

4.0 IMPLEMENTATION



4.1 MASTER PLAN PHASING & CONSTRUCTION COSTS



Environmental education is a high priority (BCPF)



The Greenway is full of exciting discoveries and learning opportunities

For implementation of the master plan, recommendations have been prioritized into (1) action items for the near future and (2) activities that should be undertaken at a later date as resources and circumstances permit. In addition to the items below, an annual discussion should be established between the BCPF and City departments in order to manage work schedules and plan for capital expenditures as they relate to the Greenway.

Near Future Action Items: 0-5 Years

The primary objectives of the first phase of plan implementation are to (1) address issues facing the Greenway that are causing habitat degradation, (2) establish wayfinding signage and rules for proper trail use, and (3) increase public awareness and stewardship. Based on these objectives, the following are high priority activities that should be undertaken in the near future. The BCPF will lead the effort to implement these recommendations.

- Education and Outreach
 - Continue sponsoring Earth Day and volunteer events
 - Initiate the Adopt-a-Trail program by working with groups such as Boy Scouts, school classes, and neighborhood organizations
 - Establish the Greenway as part of the Great Wisconsin Birding and Nature Trail
 - Work with the Einstein Project and local schools to develop curricula for environmental education
 - Coordinate the creation of a outdoor environmental discovery zone with the new Middle/High School
 - Sponsor ecological research with UW-Green Bay and the Cofrin Center for Biodiversity
- Greenway Access and Trailhead Facilities
 - Construct informational kiosks and bike racks (as necessary) at Danz Park, Triangle Hill Park, Christa McAuliffe Park, and the existing parking lots on Baird Creek and Superior Road
 - Add proposed tertiary trailheads on Sage Drive, Laverne Drive, McKenzie Lane, and Whittier Drive
 - Erect tertiary trailhead signage at existing pedestrian entrances

- Designate outdoor classrooms at Danz Avenue, Christa McAuliffe Park, and Baird Elementary School with benches and signage
- Trails
 - Construct the multi-use trail from Danz Avenue to I-43
 - Evaluate individual trails with BCPF, WORBA, and City staff to develop actions for stabilization, closures, and reroutes
 - Install directional signage at trail intersections
 - Construct hazard signage for stream crossings, sensitive areas, steep slopes, etc.
 - Add trail signage to link the Greenway to Bay Beach Wildlife Sanctuary and UW-Green Bay
- Habitat Restoration and Management
 - Continue current invasive species removal efforts
 - Begin high priority restoration efforts, including cedar and hemlock regeneration, oak savanna restoration, and sedge meadow restoration
 - Establish ecological demonstration sites with interpretive signage
 - Advance garbage removal efforts
- Stormwater Management and Stream Stabilization
 - Promote stormwater strategies that treat runoff at its source
 - Continue efforts to engineer solutions at severe tributary erosion sites
- Interfacing with Adjacent Development
 - Maintain setbacks from ridgelines
 - Provide Greenway access points from new subdivisions
 - Amend City ordinance to include spacing of pedestrian access points
 - Promote LID and conservation-by-design subdivisions
- Education and Outreach
 - Repeat the BioBlitz, expanding the area surveyed to include new locations
- Greenway Access and Trailhead Facilities
 - Construct remainder of trailheads with informational kiosks, bike racks, or signage to coincide with proposed future park development and subdivision construction
 - Add kiosks and bike racks at designated locations along multi-use trail at time of trail construction
 - Construct parking lot on top of bluff on Superior Road
 - Develop restroom facilities at Danz Park
- Trails
 - Extend the multi-use trail to Huron Road and beyond
 - Make improvements to Danz Avenue to facilitate a bicycle route to Bay Beach Wildlife Sanctuary
 - Install trail markers to inform users of trail names, distances, and difficulties
 - Construct interpretive signage along trails
 - Add benches along trails
- Habitat Restoration and Management
 - Expand invasive species removal efforts to include crown vetch, purple loosestrife, reed canary grass, and black locust
 - Expand restoration program to include low-priority efforts with young disturbed woodlands, degraded wetlands, and open/shrub invaded old fields
- Stormwater Management and Stream Stabilization
 - Assist watershed residents in rain garden construction
 - Create a watershed overlay or stream awareness district for Baird Creek
 - Focus on public education activities (page 67)

Long-Term Action Items: Greater than 5 Years

The following long-term action items for the Greenway are recommended for implementation after initial high priority initiatives have been addressed.

