

Back to the Root: An Urban River Revitalization Plan



Presented by the Root River Council and River Alliance of Wisconsin
July 2008

Table of Contents

Root River Council Members	3
Acknowledgments	4
Executive Summary	5
Introduction	7
Project Scope	8
Connecting People to the River	9
Listening to the Community	10
Root River Council's Recommendations	11
Create a Sense of Place	11
Stimulate Economic Growth	12
Allow Public Access and Interaction	15
Improve Water Quality	18
Implementation	19
Appendices	21
Appendix A: Survey and Discussion Questions	21
Appendix B: Survey Results	23
Appendix C: River Walk and Bike Path Recommendations	28
Appendix D: Belle Harbor Concept 6	29
Appendix E: Park Recommendations	31
Appendix F: Publications Reviewed	33
Figures	
Figure 1: Proposed Urban River Planning Boundary with Paths	6
Figure 2: Project Scope	8
Figure 3: Urban River Planning Boundary	11
Figure 4: Belle Harbor Concept 6	14
Figure 5: Proposed Root River Pathway Route	16

Root River Council Members

The members of the Root River Council provided hundreds of volunteer hours working on this effort. Thank you for caring so much about the future of the Root River and the City of Racine!

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Cover and page five: The image is a conceptual drawing of the river looking downstream from 6th Street. The renderings throughout the document were created by UW-Milwaukee Community Design Solutions student Anna Grosch.

Acknowledgments

Many people provided guidance and input for this plan. We greatly appreciate all of their thoughtful comments and time.

Several City of Racine Staff worked closely with us on this project. We are looking forward to continuing our partnership with the city as we move forward on the next phase of this plan.

City of Racine Staff

Rick Jones, Public Works

Julie Kinzelman, Health

Jim Luelloff, Development

Brian O'Connell, Development

Donnie Snow, Parks, Recreation and Cultural Services

Dan Williams and Cassie Goodwin from consulting firm JJR provided many conceptual images and waterfront development guidance for this plan.

A big thanks to River Alliance of Wisconsin interns Aubin Maynard and Amy Singler for their great work on this project.

UW-Milwaukee's Community Design Solutions (CDS) provided planning, facilitation and design support throughout this project. CDS is a program that gives graduate and undergraduate students real world planning experience. The main students involved in this project were:

Anna Grosch, Graphic Design

Larry Kilmer, Assistant Manager

Alison Kopyt, Project Manager



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CHARLES STEWART

MOTT FOUNDATION



Executive Summary

Back to the Root: An Urban River Revitalization Plan is intended to guide and inform the redevelopment and revitalization of the Root River in the City of Racine. The vision to create an identity for the river took shape over two years of public conversations with residents, stakeholders and the City staff. The plan brings together the best elements of existing plans and lays out a holistic vision for the future of the river that ensures water quality improvement and public access and brings beauty and functionality to the riverfront.

Four goals guided this planning process:

- 1) reorient the city to its river
- 2) prompt robust, innovative development and growth with a mix of residential, retail and recreational projects
- 3) champion redevelopment efforts that will improve and protect natural habitat and water quality of the river
- 4) promote the participation of citizens and good public process in decisions affecting redevelopment of the waterfront

Our recommendations for the Root River fall under four interconnected categories:

- Create a sense of place
- Stimulate economic growth
- Allow public access and interaction
- Improve water quality

Sense of Place Recommendation

- Define a unified urban river planning boundary highlighting the river's assets and creating an identity that connects people to the river

Economic Growth Recommendations

- Create continuous public access along the riverfront combining river walk, pathway and recreational access points
- Sustainably redevelop Belle Harbor Marina

Public Access and Interaction Recommendations

- Provide access points for public fishing, boating, and viewing the river
- Draw people to the river by placing signs directing them to recreational opportunities along the river
- Move the Mound Avenue section of the Root River Pathway off the street between 6th and Marquette Streets
- Improve the Water Street retaining wall by placing public art over the wall
- Connect the river walk to downtown by improving the 4th Street stairs and adding matching access on the Park Avenue side of the Water Street retaining wall

