



Prospect Heights Natural Resources Commission
Plan for Improved Public Access and Enjoyment of
the Prospect Heights Slough and Hillcrest Lake
July 23, 2018

The City Council has requested the Natural Resources Commission to work in conjunction with Prospect Heights Public Works to propose a plan to increase public access and enjoyment of the natural areas surrounding the Slough and Hillcrest Lake. This proposal is the first working draft of that plan.

The Commission and its volunteers have been working on this task following the plans submitted to the City in 2016. The Slough Restoration Plan of 2016 was prepared following the recommendations of the ecological survey conducted by Hey and Associates. This plan looks to accomplish the vision of the City Council to increase access and usage of the wetlands and build upon the principals and work that has already been accomplished in the two year time span. The final version will seek input from residents and the Park District.





Purpose, Scope and Goals

The purpose of this plan is to make recommendations to the Prospect Heights City Council that will achieve the stated goals for increased public access and ways to engage the environment without damaging the restoration or the wildlife that inhabit the area.

The scope of the plan will focus on the Prospect Heights Slough and Hillcrest Lake as one entity.

The stated goals are:

- Increase public access and provide an educational, interactive experience that will enhance enjoyment.
- Continue to restore the habitat of both areas, improve the watershed and increase the wildlife inhabitants.
- Establish and employ sound ecological principals and procedures to ensure the health and well-being of the entire wetland and its tributary watershed.
- Develop a maintenance plan that employs the PHNRC Volunteer workforce, Public Works and the Park District.
- Strategize potential funding opportunities.

To summarize the Hey Report

Main Problems:

1. Shoreline erosion
2. High nutrient loads
3. Excessive native aquatic growth
4. Large goose population
5. Shallow water depth
6. Invasive plant species

Recommended Solutions:

1. Removal of turf grass at the shorelines
2. Re-vegetation of shorelines with native plants
3. Reduction of goose populations
4. Removal of invasives
5. Community outreach and education
6. Detain, retain or filter incoming storm water
7. Controlled burns

What has been accomplished to date?

Much has been accomplished in two years. The efforts have been focused on the south Slough only due to the pending MWRD road project.

- Riparian buffers have been started in several areas on a staggered basis. The buffers that parallel Hillside and Elmhurst Road are now in their 3rd year of maturity. The PHNRC rule of thumb is to keep plantings in the view paths of individual homes under 2-3 feet limiting taller plantings to the areas in-between the homes and blind spots.
- Over 30,000 native plugs produced in the NRC greenhouse program and planted in shoreline restoration, woodland areas and in the ephemeral pools.
- Several invasive trees have been thinned to open up the canopy and promote emerging native plants from the seed bank.
- Over 50 pounds of native seed from NRC remnant areas have been collected and sown at the site.

What has been accomplished to date?

- Native plant species have increased some 800%.
- Birds, insects, butterflies and frogs have increased dramatically.
- Several species of endangered birds are now nesting at the Slough.



Michigan lilies at the Slough - photo courtesy of Mary Hickman

- Three prescribed burns have been conducted, increasing the health and vitality of the habitat.
- Nature trails have been installed and maintained, linking the north and south sides of the Slough to the basin area and the Isaak Walton pavilion.
- Trail markers have been installed to mark the trail system.
- Public use of the Slough area has increased in all seasons.





The path on the south side of the Slough starts near our original plantings and runs parallel to Hillside Ave.

It crosses over the tributary creek in the basin area and continues on into the Isaac Walton Park.

The north woodland path extends from Isaac Walton Park to Marion/Maple.

That area contains a wide range of native species, very unique views of the slough and an abundance of wildlife because of the diversity.

The trails are marked but do not have any interactive features.