Implementation of High Priority Master Plan Activities

The following table establishes a timeline for immediate implementation of high priority, near future action items to be pursued by the BCPF. These priorities will need to be incorporated into the City and Park Department priorities as funding becomes available, based on the discretion of the Park Committee and City Council.

Action Item	Groups Involved	Scheduled Date
<i>Trails:</i>		
1. Field evaluation of individual trails to prioritize repairs and closures	BCPF, WORBA, City Staff	March 2007
2. Trail adjustment and repair work	BCPF, WORBA	April - November 2007
3. Planning, design, and placement of trail signage	BCPF, WORBA, City Staff	2008
<i>Stormwater Management and Stream Stabilization:</i>		
1. Remediate erosion problems on the north facing slope west of Christa McAuliffe Park	BCPF, City Staff	2007
2. Remediate erosion problems on Twin Pines Court, east of Christa McAuliffe Park	BCPF, City Staff	2007
3. Remediate erosion problems downstream of Sitka Road on the tributary flowing through Christa McAuliffe Park	BCPF, City Staff	2008
<i>Habitat Restoration and Management - Clean-up Efforts:</i>		
1. Removal of remaining refuse in 'Garbage Gulch'	BCPF	Earth Fest 2007
2. Removal of materials at refuse site west of I-43	BCPF	2008
3. Removal of materials at refuse site on school property near Grandview Road	BCPF	2008
<i>Habitat Restoration and Management - Plant Community Restoration:</i>		
1. Construct boardwalk at demonstration site identified east of Superior Road on south side of Baird Creek.	BCPF	2007
2. Plan and restore habitat in 'Garbage Gulch'	BCPF	2008
3. Plan and implement sedge meadow restoration east of I-43	BCPF	2008

Estimate of Probable Construction Costs for Facilities

To assist in developing facility improvement projects for the Greenway, estimated construction costs are provided in the table at left for individual elements recommended by the master plan. As projects are scheduled, such as constructing an informational kiosk and bike rack at a trailhead, these figures will provide a general idea of what costs may be anticipated during the initial planning stages. This opinion of probable construction costs is limited to structural or built improvements only, and is based on a conceptual level of design detail. The accuracy of the estimate will be improved during the schematic design of each plan element. All costs are given in 2006 dollars, and can be anticipated to increase at approximately 3 to 5% annually. Costs include installation, assuming all design and construction would be performed by hired contractors. Using volunteer labor or other partnering opportunities identified in this document would substantially reduce project costs, and may be considered by funding agencies as in-kind match for grant money.

Opinion of Probable Construction Costs for Individual Master Plan Elements

Trail Surfacing

Asphalt multi-use trail, 10-foot width with 6" aggregate base, 3" asphalt surface	\$25 per lineal foot
Boardwalk, timber frame construction	\$25 per square foot

Signage

Informational kiosk	\$1,750-2,000 each
Tertiary trailhead map	\$600 each
Directional sign at trail intersection	\$600 each
Trail marker	\$300 each
Hazard sign	\$500 each
Interpretive sign	\$1,250-1,500 each

Trail Amenities

Bench, 4-foot length (purchased)	\$750 each
Bike rack	\$500 each

Parking Lot Surfacing Options

Asphalt, 8" aggregate base, 4" asphalt surface	\$22 per square yard
Gravel, 10" depth	\$10 per square yard
Porous Asphalt, 8" aggregate base, 4" asphalt surface	\$24 per square yard

4.2 FUTURE ACQUISITION OPTIONS



The master plan strategically preserves habitat for Greenway residents



Through prior public-private partnership efforts, high quality forests in the Greenway were acquired for public use (BCPF)

The master plan identifies several designated and proposed acquisition areas for future Greenway expansion. Several options exist for structuring the acquisition that will maximize financial resources, which can be then be combined with various grant programs discussed in Section 4.3 to stretch local dollars.