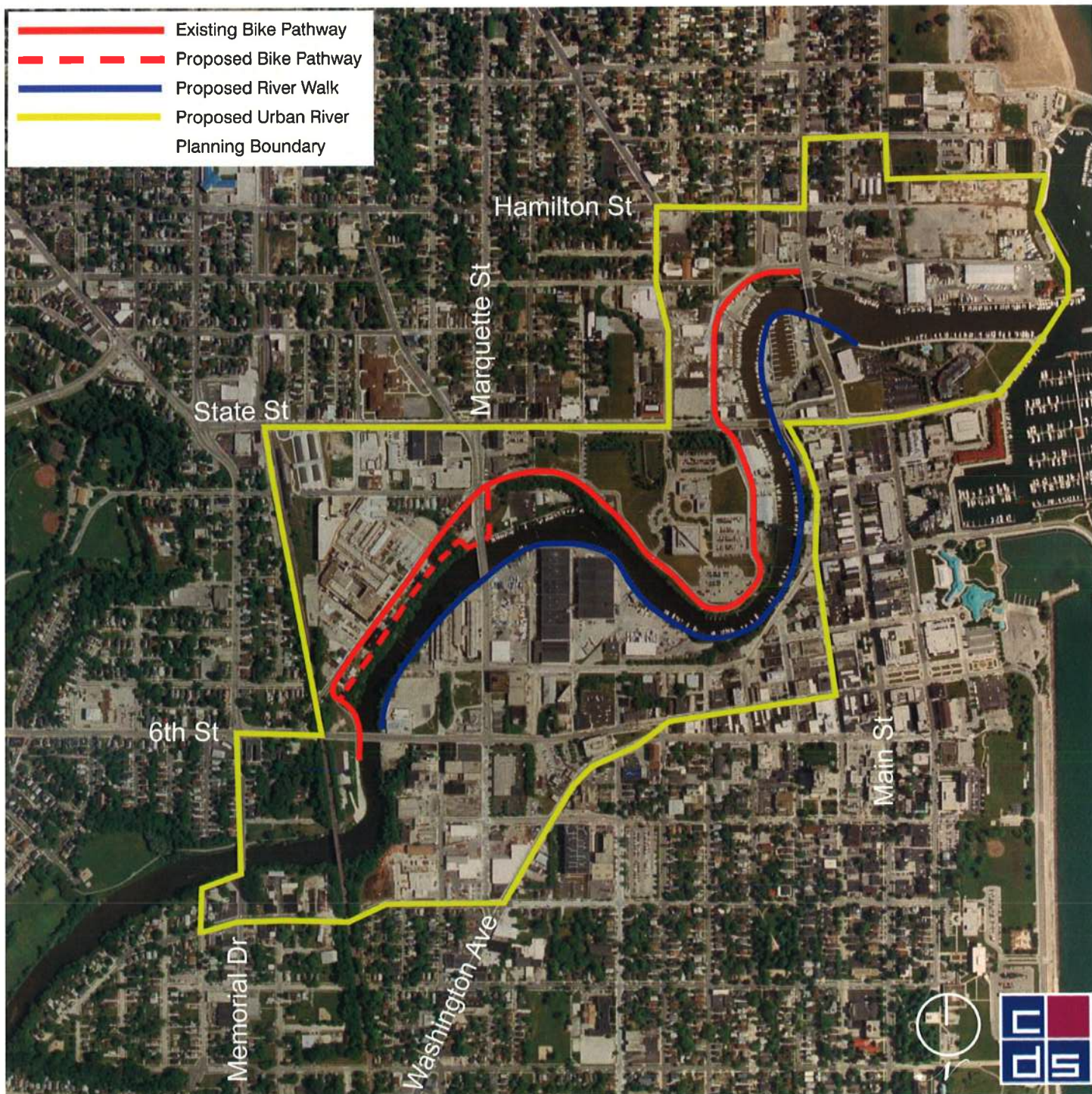
Water Quality Recommendations

- All new development within the urban planning boundary must incorporate best management practices to control stormwater runoff
- Maintain vegetative buffers along the river's edge in the river parks

The proposed urban river planning boundary, river walk and bike path are shown in Figure 1, on page six.



