

Hudson City Council Meeting

February 14, 2023

PAST, PRESENT AND FUTURE CONSERVATION PROJECTS

Created in partnership with:

Hudson Parks Department

Hudson Park Board

Friends of Hudson Parks

Present by:

Marcia Carsten, Conservation Committee Co-chair, Friends of Hudson Parks



Non-native invasive species have invaded Hudson parks, creating sterile monocultures with few native plants to supply food for native insects, birds and other wildlife.



These dense thickets of invasive plants must be removed to restore the functional biodiverse ecosystems of native habitat that support insect and other wildlife for the environmental benefit, education and enrichment of Hudson residents.

Wetlands survey of **Darrow Road Park** by Davey Resource Group 02/2019

Appendix B Plant Communities Map



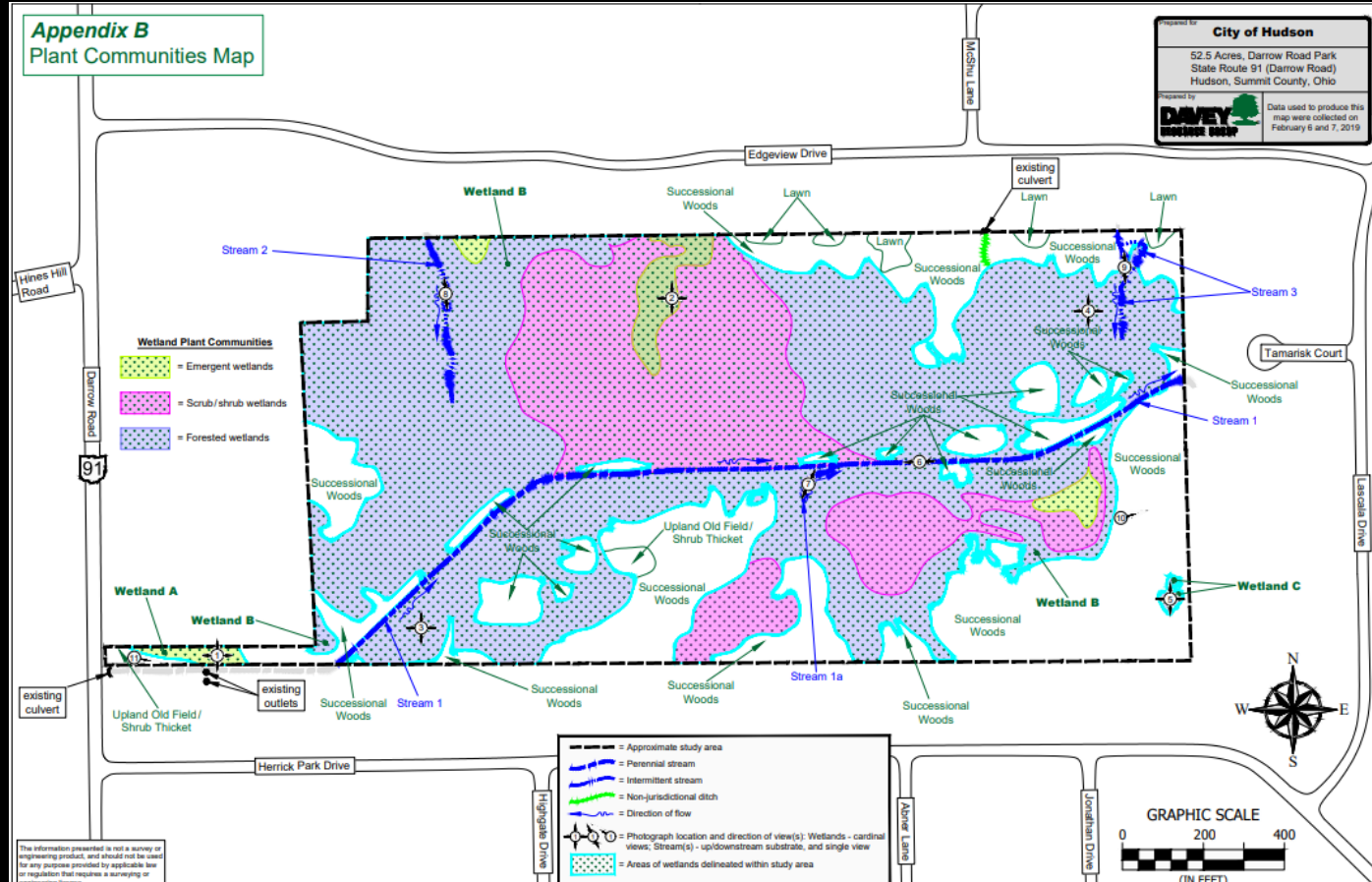
Water Resource Delineation Report

52.5 Acres, State Route 91 (Darrow Road)
Hudson, Summit County, Ohio

February 2019

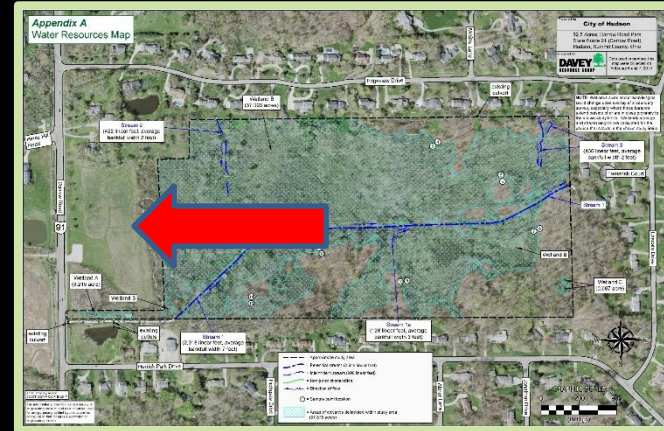
Prepared for:
City of Hudson
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Darrow Road Park Meadow Project 2020

Restored 5.5 acres of invasive species to a beautiful biodiverse native meadow.



Meadow restoration partners: Hudson Park Board, FOHP, US Fish & Wildlife PLD Ohio

The **Darrow Road Park** Stream Restoration Project in 2023 will reconnect the ditched stream to wetlands and restore its natural ecosystem function



NPSIS Plan Updates

- Add sinuosity and floodplain engagement back to stream channel
- Open up access to wetland and floodplain for flood storage and water quality treatment
- Reshape stream channel at eastern culvert to add more storage and reduce erosive pressure on streambank

Tinker's Creek Watershed applied for and was awarded a 319 grant of \$246,450 in 2022 for Darrow Road Park.



Judy Semroc's Biological Survey of Darrow Road Park 2021

Recommended Action Plan

- Identify the invasive species currently found on site
- Prioritize the order of which invasives are the most problematic and should therefore be removed or managed first
- Determine the BMPs (Best Management Practices) for the removal, treatment, and/or management for each of the invasive species. This would include knowing the best time of year for removal/treating based on the individual problem species