The first alternative for land acquisition is to purchase the land outright using public or private dollars. An option for this method is the bargain sale, where a nonprofit organization negotiates to buy the land at less than fair market value. The difference in price may qualify as a charitable contribution for the seller, which reduces capital gains tax and potentially benefits both the seller and buyer.

A conservation easement is the permanent transfer of development and land use rights recorded on a property's real estate title, which typically costs less than purchase of the parcel (Allmann, 1996). Although conservation easements allow the property to be retained by the original owner, they may place limits on recreational uses, alterations of hydrology and vegetation, or the construction of structures, utilities, or impervious surfaces. These easements may be ideal for permanent protection of pedestrian access points, setbacks, or stormwater networks in subdivisions adjacent to the greenway, where developers wish to maintain lot sizes or neighborhood private open space. Benefits to the owner include a break on property taxes under Wisconsin State statute 70.32 and a potential charitable contribution deduction if the easement was donated (Meyer, 2001). The following strategies for use of conservation easements may be desirable for the BCPF to pursue:

1. Lands purchased by the BCPF for transfer to City or County ownership should be placed under a conservation easement before ownership is turned over. The BCPF then serves as the guardian for the property, monitoring to make sure conservation values are maintained or enhanced.
2. The BCPF should assist in the placement of easements on ecologically valuable areas of any parcel held by conservation-minded land owners within the watershed, prior to the sale of the property to a developer for subdivision.

The City's parkland dedication ordinance (14.04(8)(d)) should be used to the extent feasible to reduce costs for Greenway expansion. As part of the urban expansion and urban reserve districts of the City, developers within the watershed are required to dedicate land or pay a cash sum in lieu of dedication based on the density of the residential development. Any accepted fees should be targeted to purchase parcels deemed high priority acquisition areas.

Finally, property owners may donate land for the Greenway, which may be to their benefit by reducing tax burdens and creating a sense of stewardship and legacy. As with conservation easements, restrictions may be placed on the title for the use of the land. Many grants view the donated value of a property as a match for proposed improvements, such as trails or public access. An option for land donation is the reservation of life estate, which allows the former owners to live out their lives on the property, with the ownership transfer occurring on their passing (Allmann, 1996). This may be preferable to donation by bequest (will), as it allows the residents to claim a charitable contribution deduction less the value of their retained interest on income taxes immediately, as opposed to simply reducing the value of the property for estate proceedings.

Prioritizing Parcels for Acquisition

Property purchases should be prioritized based on (1) the quality of ecological communities present and (2) opportunities to provide a continuous greenway by filling gaps in public ownership. The following parcels meet these criteria for high priority status:

1. Basten Family Trust Land, parcels #21-32 and 21-47, located between I-43 and Huron Road.
2. High-quality upland woods and steep terrain on parcels #21-383 and 21-407, located east of Huron Road, south of Baird Creek.
3. Southern tributary flowing from Deckner Avenue to join Baird Creek near Danz Avenue, parcels #21-315-1 and 21-305-1.

4.3 FUNDING STRATEGY

The tables on the following four pages list funding sources that may potentially benefit Greenway projects, including everything from land acquisition and trail construction to habitat restoration and invasive species control. Funding sources can generally be classified into three categories:

- State of Wisconsin agency grants or loans
- Federal agency grants or loans
- Private corporation or non-profit organization grants or loans

Criteria for applicable projects, the grant matching requirement, and the application cycle are identified for each funding source. As competition for funding is high, communication with the sponsoring agency or organization prior to grant submission is essential to ensure a successful application. Several of the programs listed are for private landowners only. The BCPF could engage neighbors of the Greenway who are not interested in the outright sale or donation of their land to improve habitat on these adjacent properties by facilitating a grant application process.

Establishing an Endowment for the BCPF

In order to provide a predictable source of funding for implementing the master plan, the BCPF should consider establishing an endowment fund. An endowment is a financial reserve that is invested for long-term growth. While the principal of the fund remains untouched, the interest and earnings it generates can be used for specific projects or general expenses. The endowment could be established with current BCPF financial resources or with gifts from their membership designated for the fund. Donors may be especially interested in providing a lasting legacy that will continue to fund the protection and enhancement of Baird Creek long into the future.