Figure 1: Proposed Urban River Planning Boundary, River Walk and Bike Path



Introduction

"We perceive the transformation of urban waterfronts in North America...playing a major role in ongoing efforts to restore the centers of our cities to economic and social health." Waterfronts: Cities Reclaim Their Edge (Breen and Digby, 1994).

Racine is a city in the midst of reinventing itself from a manufacturing center to a Great Lakes business, recreational and cultural destination. Perched on the shores of Lake Michigan and bisected by the Root River, much of the redevelopment and revitalization of the city has focused on the lakefront, but is increasingly moving to the riverfront. Increased focus is now being placed on another valuable resource in the City of Racine - the namesake Root River - and the potential to make it a key component in revitalization plans for the City of Racine.

The City has adopted several plans for the management and redevelopment of city areas that touch on portions of the Root River, including the 2005 Downtown Plan and Park and Open Space Plan. Close to 58% of the land along the Root River in the City of Racine is publicly owned. In 2004, the City completed the Root River Pathway, a bike path along the Root River in Racine, allowing for non-motorized access to the river's shore for over four miles, through both parks and urban areas.

There has been increasing interest in evaluating and improving the water quality of the river over the last several years. In 2005, the City commissioned an assessment of the erosion control problems associated with storm sewer outfalls and hydrological modifications along the Root River to guide future restoration and upgrading efforts. Southeast Wisconsin Regional Planning Commission (SEWRPC) has updated its Regional Water Quality Management Plan for the Root. The City of Racine Health Department has been monitoring select open water and storm water discharge pipes on the Root River for over twenty years. Future comprehensive water quality assessments will establish a baseline by which improvements may be gauged.

Yet for all the good planning, redevelopment, monitoring and restoration that is happening along parts of the river, no comprehensive plan exists that ties together all the separate valuable efforts to establish priorities for the Root River within the City of Racine, and to promote it as the asset and treasure it can be. And despite major improvements in the water quality of the river over the last 30 years (as evidenced by the big increase in salmon fishing in the river), many still perceive the Root River as "dirty, industrial, contaminated," in the words of one resident.



Top: Paddler traveling downstream toward DP Wigley
Bottom: West 6th Street Bridge

Several recent redevelopment plans include portions of the river within their boundaries, but there is a growing desire to address riverfront redevelopment in Racine more holistically. Since June 2006, engaged residents and organizations from Racine have been coming together to strategize how the Root River can be a key asset in the revitalization of the city.

