

Handout # 1

Management Plan for Children's Duck Pond Park (1996)

	ISSUES	ALTERNATIVE #1.	ALTERNATIVE #2.	ALTERNATIVE #3.
1. Use of the park	Should the primary use be nature oriented, or should the park be developed with more traditional city park facilities, such as playgrounds and picnic tables?			
2. Water Levels	Should management objectives include regulation of the water level of the ponds, or should they be left as they are? If no management is used, the ponds will eventually silt over.	Make no efforts to alter the current water flow.	Build a dam at foot of main pond to hold more water. Build a dam to enlarge second pond.	Dig a well and install a pump in order to provide the ponds with an easily regulated flow of water. Dredge ponds of silt to deepen.
3. Flora	Should vegetation be managed to introduce and maintain indigenous species, and eliminate foreign species, or should the present system of simply mowing the area twice a year continue? This current method does not allow much species diversity.	Continue to mow the area twice a year to provide weed control and reduce fire danger.	Plant a small number of indigenous species on the borders of the ponds. Continue to mow the rest of park twice a year.	Eliminate all exotic species, and make extensive efforts to introduce species typical to a riparian habitat
4. Fauna	Should facilities be developed to protect species that utilize the area and to encourage other species to visit it? Currently little is done to accomplish this, and there is a perceived problem of wildlife disturbance.	Make no efforts to increase protection of the existing species or to introduce new species.	Create a small island in the center of the main pond as a nesting habitat.	Create a small island in the center of the main island as a nesting habitat, and install nesting boxes along the ponds.
5. Access	Should accessibility be increased by improving bridges and trails?	Make no efforts to change the present state of the trails. Build rudimentary foot bridges at the east end of the park over Pattee Creek, and near the south boundary of the park, spanning the gap between the main and secondary ponds.	Widen and level the trail around the main pond. Build bridges that are more accessible to cyclists at the east end of the park over Pattee Creek, and at the south boundary at both the head and foot of the main pond.	Widen and level the main trail around the pond, covering it with crushed gravel to make it handicapped accessible. Build bridges more easily accessible to cyclists on the east end of the park over Pattee Creek and at the south side at the head of the main pond. Build a handicapped accessible bridge over the span between the main pond and the secondary pond. Install a handicapped accessible ramp on the street curb in front of this bridge.
6. Education and Recreation	What types of facilities and/or organizations should be developed to enhance educational opportunities provided by the park?	Install one sign briefly describing the riparian habitat.	Install four signs along the trail around the main pond describing marsh habitat and different aspects of it, including aquatic vegetation, land vegetation, and wildlife.	Install eight signs around the park, with four describing the general habitat, and four giving more detailed information about selected species. Install two wooden benches along the trail around the main pond.
7. Enforcement of Objectives	Should the protection and maintenance of the park and natural areas be enforced primarily by regulation, or by education? This leads to the question of who should conduct the enforcement, the Missoula Department of Parks and Recreation, or other interest groups, such as schools, nature organization, or private citizens.	Make no efforts to change present rules or enforcement of them.	Install a sign stating the park's name and the standard Missoula Parks and Recreation rules. Organize a volunteer litter clean-up group.	Install a sign stating the name of the park and the standard Missoula Parks and Recreation rules. Install two trash receptacles and have hired personnel periodically patrol for litter. Build a four-foot high double beam wooden fence around the area, with two entrances on the south side of the park, and one each on the east and west ends. This will help delineate the area as a special resource, encouraging the public to treat it with respect
8. Safety	Should the safety of children and other users be managed by regulations, education, or physical barriers (around the ponds, for example)? It is possible that any development of the park will make it more of an attractive nuisance.	Make no efforts to change safety levels.	Make no efforts to change safety levels.	Make no efforts to change safety levels.
9. Encroachment	Should encroachment onto the park property by neighboring residents continued to be permitted. Currently several residents use park property for firewood and vehicle storage, and use park land for access to their properties.	Make no efforts to eliminate encroachment onto park lands.	Make no efforts to eliminate encroachment onto park lands.	Require all neighboring residents to remove any and all possessions from park land. Build the entranceways to the fence too small for vehicle entry.