Private Corporation Gifts

Private grants and gifts vary widely in both the types of projects that are funded as well as in the application processes and award types. Local businesses and corporations may be interested in investing in their community either by direct cash donation or by the sponsorship of special events or Greenway features. Corporate sponsorships often carry with them the expectation of recognition or advertising posted at the site.

Program Name	Administered By	Applies To	Matching Requirements	Application Cycle	Contact
American Greenway Grants	Eastman Kodak, The Conservation Fund, The National Geographic Society	Ecological assessments, surveying, design activities, developing brochures and interpretative displays, constructing public access, and performing restoration activities	Matching funds increase chance of award, Maximum grant of \$2500	Yearly (Next Application June 1, 2007)	American Greenways Program Coordinator 1655 N. Fort Myer Drive, Suite 1300 Arlington, VA 22209-2156 (703) 525-6300 greenways@conservationfund.org
Aquatic Invasive Species Control Grant	Wisconsin Department of Natural Resources	Public education or control efforts for aquatic invasive species in all water bodies of Wisconsin, including wetlands. Specifically lists purple loosestrife control as a project type.	50% Local Match, Maximum grant of \$75,000	Twice annually for education or established infestation control grants (February 1, August 1), rolling application for rapid response projects	Sue Kocken WI Department of Natural Resources PO Box 10448 Green Bay, WI 54307-0448 (920) 662-5487 kockes@dnr.state.wi.us
C.D. Besadny Conservation Grant	Natural Resources Foundation of Wisconsin	Local conservation projects including kiosks and interpretive signs, invasive species removal, BioBlitz sponsorship, boardwalk construction, prairie restoration, and other projects that benefit the public	50% Local Match, Grants of \$100 to \$1,000	Yearly (Next Application January 15, 2007)	Natural Resources Foundation of Wisconsin PO Box 2317 Madison, WI 53701-2317 (866) 264-4096 http://www.wisconservation.org/
Conservation Reserve Program	Farm Service Agency, NRCS	Habitat restoration on agricultural land	50% Match for Vegetation Establishment, Annual Payment Program	Rolling Application Process	Local FSA Service Center Brown County 3071C Voyager Drive Green Bay, WI 54311-8303 (920) 884-3910
EPA Environmental Education Grant Program	U.S. Environmental Protection Agency	Education enhancing the public's awareness, knowledge and skills concerning environmental quality	100% Grant	Rolling Application Process	Environmental Education Grant Program Office of Environmental Education 1200 Pennsylvania Avenue NW Washington, DC 20460 (202) 564-0451
Five-Star Restoration Matching Grants Program	National Fish and Wildlife Foundation	Community-based wetland and riparian habitat restoration projects that foster stewardship through education, outreach and training activities	50% Local Match	Yearly (Next Application March 2007)	Matthew Hurley National Fish and Wildlife Foundation 1120 Connecticut Ave., N.W., Suite 900 Washington, DC 20036 matthew.hurley@nfwf.org http://www.nfwf.org/programs/