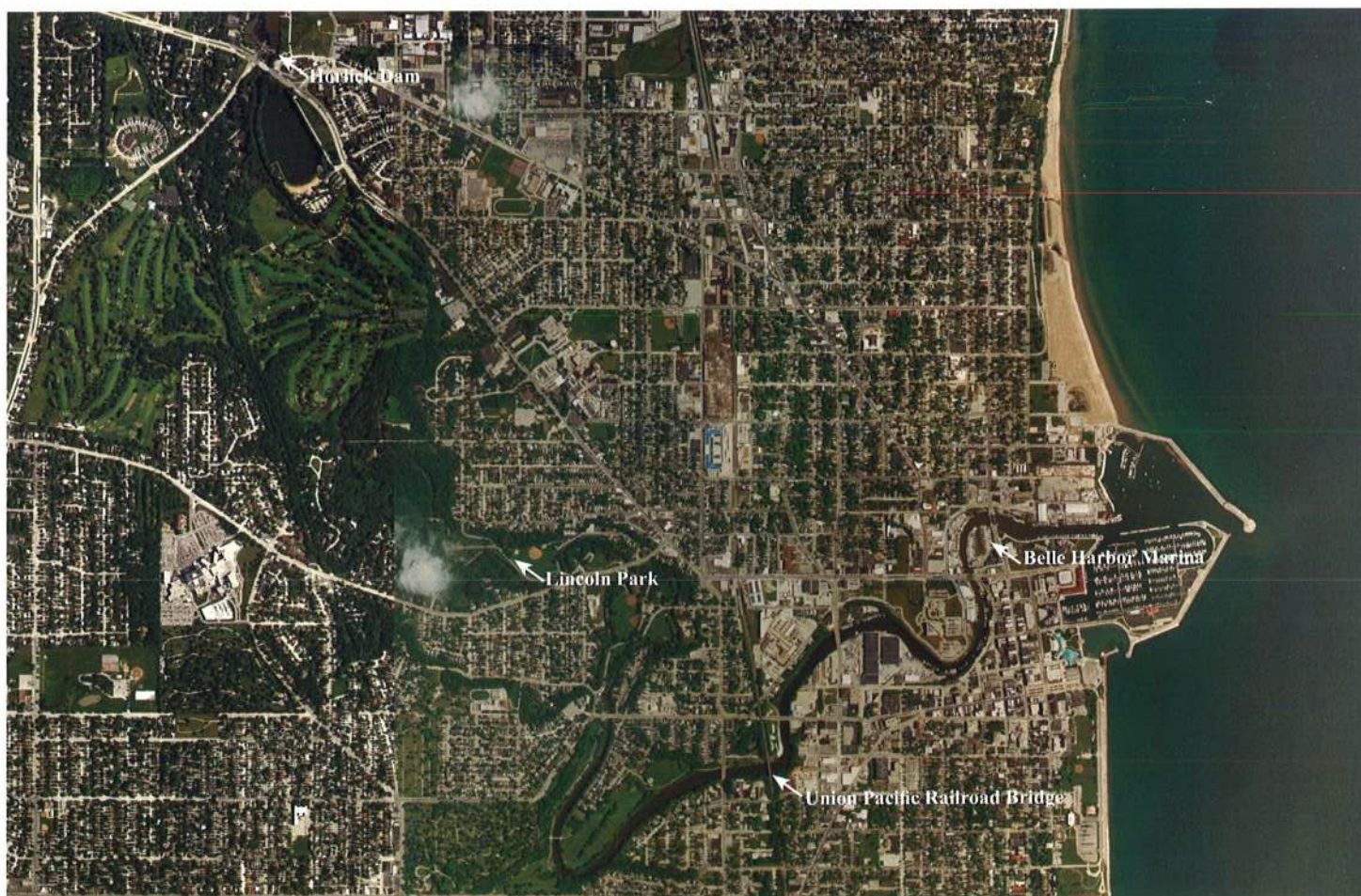
Over the course of several conversations, the group has identified the need for a comprehensive plan that will focus on the Root River specifically to: 1) reorient the city to its river; 2) prompt robust, innovative development and growth with a mix of residential, retail and recreational projects; 3) improve habitat and water quality along the river; and 4) promote the participation of citizens and good public process in decisions affecting redevelopment of the waterfront.

Project Scope

The geographic area covered in this plan is the urban Root River corridor from Horlick Dam to the mouth of the river at Lake Michigan, approximately five miles downstream, as shown in Figure 2 below.

The river's course has a natural evolution through the city meandering through nine city parks, two county parks and two golf courses and residential neighborhoods. At the Union Pacific Railroad bridge, the course changes, and its historic commercial and manufacturing character predominates. While the plan addresses the entire river scope, the majority of recommendations focus on the redevelopment potential in the lower reaches of the river.

Figure 2: Project Scope



Connecting People to the River

River communities have historically turned their backs on their hard-working rivers, and Racine, in its treatment of the Root River downtown, was no exception. The Root River Council made it a priority to help residents reconnect with the Root River in order to better understand it and to envision a new future for the river. In the last two years, several public events were organized to bring residents “back to the Root.”



