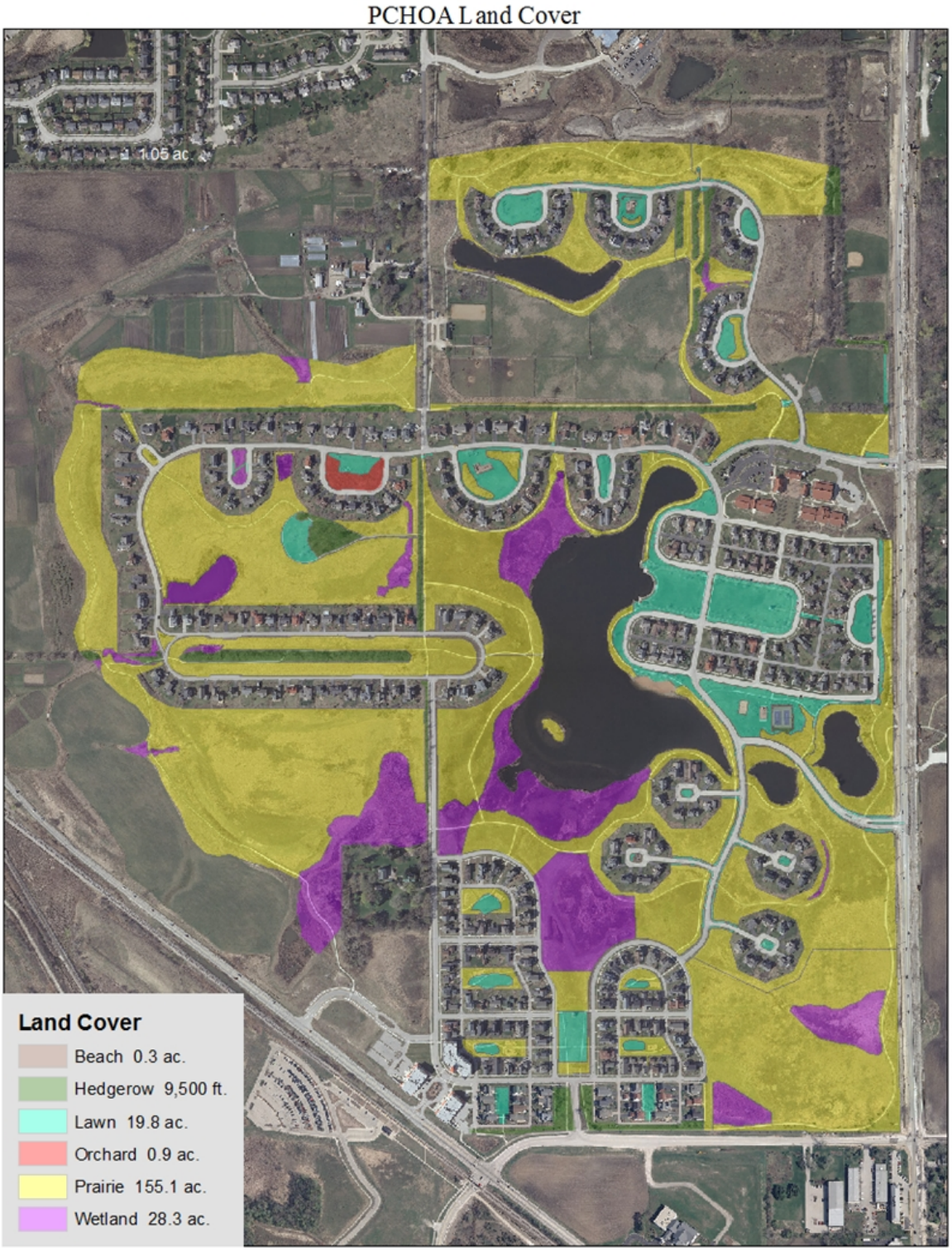
Trails and Fences		
Task/Practice	*Responsibility*	*Estimated Cost*
Mow Trail Edges (2 Ft) In July & Sept Focal Point Of April Site Inspection with LCM will be to Reduce any Unnecessary Mowing Around Light Poles, Boulders Etc.	Jim O'Connor & Bill Pogson Landscape Concepts Management	NAC. In LCM Turf Management Contract
Apply 2 Seasonal Application of Roundup plus marker for Weed Control	Landscape Concepts Management	$7,000
Cut And Herbicide Willows Alongside Trails, Pond Edges, Natural Area (see Woody Invasives Removal exhibit)	Landscape Concepts Management	$1,000
Repairs of Surface as Needed 1) Washouts 2) Drainage Issues Monitor Results of 2014 & 2015 Repairs	Bill Pogson Landscape Concepts Management	$2,000
Monitor and Replace Degraded Split Rail Fence Sections along Route 45 & Casey Road	LPF Managed Labor	$2,000