Program Name	Administered By	Applies To	Matching Requirements	Application Cycle	Contact
Great Lakes Revolving Loan Fund	The Conservation Fund	Provides loans for purchasing land or conservation easements for ecologically significant sites in the Great Lakes basin threatened by development	Loan Collateral Required	Rolling Application Process	Mike Kelly, Great Lakes Field Representative The Conservation Fund PO Box 111 Auburn, MI 48611 (989) 662-6024 kellym@conservationfund.org
Knowles-Nelson Stewardship Program	Wisconsin Department of Natural Resources	Acquiring land and easements for conservation and recreation purposes, developing and improving recreational facilities, and restoring wildlife habitat	50% State 50% Local	Yearly (Next Application May 1, 2007)	Chris Halbur WI Department of Natural Resources PO Box 10448 Green Bay, WI 54307-0448 (920) 662-5121 halbuc@dnr.state.wi.us
Land and Water Conservation Fund (LWCF)	Wisconsin Department of Natural Resources	Federal appropriation program that applies to the planning, acquiring, and developing of State and local recreation areas	50% State 50% Local	Yearly (Next Application May 1, 2007)	Chris Halbur WI Department of Natural Resources PO Box 10448 Green Bay, WI 54307-0448 (920) 662-5121 halbuc@dnr.state.wi.us
Migratory Bird Conservancy	National Fish and Wildlife Foundation, Migratory Bird Conservancy	Acquisition, restoration, and improved management of priority bird habitats	50% Local Match	Yearly (Next Application April 2007)	Peter Stangel National Fish and Wildlife Foundation (404) 679-7099 peter.stangel@nfwf.org http://www.nfwf.org/programs/
Native Plant Conservation Initiative	National Fish and Wildlife Foundation, Plant Conservation Alliance	Restoration of native plant communities, conservation of native pollinators	50% Local Match	Twice Annually (Next Application August 25, 2006)	Ellen G. Gabel National Fish and Wildlife Foundation (202) 857-0166 ellen.gabel@nfwf.org http://www.nfwf.org/
NFWF General Matching Grants Program	National Fish and Wildlife Foundation	Projects that conserve fish, wildlife, plants, and the habitats on which they depend	Local Match 2x Grant Allowance	Yearly (Next Application April 2007)	National Fish and Wildlife Foundation Central Regional Office 1 Federal Drive Ft. Snelling, MN 55111 (612) 713-5173 http://www.nfwf.org/

Program Name	Administered By	Applies To	Matching Requirements	Application Cycle	Contact
North American Wetlands Conservation Fund	U.S. Fish & Wildlife Service	Wetland and upland habitat restoration projects that benefit migratory wetland bird species	50% Local Match	Yearly (Next Application December 2006)	Barbara Pardo Joint Venture Coordinator U.S. Fish and Wildlife Service One Federal Drive Fort Snelling, MN 55111-4056 barbara_pardo@fws.gov
Partners for Fish and Wildlife Habitat Restoration Program	U.S. Fish & Wildlife Service	Restoration on private lands of wetlands, grasslands and threatened and endangered species habitats	Goal is 50% match program-wide, Individual projects may require no match	Rolling Application Process	Jim Ruwaldt State Coordinator (608) 221-1206 Ext.14 http://www.fws.gov/midwest/WisconsinPartners/
Pulling Together Initiative	National Fish and Wildlife Foundation	Formation of local Weed Management Area (WMA) partnerships to control invasive species	50% Local Match	Yearly (Next Application October 2006)	Ellen Gabel National Fish and Wildlife Foundation (202) 857-0166 ellen.gabel@nfwf.org http://www.nfwf.org/
Recreational Trails Act	Wisconsin Department of Natural Resources	Funded by Federal gas excise taxes to develop and maintain recreational trails and trail-related facilities	20%-50% Local Match	Yearly (Next Application May 1, 2007)	Chris Halbur WI Department of Natural Resources PO Box 10448 Green Bay, WI 54307-0448 (920) 662-5121 halbuc@dnr.state.wi.us
Targeted Runoff Management (TRM) Grant Program	Wisconsin Department of Natural Resources	Design, land acquisition, and construction of BMPs, including cropland protection, detention ponds, livestock waste management practices, stream bank protection projects and wetland construction	35-50% Match	Yearly (Next Application April 2007)	Kathy Thompson 101 S. Webster St., P.O. Box 7921 Madison, WI 53715 (608) 267-7568 kathleen.thompson@dnr.state.wi.us
Transportation Enhancements Program (Part of the Federal Transportation Grant Program)	Wisconsin Department of Transportation	Providing facilities for pedestrians and bicycles, preserving historic sites, and archeological planning/research	80% State 20% Local	Biannual (Next Application April 2008)	Wisconsin Department of Transportation Central Office John Duffe (608) 264-8723