Root River Environmental Education Community Center

REC will continue to have a key role in drawing positive attention to the Root River by providing educational and recreational programming and connecting the residents to the natural world in the neighborhood.



Top: Paddlers at Union Pacific Railroad bridge during the 2007 Running the Root
Middle: Cyclists learning about REC in August 2006
Bottom: REC ribbon cutting on May 3, 2008

- Running the Root, an annual canoe trip.
- A bike ride along the Root River Pathway from Colonial Park to North Beach. (This event, held in August of 2007 when the river was high, demonstrated the important function of the floodplain.)
- A community park walk from Island Park to Root River Environmental Education Community Center (REC) was led by Racine Parks Director Donnie Snow.
- A fall motor boat trip, made possible thanks to Captain Monte Osterman.
- A public forum at which City of Racine Microbiologist Dr. Julie Kinzelman presented the results of the City Health Department’s 2007 Root River study.
- The May 2008 grand opening of UW-Parkside’s REC which celebrated the Root River and provided an opportunity for public comments about this plan.
- A web site (www.backtotheroot.org) provided online access to information about events and resources about the Root River planning effort.

Citizen Comments

We would use the river more if the:
“Area around the river can be cleaned up”
“Water quality was increased”

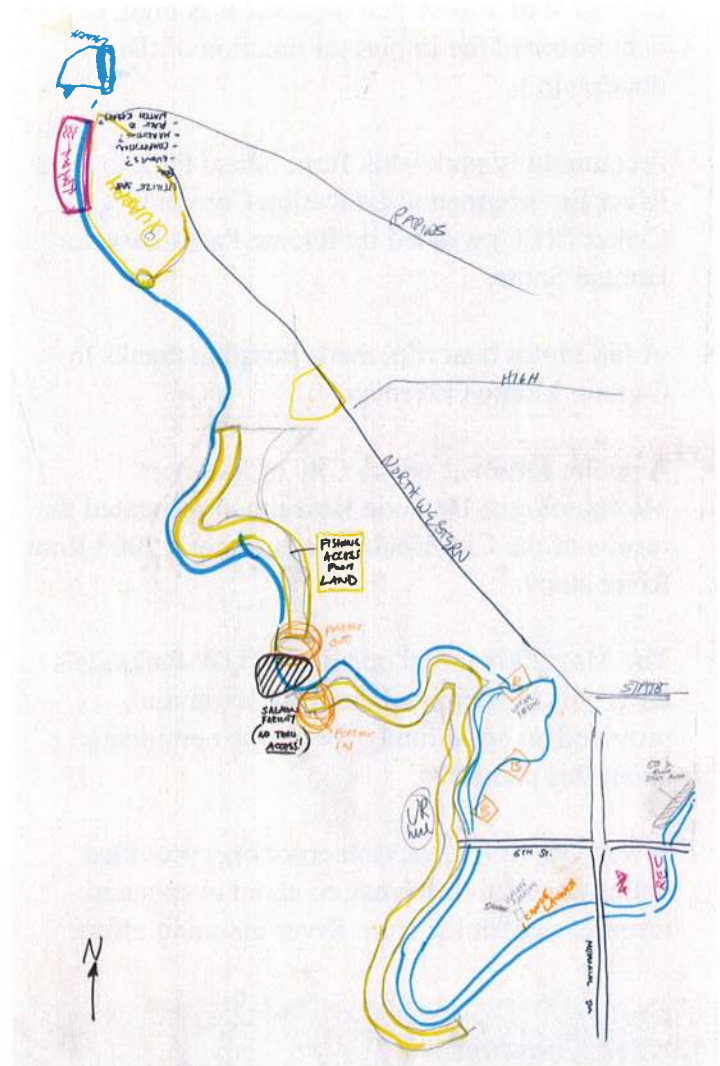
Listening to the Community

One of the central goals of the Root River planning process was to meaningfully engage residents in a public dialogue about the role of the Root River in a revitalized urban center. The Root River Council worked directly with many different stakeholders who have an interest in the river: neighborhood associations and churches, local businesses, developers, recreational, fishing and environmental groups, local schools, Root-Pike WIN, members of Common Council whose districts incorporate the Root River, and staff from the City Departments of Public Works, Parks, City Development and the Mayor's office.



