Prairie Crossing Homeowner's Association ENVIRONMENTAL MANAGEMENT PLAN – 2011

In 2011 the Prairie Crossing Homeowner's Association will be responsible for the management of approximately 252 acres of common area land and 27 acres of lakes and ponds. The land and cover types is shown in the attached figure.

Prairie Crossing Environmental Standards

(adopted 2002)

The Prairie Crossing Homeowners' Association is committed to stewarding its common areas and natural areas such that the ecological health and functions improves every year until it reaches a "steady state" of sufficient quality that it enhances the surrounding open space in the Liberty Prairie Reserve.

We recognize that the successful integration of a vibrant human community and 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. For example, it is far cheaper to prevent the overloading of the lake with nutrients and chemicals than it is to clean it up later.
- 4. Healthy native ecosystems contain low levels of weeds. Weeds are not all equal. Some weeds are transitory in the establishment of new plant communities. Others are pernicious and dramatically reduce the ecological health of the ecosystem. Decisions about weed management should include ecosystem threats as well as aesthetic threats.
- 5. Inputs that are not immediately used entirely by the intended plant community 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".

Current Management Objectives and Strategy:

<u>Turf and Landscape Trees:</u> The major turf areas include the Village Green, Station Village Green, Road Edges, and Center Courts of home clusters for a total of approximately 30 acres.

Current Objective: Maintain lawns as aesthetically pleasing and comfortable recreational surfaces, using minimal irrigation, fertilization and pesticides.

2010 Comments:

- 1. For the fifth consecutive year, all areas were treated with a non-2-4-D herbicide for broadleaf weeds in May and August. Dandelion populations have been reduced.
- 2. All turf areas were treated with a liquid application of slow release N (2#/1000 sq ft) and Atriplex.
- 3. During months of July and August, several turf areas were only mowed every other week.

Recommended 2011 Tasks/Practices

Responsible

Contract/Cost

Mow weekly (when warranted), starting April 15	Landscape Concepts	
Maximize height of mowing to facilitate weed control	Landscape Concepts	
Use 2#/1000ft ² of liquid N plus Atriplex in split	Landscape Concepts	
application (June & September)		
Do fall hazing of migratory geese.	Wild Goose Chase	
Test compost tea as an alternative to synthetic fertilizer	Landscape	
on Village Green	Management &	
	Volunteers	
Fertilize all landscape trees in Fall with liquid slow	Landscape Concepts	
release N plus Atriplex.		
Present proposal for additional conversion of turf to	Environmental Team	
native vegetation.	Leader	
Post all MSDs on web site,	Environmental Team	
,	Leader	
Prepare and distribute PC Environmental Handbook.	Environmental	
Conduct appropriate homeowner education programs	Stewardship Committee	
Write and publish appropriate stories in Newsletter	Environmental	
1 11 1	Stewardship Committee	
Document all applications.	Environmental Team	
11	Leader	
Expand mulch areas around landscape trees	Landscape Concepts	
Replant entrance plantings (shrubs & Perennials)	Landscape Concepts	

Prairies: The prairie areas are all planted, with oldest areas being 15 years old. Prairie area under management in 2011 is 174 acres.

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.

2010 Comments:

- 1. *Phragmites* was treated by outside contractor
- 2. In several areas, volunteer woody cottonwoods and willows were cut and or burned.
- 3. 108 acres were burned in 2009. (see 2010 Burned Areas exhibit)
- 4. Sweet clover infestations were similar to 2008.
- 5. Prairie Patrols focused on areas around 3rd pond and Prairie Trail from Beach to Shooting Star.
- 6. Firebreaks have been moved in priority burn areas for coming Spring.
- 7. Burn permits for 2011 in hand