CHILDREN'S FISH POND PARK
IMPROVEMENTS PROGRAM - ISSUES, GOALS & OBJECTIVES

[Note: The following is based on the original DRAFT of the Issues and Goals paper prepared by the Missoula Society of Landscape Architects in May 1996. It has been modified to reflect the most recent consensus of those in attendance at the meeting of 9/26/02, and is presented for review and comment by all interested parties.]

Overriding GOAL: The overall role of the Park is as a wildlife conservation area in an urban setting.

1. NEIGHBORHOOD CONSIDERATIONS

Provide for protection of the park and adjacent properties from:

- a. Flooding
- b. Trespassing (illegal use of the public park for private purposes)
- c. Visual degradation
- d. Noise pollution

Enhance neighborhood connections (pedestrian/bicycle)

Enhance and protect views and vistas from within and without the park

Establish the park boundary

2. PUBLIC SAFETY

Limit/eliminate physical hazards to humans

Provide accessible, safe access to park:

- a. Identify on-street, curbside parking areas
- b. Coordinate with a Sidewalk Master Plan
- c. Minimize and provide protection from water hazards
- d. Design trails, bridges, boardwalks, etc. with safety in mind

3. STORMWATER & WATER MANAGEMENT

Determine short-term and long-term goals of the Engineering Department regarding continued use of the Ponds as a conduit/storage facility for Pattee Creek, especially the impact on the ponds when being by-passed during Pattee Creek flood events, and the impact of the new storm flows from the SW Higgins drainage area.

Maximize flows through the existing pond network

Ensure ponds have continued water supply during low-flow periods

4. WILDLIFE HABITAT

Provide appropriate signage to curtail inappropriate feeding of the waterfowl

Provide food, nesting and shelter opportunities that offer protection from humans and other animals.

Maintain water levels during dry periods

Enhance vegetative diversity

Provide habitat opportunities for birds, mammals, amphibians, and reptiles in addition to waterfowl

Establish special park rules for pets

5. PASSIVE RECREATION/EDUCATION

Provide trails, bridges, boardwalks and benches for walking, relaxing, observing, etc. Provide interpretive information to the using public that focuses on wildlife habitat.

6. VEGETATIVE DIVERSITY

Identify/inventory existing vegetation

Identify sites/niches for desirable potential vegetation

Design a pond profile to support a wider variety of vegetation beneficial to targeted wildlife species

Introduce integrated pest management and select new plant species to minimize weed establishment

Consider aesthetics/views from within and from outside the park

7. MAINTENANCE

Target unwanted plants for removal/continued control; develop a site-appropriate weed control program

Minimize routine (weekly) mowing; provide an annual mowing/maintenance plan Provide trash receptacles at easily accessed designated locations

Design all user surfaces and structures for minimal maintenance.