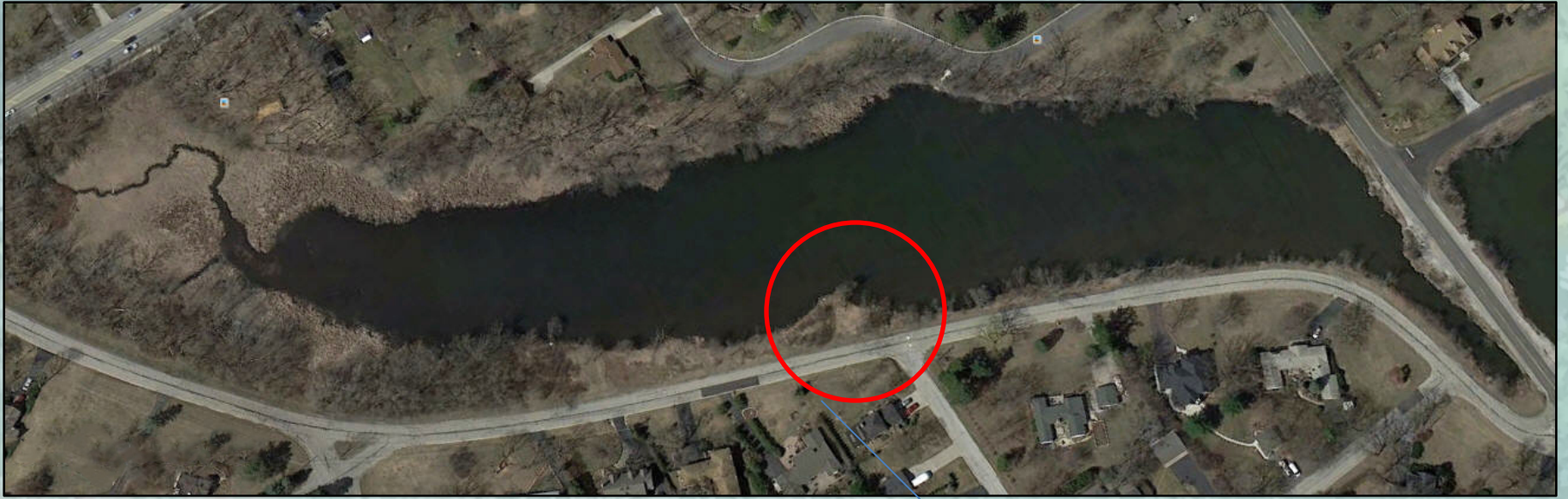


As a brief reminder, this was the southeast side of the Slough at Hillside Ave circa 2015





















Same area after restoration









Proposed plan for increasing public access and enjoyment.

NOTE: The City Council has expressed interest in having the plan include parking for people that currently park and fish on Willow Road. Problematic to developing this plan is the pending MWRD road reconstruction project which to date, has not been implemented and clear plans of intent have not been presented to the NRC which makes it close to impossible to plan anything relevant for the Willow Road area. The NRC would welcome an opportunity to discuss the plan with the MWRD in the hopes of arriving at the best possible solution to meet the stated goals of this proposal.

This plan makes the following recommendations:

1. The creation of new deep rooted riparian buffers (green marking) at the lake to improve wildlife habitat, absorb and filter runoff, arrest erosion and create visual interest.
 - a. All new buffers start with the removal of invasives.
 - b. At Hillcrest Lake the buffers would feature shorter native plantings in the sight lines of residences and taller species where view is not a direct consideration. Pending MWRD plans for the southeast corner of the lake, the NRC would look to remove the invasives thickets and create a fishing area from the two lots that are owned by an absentee owner.





Eleocharis and path rush are shorter species of rushes that will serve to stabilize the shoreline while not changing the appearance of the open area.

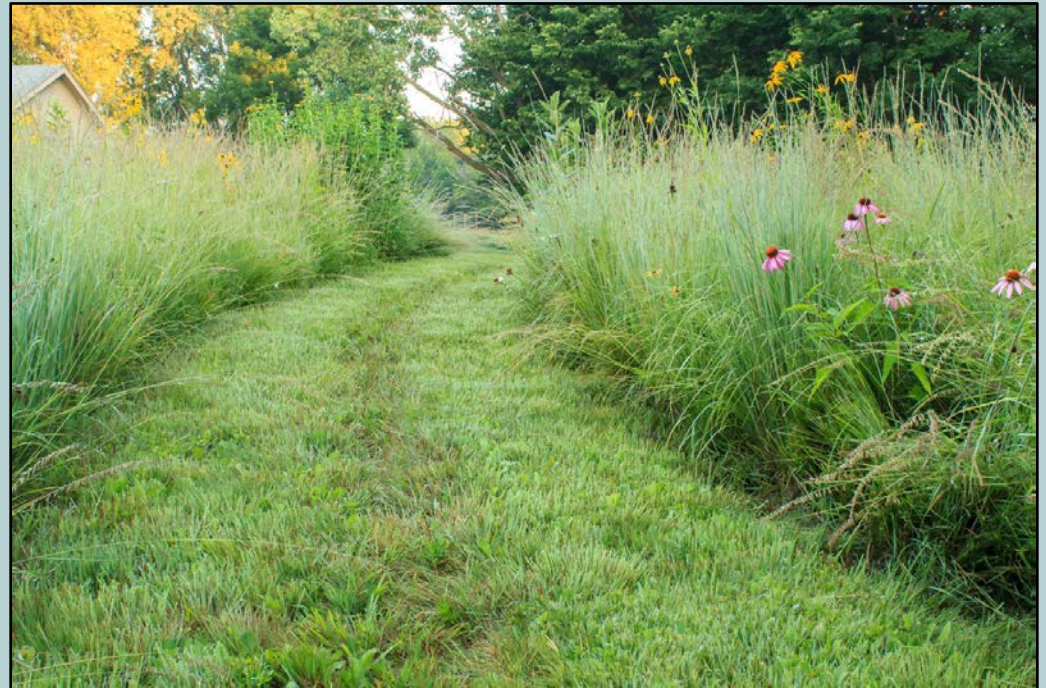
While the root systems are not quite as deep as other natives, they make up for it with more biomass to the root systems. The short height still provides public access to the water and water fowl access out of the water.