Recommended 2011 Tasks/Practices	Responsible Co	ntract/Cost
Do Spring burns on priority areas (See 2011 Burn	Applied Ecological Services	
Priority exhibit)	ETL managed volunteers	
Do Fall burns on priority wetlands; (See 2011	ETL managed volunteers	
Burn Priority exhibit)		
Monitor and record of major weed problems. reed	Jim O'Connor & volunteer	5
canary grass, teasel, <i>Phragmites</i> , and sweet clover.		
Selectively herbicide for specific weeds. Spring:	Jim O'Connor & volunteer	
Teasel, Reed canary grass, Late summer:	Liberty Prairie Restoration I	nc
Phragmites, Reed canary grass		
Selective cut and herbicide invasive woody	Environmental Team Leade	
species; Winter (priority areas around Sanctuary	Environmental Stewardship Committee	
Pond, Route 45, Casey Road)		
Mow and herbicide around planted trees in prairie	Environmental Stewardship)
to reduce competition	Committee	
Continue training and implementing volunteer	Environmental Team Leade	
stewardship volunteers program ("Prairie Patrol").	Environmental Stewardship Committee	2
Recruit 5 additional members.		
Continue selective prairie enhancement with	Environmental Stewardship)
addition of plugs.	Committee	
Monitor use of nesting structures	volunteers	
Monitor and replace degraded split rail fence	ETL managed staff	
sections along Route 45 & Casey Road		
Conduct appropriate homeowner education	Environmental Stewardship)
programs	Committee	
Document all treatments.	Environmental Team Leade	er
Mow 2012 fire breaks	ETL managed labor	
Apply for 2102 burn permits	Environmental Team Leader	

<u>Wetlands:</u> The wetland and shoreline areas are all planted, with oldest areas being 16 years old. Current planted wetland and shoreline area that HOA is responsible for is almost 35 acres.

Current Objective: Facilitate the development of stable, functional native ecosystems with broad diversity and minimal weed pressure that provide quality habitat for desired wildlife and aesthetically pleasing vistas.

2010 Comments:

- 1. *Phragmites* areas were treated with RoundUp/Rodeo.
- 2. Canada Goose nests were destroyed and required reports submitted.
- 3. *Galerucella* beetles continued to expand throughout the wetlands, although purple loosestrife did flower profusely in SE quadrants.
- 8. *Epilobium* was detected in larger colonies than previously found and some spraying with Habitat was completed (later than optimal)
- 9. Burn permits for 2011 in hand

Recommended 2011 Tasks/Practices

Responsible

Contract/Cost

Do burns in Fall 2010 and 2010. (see 2009/2011	Applied Ecological Services
Burn Priorities exhibit) The goal is to burn at least	ETL managed volunteers
50% per year. Selection of appropriate areas and burn	
dates will be based on actual weed pressure, wind	
directions, and relative priority.	
Monitoring and recording of major weed problems.	Jim O'Connor
ID <i>Epilobium</i> , reed canary grass, Purple loosestrife,	Joe Marencik Environmental Team Leader
and Phragmites.	Environmental Team Leader
Selectively herbicide for specific weeds. Spring:	Jim O'Conner
Reed canary grass. Summer: <i>Epilobium</i> , Purple	Environmental Stewardship
loosestrife. Fall: <i>Phragmites</i> , Reed-canary grass.	Committee
Do spring monitoring and addling of goose nests.	Integrated Lakes
Permits received for egg addling.	Management
Conduct appropriate homeowner education programs	Environmental Stewardship
WY 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Committee
Write and publish appropriate stories in Newsletter	Environmental Stewardship Committee
Develop, train and implement volunteer stewardship	Environmental Stewardship
program ("Prairie Patrol")	Committee
Continue to document spread and effectiveness of	Environmental Team Leader
Galerucella beetles	
Document all treatments.	Environmental Team Leader
Submit 2010 IEPA 319 grant reports to SMC	Environmental Team Leader
Review wetland restoration & lake edge stabilization	Environmental Team Leader
grant opportunities	

Hedgerows: The hedgerows are remnants from the prior use of the farm land. 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 approximately 4 acres.

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.

2010 Comments:

- 1. Selective trimming of Osage Orange & Silver Maple along Hedgerow Trail was completed to minimize safety concerns.
- 2. Buckthorn has increased dramatically in several hedgerows.