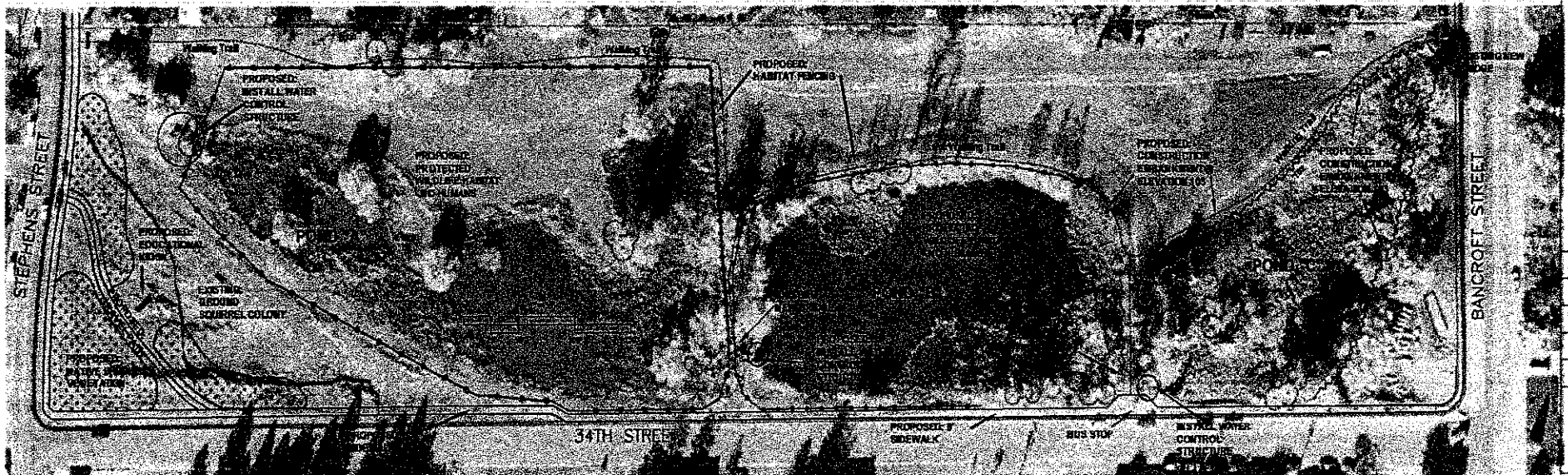
Design water control structures for minimal maintenance

(Edited and revised by Kent Watson, FASLA, landscape architect)

Children's Fish Pond Park Improvements Program: Issues, Goals and Objectives.

August 2004

Handout # 2





MISSOULA
 PARKS AND RECREATION
 DEPARTMENT
 101 UNIVERSITY AVENUE MISSOULA, MT

DATE: _____

SCALE: _____

PROJECT NUMBER: _____

DATE: _____

SCALE: _____

PROJECT NUMBER: _____

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OF 6 SHEETS

Children's Fish Pond
 Site Plan and Management Plan

Handout # 3

Habitat Enhancement Concepts for the Children's Fish Pond: Creating an Urban Nature Preserve (2007)

Erika Miersma & Susan Wall

We reviewed available information about Bancroft Pond, urban natural areas, and natural wetlands in Western Montana including literature, media, and local specialists. We used the gathered information to answer the following questions:

- 1) What is the relevant history of the pond and watershed that informs its potential as an urban nature preserve
- 2) What is the current state of the site, regarding the watershed, soil, vegetation, and wildlife?
- 3) How can each of the above natural features be restored and/or enhanced so as to create a more natural pond landscape and associated native community typical of western Montana?
- 4) What social and cultural views must be addressed? How can the project plan accommodate differing views and objectives?
- 5) How can educational and recreational uses be incorporated into the park?

We present the following targeted recommendations for goals and actions:

1. Site will support habitats capable of supporting the plant & animal communities associated with natural ponds/wetlands found in stream floodplains in western Montana (within the limits of its size; ie no large mammals) Through management, exotic species numbers will decline and no longer dominate the site; native species will come to dominate the site. Unnatural concentrations of native species (ducks, other) will decline to natural levels
2. Site will be used mainly for nature study and other educational and recreational uses that have minimal impact on natural features of the site
3. Watershed community becomes involved in caring for the creek and pond/wetland complex and makes long term commitment to this effort

To achieve the above goals, the following actions are recommended:

1. Rename pond/wetland complex the Bancroft Urban Nature Preserve or solicit names from the neighborhood residents
2. Use water stormwater control structures at Higgins Avenue to direct maximum amount of water into the ponds
3. Manage the pond for biodiversity (aquatic, wetland & riparian habitat)
4. Delay plantings and fish stocking until it is determined what water levels can be reliably maintained over the hydrologic year and from year to year; then plant/stock a variety of native species likely to succeed in the available habitat
5. Develop a trail and interpretive sign system
6. Create a Bancroft Urban Nature Preserve website with additional information about the preserve and resources for teachers
7. Establish a Pattee Creek/pond watershed group with stewardship & education responsibilities-meet twice a year to discuss whole watershed (once a year in Pattee Canyon picnic area and once a year in Bancroft Urban Nature Preserve)
8. Consider daylighting lower Pattee Creek again to reestablish water source for riparian habitat downstream of the ponds.
9. Eliminate year-round duck populations by inhibiting duck feeding and possibly trapping ducks that remain and releasing them elsewhere

Handout # 4

1996 + 2004 + 2016 Comments	
Attitude	
	City management of this area by parks and recreation. This is either a park or a place for recreation. It is a place to experience nature as it exists, to develop a healthy respect for all the plants and animals we share the space with. The document drafted in 1996 and reviewed in 2002 by the Missoula Society of landscape architects captures the essence of the area well. Let them take the lead.
	Don't want any "Park type development". We don't expect to find picnic tables when we go walk in the woods therefore they shouldn't be here.
	I want this to remain a habitat more than a park
	View the area as a community jewel – the only place where citizens can have interaction with an abundance of vegetation and wildlife in the heart of town.
	What about a community garden for all these apartments?
	There are many parks around this area. Please keep this the sanctuary it can be
	Parks and Rec seems to need to drive here. I don't understand. On the other hand an occasional bike cop riding advice single through might discourage some bad behavior
	keep it wild, good.
	This is an oasis right here in Missoula, Montana and is enjoyed by young and old alike
	Interference with the natural evolution of the park – let it lead where any human involvement needs to occur – should be minimal
	Protect wildlife
Neighborhood Considerations	
	a. Provide for protection of the park and adjacent properties from:
	• Flooding
	• trespassing (illegal use of the public park for private purposes)
	• visual degradation
	• noise pollution
	b. Enhance neighborhood connections (pedestrian / bicycle)
	c. Enhance and protect views and vistas from within and without the park
	d. Establish the park boundary
	Clean up litter
	Determine who owns water rights
Public safety	
	Limit /eliminate physical hazards to humans
	Provide accessible, safe access to park:
	• Identify on street, curbside parking areas
	• coordinate with sidewalk master plan
	• minimize and provide protection from water hazards
	• designed trails, bridges, boardwalks, etc. with safety in mind
	• Create access road
	Provide trails, bridges, boardwalks and benches for walking, relaxing, observing, etc. provide interpretive information to that using public that focuses on wildlife habitat
	Information kiosk for pond and nearby parks and Install interpretive signs
	Provide appropriate signage to curtail inappropriate feeding of the waterfowl
	Establish special park rules for pets (e.g., Keep dogs on leashes)
	More trash cans
Access (Bridges, trails, benches, viewing places)	
	No fencing
	No picnic tables
	Build playground equipment
	Build a covered picnic area
	Improve trail for safer walking and disabled people using the path – not asphalt
	Sitting area with shade
	Rock seating
	Bench at wooded pond
	Bench near small pond to view birds
	Another bench on Main Pond
	Viewing platform