Exhibits

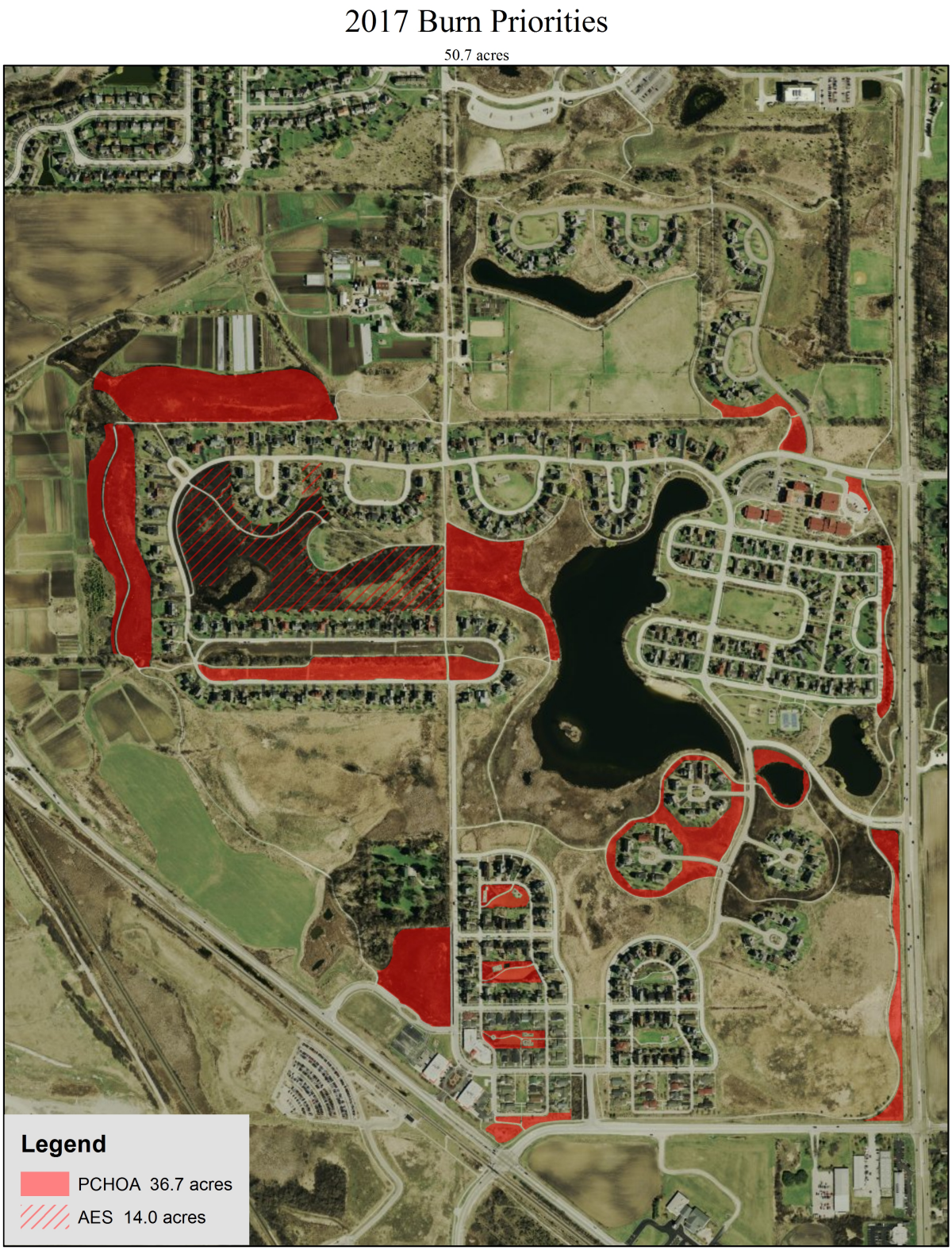
Land Ownership



Land Cover


PCHOA Land Cover
1.05 ac.
Land Cover
Beach 0.3 ac.
Hedgerow 9,500 ft.
Lawn 19.8 ac.
Orchard 0.9 ac.
Prairie 155.1 ac.
Wetland 28.3 ac.

Burn Priorities 2017



Hedgerow and Tree Area Management

Woody Invasive Removal

Woody Invasive Removal 2017