Recommended 2011 Tasks/Practices	Responsible	Contract/Cost
Remove both species of Buckthorn in hedgerows in center of Hedgerow Drive common area. Cut and apply Garlon to stumps. Wick application of Garlon on small plants.	Jim O'Connor Environmental Stewardship Committee	
In old farmstead south of Prairie Orchid, begin replanting with oaks, sassafras, sour gum, hackberries, redbuds	ETL managed staff, Volunteers PCCS students	
Prune as necessary to eliminate dangerous snags. Leave snags for wildlife habitat where they present no human danger.	Landscape Concepts Management	
Continue replanting native understory shrubs (red twig dogwood, hazelnut, sumac, vibernums) in Hedgerow Drive common area to compete with buckthorn.	Environmental Stewardship Committee	
Continue replacing selected weedier (silver maples, box elders, mulberries) trees with more desirable native species (oaks, buckeyes, hackberries, pines, redbuds)	Environmental Stewardship Committee Environmental Team Leader	
Monitor use of nesting structures	Volunteers	
Conduct appropriate homeowner education programs	Environmental Stewardship Committee	
Document all treatments.	Environmental Team Leader	

<u>Lakes/Ponds</u>: The ponds and lake were dug as part of the initial residential development. While serving as the end storage for storm water, their relationship with the wetlands and prairies allows for high quality habitat. The water quality has been maintained at a high standard, such that the IL DNR has stocked the ponds with 4 species of State listed fish species.

Current Objective: Maintain a high standard of water quality, diversity of aquatic vegetation and integrity of the shorelines. In addition to their use as habitat, the lakes are used for swimming, skating, fishing, and non-motorized boat traffic.

2010 Comments:

- 1. Volunteer lake monitoring program for Lake Leopold continued (Joe Marencik).
- 2. Beach area water was herbicided to control rooted aquatic plants in June.
- 3. Water quality tests in Sanctuary Pond were conducted by ILM.
- 4. Water quality remained high, with the exception of chloride levels resulting from road salt applications that continued their high levels.
- 5. Significant rooted aquatic plant growth occurred in Lake Leopold this year. This plant growth also provided substrate for significant growth of filamentous algae, particularly in the entrance to the north bay.

Recommended 2011 Tasks/Practices

Responsible Contract/Cost

	1	
Expand an effective Lake Management group of volunteers under leadership of Joe Marencik	Environmental Team Leader Joe Marencik	
Review of future lake remediation/dredging needs for decisions re Reserve Study	Environmental Team Leader	
Continue to monitor water quality in Sanctuary Pond. (Liberty Prairie Foundation and ILDNR as part of the T&E fish project)	Environmental Team Leader Integrated Lakes Management	
Continue to monitor water quality monthly in Leopold Lake (DO, BOD, N, P, Cl, temperature, clarity, algae and zooplankton species composition).	Joe Marencik Lake management volunteers	
Conduct herbicide treatment for curlyleaf pondweed and Eurasian milfoil in front of beach area.	Integrated Lakes Management	
Back plant herbicide treated areas with appropriate native plants	volunteers	
Monitor beach bacteria levels and manage beach as appropriate.	County Health Dept	
Monitoring for potentially toxic blue algae blooms	Environmental Team Leader Integrated Lakes Management	
In winter, monitor ice thickness for skating.		
Monitor spring goose populations and addle goose eggs.	Integrated Lakes Management	
Do Fall hazing of migrating geese to ensure that all populations move on.	Wild Goose Chase	
Targeted use of herbicide at entrance to north bay	Integrated Lakes Management	
Document all treatments.	Environmental Team Leader	

<u>Trails:</u> 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.

Current Objective: The trails provide recreational opportunities for walking, jogging, bicycling, and limited horseback riding. Additionally, they provide pedestrian and bicycle commuting opportunities.

Recommended 2011 Tasks/Practices	Responsible	Contract/Cost
Mow trail edges (3 ft) monthly,	ETL managed staff	
Apply two seasonal applications of RoundUp	Landscape Concepts	
plus marker for weed control.		
Repairs of surface as needed.	ETL managed staff	
1) washouts	Landscape Concepts	
2) drainage issues		

2010 Burns



1 inch = 627 feet

2011 Burn Priorities