Path rush is a native species that can tolerate foot traffic, allowing residents full access to the shoreline while providing stabilizing roots underground.

Buffer strips are created in several ways. Once invasives are removed, the native seed bank has the opportunity to emerge in the presence of light, water and nutrients and contribute significantly.

Prepared areas are also seeded with native seeds, native plugs and plantings of trees and shrubs. It takes time for buffers to fully mature as native plants spend the first two years developing their root systems. This is why continuous community outreach and education are so important in this time of transition.



Buffer strips will also reduce the goose population as it does not provide favorable habitat for geese. Mow paths provide public access through the buffer strips.

Buffer strips also enhance the visual appeal of the environment.





2. The continuation of the existing trail system onto Hillcrest Lake. (blue marking)

a. At Hillcrest Lake, simple mow paths that extend from Hillcrest Drive down to the water would be provided for every resident located around the lake.



3. The installation of raised boardwalks, (yellow marking) in the known areas of the Slough prone to moderate to heavy fluctuation in water levels. This would significantly extend the number of days of access to the trail system.



This type of boardwalk sits on a post and lintel system above ground.



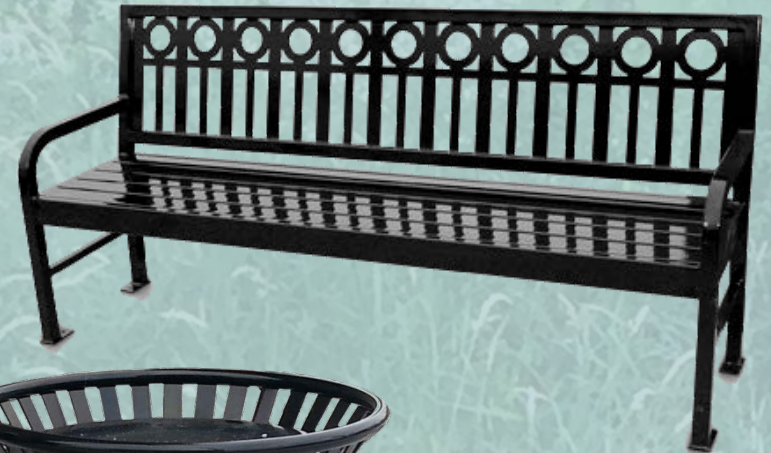


This type of boardwalk sits directly on the ground and is anchored in place. Both types can be manufactured off site and assembled in sections in the field.

4. Continued development of the riparian buffers (orange marking) at the Slough.

5. Provisions for limited public parking at Hillcrest Drive on the residents side of the street to keep cars off of Willow Road. (purple marking)

6. Installation of benches, garbage cans and solar lighting at strategic locations on the Lake. Final placement would be determined on practicality, non-threatening locations to wildlife and resident feedback and safety.



7. Interactive signage, plant ID signs and trail markers throughout both areas to increase the educational component.



WHAT IS ECOLOGICAL RESTORATION?



 Prospect Heights

Ecological restoration is the practice of renewing and restoring degraded, damaged, or destroyed ecosystems and habitats in the environment by active human intervention and action.

Healthy ecosystems support biodiversity, which means having a large variety of different living organisms.

In 2016, the Prospect Heights Park District, teamed up with the City of Prospect Heights and its Natural Resources Commission to restore this site with the support of the ComEd Green Region Program.

Look around as you walk down the trail. This area now has hundreds of different species of plants, insects, birds and mammals. It is in the process of being restored back to a natural, healthy ecosystem for wildlife and for you!