- Plan a timeline for scheduled removals based on the priority list
- After early/initial removal/treatments, be prepared to take time to reassess what might be coming up through the seed bank and determine if and when subsequent treatments will be needed to complete the removal
- Determine whether to plant other native species to fill in the areas where the invasives have been removed - if warranted and allowable within budget constraints
- Important to manage these species sooner rather than later so that the Park doesn't develop into a monoculture of invasives. If the invasive growth is allowed to march ahead with no management, it will cost more money and take more time to remove/treat down the road. Continual growth of the invasive species will threaten the remaining areas of native plant species, which will then ultimately affect the entire ecosystem including all of the other animal and plant species found at the Park.
- Continue to add all species noted from subsequent visits to a master baseline list which will become valuable for determining trail placement and/or future trail expansion if warranted
- Upgrade the trail system – plan for elevated boardwalks through the wet areas

WOODLANDS



Rose-breasted Grosbeak



Blue-gray Gnatcatcher



Baltimore Oriole



Cedar Waxwing



Pileated Woodpecker



Barred Owl

DRP WETLANDS



Biological Management Plan for Darrow Road Park created by Davey Resource Group September 2021 **UPDATE NEEDED 2023**



Biological Management Plan

Darrow Road Park, City of Hudson, Summit County, Ohio

September 2021

Prepared for:
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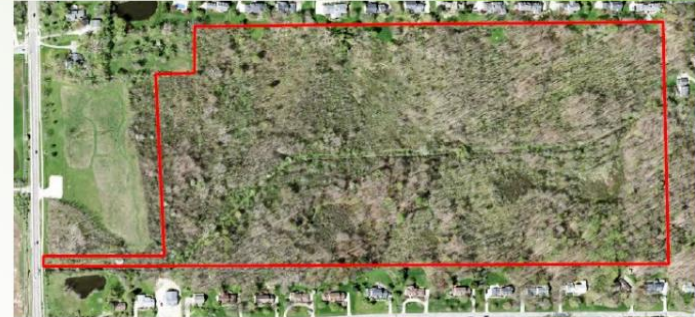
Summary of work at Darrow Road Park (DRP)

Biological management plan

- Identify and map invasive species present on site
- Make recommendations for treatment
- Estimate budget and schedule
- Set reasonable goals and objectives
- Create Biological Management Plan

Nonpoint Source Implementation Strategy Plan Updates

- Identify restoration opportunities on-site at DRP
- Develop concept plan for restoration
- Develop budget for restoration
- Perform load reduction estimates
- Write project narrative and update data tables in existing NPSIS plan for future Section 319 grant funding



52.5 acres, off State Route 91 (Darrow Road, Hudson, Summit County)