Make trails more accessible to bicycles
Crosswalk on Bancroft [Sign for crossing on Bancroft: deer crossing sign]
Sign for crossing on Bancroft: deer crossing sign
Clean up dead tree branches
Storm water and water management
Determine short-term and long-term goals for the engineering department regarding continued use of the ponds as a conduit /storage facility for Patty Creek, especially the impact on the ponds of being bypassed during Patty Creek flood events, and the impact on the new storm flows from the Southwest Higgins drainage area.
Maximize flows through the existing pond network
Ensure ponds have continued water supply during low flow periods
Create an additional pond on the west end of the park
Keep riparian area at west end of park
Increase water flow in summer [Divert more water into pond]
Build dams to control water flow
Design water control structures for minimal maintenance
Environmental assessment for ideas such as dredging and damming
Water Levels
Control water flow to maintain level
Channelized to zigzag (for slow streamflow)
Design a pond profile to support a wider variety of vegetation beneficial to targeted wildlife species
Dig at least one pond deeper
Pay attention to boards in dam.
Keep (part) as stream area
Improve secondary dam
Deepen main pond by dredging
Maintain water levels during dry periods
Wildlife Habitat, Vegetative Diversity, Flora, Fauna
Identify and inventory existing vegetation
Need inventory of resources: plants and animals
Identify sites and niches for desirable potential vegetation
Manage to maintain natural wetlands
Leave it as wild to encourage wildlife
Provide food, nesting and shelter opportunities that offer protection from humans and other animals.
Provide habitat opportunities for birds, mammals, amphibians, and reptiles in addition to waterfowl
enlarge island
Maintain or restore nesting platforms.
Refurbish nesting site
Better goose nesting in pond C [Add hay bale for Geese]
Build wood duck nests
Sandhills would help gopher boom
Habitat for blackbirds, geese, ducks – all other birds and species both plant and animal
Habitat for gophers (they keep migrating as development takes their homes, let them stay along pond A
I also would love to have more water for ducks. This is a duck pond
Insert basking logs
Love the blackbirds – first sign of spring in the cattails
Deer beds
Install a log or island in the main pond for ducks and turtles
Stock ponds with fish
Vegetative Diversity
Identify /inventory existing vegetation
Identify sites niches for desirable potential vegetation
Enhanced vegetative diversity
More Native grasses and wildflowers and shrubs
More Native riparian vegetation stream area
Monitor condition of wetlands
Develop a site appropriate weed control program
Target unwanted plants for removal and continued control;
Get rid of invasive species – use natives
Shrubs and a few trees
Design a pond profile to support a wider variety of vegetation beneficial to targeted wildlife species
Introduce integrated pest management and select new plant species to minimize weed establishment

Consider aesthetics /views from within and outside the park
Manage brush and grass to be aesthetically pleasing
Reduce algae in ponds
Introduce integrated pest management select new plant species to minimize weed establishment – okay
Remove dead trees
Reduce cattails & Bushes along road
Leave the area along ponds as grassland – the geese graze there all summer
encourage Wetland shrubs
On Northwestern section: trees and bushes
Natural development i.e. trees fall, leaving place, underbrush along pond C
Native flowering plants such as fire weed would be a nice addition to the Goldenrod that already grows around the ponds and arrow leaf balsam route as well as Lupin would be a nice addition to the dry corner at Stevens and 34th St.
Introduce native species of flora
Introduce plants to increase food supply of ducks
Education and Recreation
An informational map of the area and nearby parks
More signage throughout with explanations about the different species and habitat.
Signs: don't feed the animals
Sign: don't feed the birds
Signage by pond: no motorized craft. Stay out of water. Last year college kids with RC boats were hazing geese during nesting wouldn't stop. Boat battery died. They waited in to get it while I called 911.
Start educational programs with schools
It would be great to have some guided birding walks on occasion through the duck pond.
Maintenance
Design all user services and structures for minimal maintenance
Do the minimum management – let nature do the work
Design all user services and structures for minimal maintenance
Design water control structures for minimum maintenance
Keep maintenance costs low
Continue mowing grasses
Thanks for stopping mowing, This is a native park.
Minimize routine (weekly) mowing; provide an annual mowing/management plan; provide trash receptacles at easily accessed designated locations
Clean up scum
Don't tear out the trees and plants unless trees and plants are dead and (then) replace them
Please stop removing habitat
Create natural protective barrier around ponds
Leave trails in present condition
Keep development to a minimum
Provide trash receptacles at easily access designated locations – okay,
Control weeds
Could a Jack fence help protect habitat? Keep people off the ice?
Leave as is
Enforcement of Objectives
We need less regs not more
(use) Rocks to control (vehicle) entry
Access points off Bancroft, and two off 34th – all accessible
Encroachment (Use by adjacent landowners)