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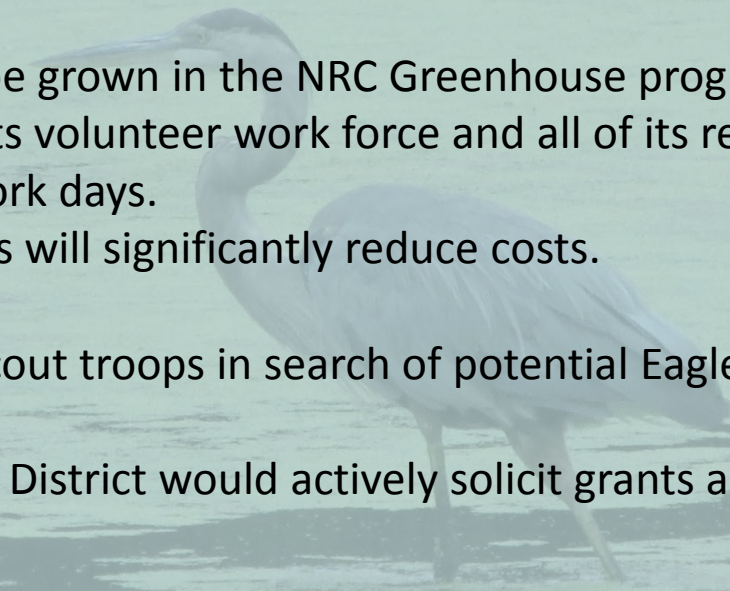


- █ Existing Nature Trails
- █ Proposed Nature Trails
- █ Proposed Boardwalks
- █ Proposed Parking
- █ New Riparian Buffers
- █ Riparian Buffers in Restoration
- █ Bench with Solar Light
- Trash Can

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Funding.

1. Once the plan has been decided, a comprehensive budget can be created. The following items should be considered.
 - a. Native seed would be collected and sown by the NRC as a function of its regular work days.
 - b. Native plugs would be grown in the NRC Greenhouse program.
 - c. The NRC would use its volunteer work force and all of its resources as part of their normal work days.
 - d. All of these measures will significantly reduce costs.
 2. The NRC will reach out to its scout troops in search of potential Eagle Scout projects.
 3. The NRC, the City and the Park District would actively solicit grants and alternative funding.
 4. The City and the Park District can choose to budget for some items or phases.
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Implementation and Maintenance Program.

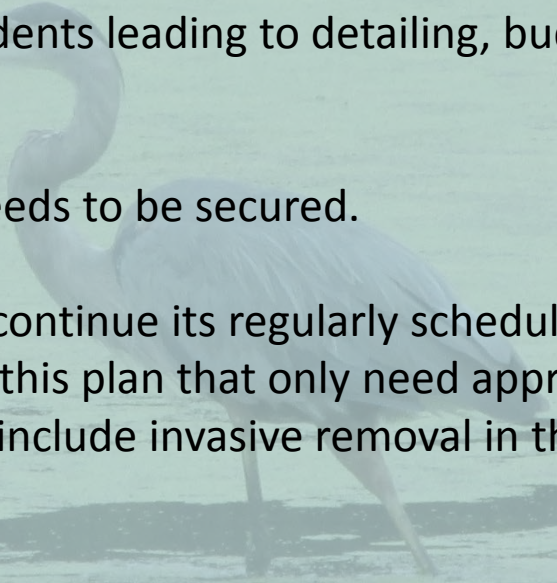
1. The Natural Resources Commission would look to implement and maintain the project as part of the regularly scheduled calendar year. This would include:
 - a. Invasive removal.
 - b. Herbicide application.
 - c. Trail creation.
 - d. Growing native plugs.
 - e. Seeding and plugging of native species.
 - f. Annual prescribed burns.
 - g. Installation of interactive features.

2. Public Works would assist in the following ways:
 - a. Tree removal.
 - b. Cut brush and invasive chipping the during summer months
 - c. Mowing

3. The Park District would assist in the following ways:
 - a. Mowing
 - b. Tree removal

4. Upon approval, the City Council would assist with securing funding.

Next steps and timeline

1. A comprehensive understanding of the MWRD plan and timeline must be known so it can be accounted for in the master plan.
 2. Feedback from the City Council and residents leading to detailing, budgeting and a finalization of the plan is necessary.
 3. Upon finalizing and approval, funding needs to be secured.
 4. The Natural Resources Commission will continue its regularly scheduled workdays and is ready to proceed with all of the areas of this plan that only need approval and not necessary funding at this time. This would include invasive removal in the buffer zones, herbiciding and seeding.
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Summary

As the guardians and advocates for this historically significant sliver of natural wetland, we have a deep conviction to ensure its health and well-being, not only for future generations, but for the reptiles, amphibians, macroinvertebrates, insects, fish, birds, mammals and all of the wildlife that call it home.

This plan looks to protect at all costs the habitat and the inhabitants while maximizing the opportunities for residents and the public to enjoy all that has been preserved.