Program Name	Administered By	Applies To	Matching Requirements	Application Cycle	Contact
Urban Forestry Assistance Grants	Wisconsin Department of Natural Resources	Urban forestry plans, inventories, public awareness programs or materials, and tree planting, maintenance or removal	50% Local Match	Yearly (Next Intent to Apply July 1, 2007)	Tracy Salisbury 2984 Shawano Ave., P.O. Box 10448 Green Bay, WI 54307 (920) 662-5450 salist@dnr.state.wi.us
Urban Nonpoint Source Grant Program	Wisconsin Department of Natural Resources	Urban stormwater and water quality management planning; construction projects such as detention ponds, filtration and infiltration practices, streambank stabilization, and shoreline stabilization	35-50% Match	Yearly (Next Application April 2007)	Kathy Thompson 101 S. Webster St., P.O. Box 7921 Madison, WI 53715 (608) 267-7568 kathleen.thompson@dnr.state.wi.us
Wetland Reserve Program	U.S. Department of Agriculture Natural Resource Conservation Service (NRCS)	Wetland restoration on current agricultural lands	0-25% Local Match	Yearly (Next Application March 2007)	Patricia S. Leavenworth NRCS State Conservationist 8030 Excelsior Drive, Suite 200 Madison, WI 53717 (608) 662-4422 pat.leavenworth@wi.usda.gov
Wildlife Habitat Incentives Program	U.S. Department of Agriculture Natural Resource Conservation Service (NRCS)	Habitat restoration on agricultural land	Minimum 25% Local Match	Rolling Application Process	Local NRCS Service Center Brown County 3071C Voyager Drive Green Bay, WI 54311-8303 (920) 884-3910
Wisconsin Coastal Management Program	Wisconsin Department of Administration	Wetland restoration, public education about stormwater impacts to Great Lakes	50%-60% Local Match	Yearly (Next Application November 2007)	Department of Administration Wisconsin Coastal Management Program (608) 267-7982
Wisconsin Forest Landowner Grant Program	Wisconsin Department of Natural Resources, Bureau of Forestry	Private land tree planting, forest stand improvement, riparian and wetland improvement, and wildlife habitat enhancement	35-50% Match	Quarterly (February, May, August, November)	Shelley Wrzochalski 2984 Shawano Ave., P.O. Box 10448 Green Bay, WI 54307 (920) 662-5156 Michele.Wrzochalski@dnr.state.wi.us

4.4 PARTNERSHIP OPPORTUNITIES

The master plan process proved that many diverse groups and individuals are interested in preserving, protecting, and enhancing Baird Creek and the Greenway. By fostering relationships between the BCPF, City of Green Bay, Brown County, UW-Green Bay, WORBA, the Wisconsin Department of Natural Resources, and other agencies working in the watershed, groups will remain aware of each others efforts and be more effective at implementing projects that improve the health of the Greenway ecosystem. Stressing the cooperation between these groups will also increase the likelihood for Greenway projects to receive grants and other support from outside the community.

Coordinating Volunteer Efforts

Volunteers are essential to successful implementation of the master plan. Thanks to the organization provided by the BCPF and the combined efforts of many individuals, the restoration of the Greenway is off to a strong start. Volunteers have removed invasive species, assisted in garbage cleanup, and donated their time sharing ideas during the planning process. The energy and enthusiasm of these diligent workers needs to be recognized and sustained through future restoration activities.

Management and Maintenance of the Greenway

The BCPF and WORBA are committed to assisting the City with many of the management and maintenance activities necessary for facilitating safe public use of the Greenway. As suggested in Section 3.3, these groups can provide the City with volunteers to assess and repair the extensive trail network. A trail patrol could also be set up to ensure appropriate trail behavior, provide assistance for trail users, and monitor trail conditions. Establishing such a patrol would also help secure funding under the Recreational Trails Act grant program.

The BCPF should also continue to lead habitat management and restoration efforts. With minimal assistance from City staff, the BCPF can document areas of invasive species removal, prepare restoration strategies, and coordinate volunteers and/or contractors to perform field activities. Also, the BCPF is currently facilitating efforts to determine repair strategies for severely eroding tributaries, streambanks, and ravines as discussed in Section 3.5. This includes involvement with the City Department of Public Works, Brown County Land County Conservation Office, the WDNR, and the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP). Once appropriate techniques for stabilization are determined, these groups should discuss how best to manage the repairs to maximize limited financial budgets and draw upon volunteers and community resources.

To coordinate these activities, an annual meeting should be held between the BCPF and City departments in order to manage work schedules and plan for capital expenditures. These discussions will assist in prioritizing actions, and will ensure that both groups cooperate to provide the maximum benefit possible for enhancing the Greenway.