Biological Management Plan

- Costs estimated for two year implementation period to achieve Goal 1 and eliminate mature buckthorn
- Future costs will be re-evaluated after monitoring period and updated to reflect site conditions

Estimated IVC Costs for Darrow Road Park

| | |
|--|--------------------|
| Fall 2021 - Treatment of 7.5 AC of buckthorn and other invasive shrub species | \$10,688.84 |
| Labor: four field biologists working three 8-hour days, includes travel time to/from site | \$8,600.00 |
| Materials and Equipment: Truck, low-volume backpack sprayer, chainsaws, PPE and miscellaneous equipment, herbicide (Garlon 3A) | \$2,088.84 |
| Spring 2022 - Monitoring of site for invasive species | \$1,850.00 |
| Labor: 1 field biologist working one 8 hour day, data analysis, map updates, includes travel time to/from site | \$1,850.00 |
| Fall 2022 - Treatment of 13.5 acres of buckthorn and other invasive shrub species | \$18,277.91 |
| Labor: four field biologists working five 8-hour days, includes travel time to/from site | \$14,700.00 |
| Materials and Equipment: Truck, low-volume backpack sprayer, chainsaws, PPE and miscellaneous equipment, herbicide (Garlon 3A) | \$3,577.91 |
| Total estimated costs for 2 years of plan implementation | \$30,816.75 |



Invasive removal projects 2021-22 by Davey Resource Group at Darrow Road Park



2021 Cutting and stump treatment alongside central path beside stream
2022 Invasive spraying in NE section of park/forestry mulching in NW
section of park/small scale spraying in SE priority section by wetland

Hudson Springs Park Pollinator Projects



Monarch/Bumblebee
Waystation and Pollinator
educational garden sponsored
by Friends of Hudson Parks.

Native plants are allowed to grow along the edge of Hudson Springs Park lake to increase pollinator resources and offer forage and protection to native aquatic bird species like green herons.



Allowance of Lake Edge Vegetation to
Remain Natural

Invasive Buckthorn and Honeysuckle removal 2022 at Hudson Springs Park by FOHP Conservation Committee/funded by HGC



Invasive Removal Project Hudson Springs Park by Davey Resource Group



Invasive honeysuckle bushes were stump cut and treated - fall 2022.

Hudson Garden Club Grant - Fall 2022

Serious challenges facing forest areas in Hudson Parks



Extensive storm damage opened up large areas of Hudson Springs Park to invasive species.



Beech trees make up 20-30% of Hudson park forests. Beech Leaf Disease will KILL most beech trees in the next 7 – 10 years, causing catastrophic loss of spring ephemerals.

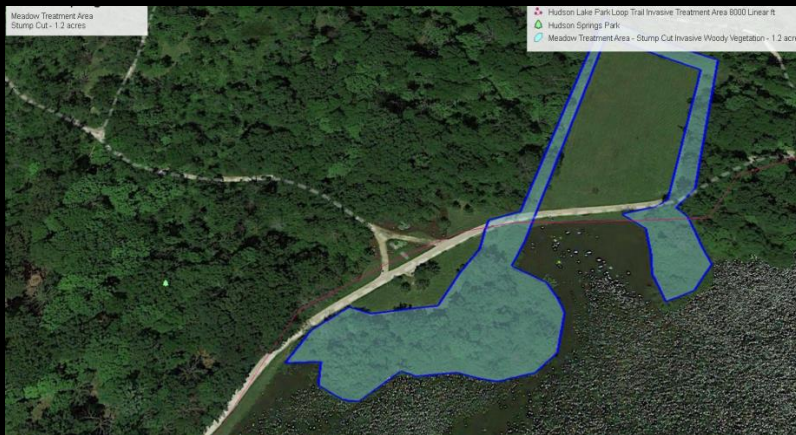
Native bushes and trees must be planted underneath the dying beech trees and in storm damaged areas in Hudson parks to protect the native understory plants.



Fast growing native trees and bushes will help preserve the native plants, like spring flowering ephemerals, that make up the understory in our forests. Devoid of shade, these ecosystems will overheat, dry out and disappear.

Invasive Removal Projects in Hudson Springs Park are planned for 2023 through funding from FOHP & HGC.

Davey Resource Group will backpack spray small invasive buckthorn and privet on both sides of big woods trail in 2023 with funding from Hudson Garden Club Grant.



Invasive Species Removal Project to be completed 2023 – with funding from Hudson Garden Club and Friends of Hudson Park

Second Meadow Project

Hudson Springs Park 2023

US Fish & Wildlife PLD Ohio, w/funding from Friends of Hudson Parks



Biological Management Plans need to be created (with priority projects identified and funded) for all Hudson parks to protect, restore and maintain biologically diverse natural areas.



Natural areas that are not part of the park system in Hudson should be assessed for invasive remediation/restoration.

Bee End