Both one-on-one interviews and facilitated group meetings were used to get public input. Interviews were designed to determine how stakeholders perceive and use the river and what they believe is needed to make the river a more central resource for the city. The public visioning process for the Root River Plan was carried out as a group of three "Root River Conversations" held in the fall of 2007 and facilitated by UW-Milwaukee's Community Design Solutions. These working meetings were designed for small group discussions and visioning and allowed residents to learn about the current condition of the Root River and share their opinions about its future.

Additionally, the Root River Council distributed surveys to Racine area residents. The survey responses and meeting discussions shaped the recommendations in this plan. The list of the survey questions and responses are in Appendix A and B respectively.



Citizen Comments

We love the Root River because:

"It is a natural gem in an urban area"

"I love the calming effect of being near water"

"Each time I visit it is growing cleaner"

Top: Residents annotate a map of the Root River
Bottom: Citizens' sketches for Root River corridor redevelopment

Root River Council's Recommendations

From our interviews, surveys and conversations with citizens and stakeholders, the Root River Council makes these recommendations, which fall under four interconnected categories:

- **Create a sense of place**
- **Stimulate economic growth**
- **Allow public access and interaction**
- **Improve water quality**

Create a Sense of Place

The 2005 Downtown Plan created seven districts which it envisioned as “an assembly of distinct and varied districts that create a unified and coherent whole – a place where people will want to live, work, shop and play.” While several downtown districts touch on the riverfront, there is no unified river district that would help create an identity around the river, lay out consistent development guidelines and public access requirements, and generally help develop a sense of place tied to Racine’s namesake river. To unify the Root River corridor in the urban section we have created a river planning boundary (Figure 3 below and Figure 1 on page six). We will use this boundary as a guide as we further develop our recommendations.

Steps need to be taken to create a sense of place or identity within this boundary. This can begin with creating a logo and signs for the entire river corridor that highlight the character of both the park and urban sections of the river and unify the Root River within the city.

The Root River and the Racine community are fortunate that city officials had the vision to create so much park land along the river. (For example, Island Park is an urban gem created by renowned landscape designer Jens Jensen.) However, the park section abruptly ends at the Union Pacific Railroad bridge. As the urban river corridor redevelops, adding more green space will better connect these sections.

Figure 3: Urban River Planning Boundary



Sense of Place Recommendation

- Define a unified urban river planning boundary highlighting the river’s assets and creating an identity that connects people to the river

Stimulate Economic Growth

As stated in the 2005 Downtown Plan, “Development that authentically reflects Racine’s history of innovation and reconnects to its geographical features – Lake Michigan and the Root River – will reinforce its unique qualities.”

The river can be a destination and attract multiple uses such as housing, retail, restaurants, concerts, festivals, and recreation. All of these activities need an attractive setting with green spaces and good water quality.

While almost all of the recommendations in this report will make the river a more desirable place for people to be, two are key to catalyzing economic growth:

1) creating continuous public access along the riverfront combining river walk, pathway and recreational access points, and 2) sustainable redevelopment of the Belle Harbor Marina.

Many Wisconsin cities have revitalized their riverfronts. The photos on the right show examples of how Milwaukee and Waupaca have made their rivers an economic asset. From top to bottom:

- Public performance spaces, like this pavilion on the Milwaukee riverfront, provide an amenity for both pedestrians and river users.
- The Waupaca River is an asset to housing in Waupaca. The buildings are oriented to both the river and the street, and offer river views and easy access to the water.
- The Rock Bottom Brewery in Milwaukee is one of many businesses that lures customers looking for a table with a view.

Citizen Comments

The economic changes I'd like to see:
“Developed more with an overall plan, yet keep it as natural as possible”



Top: A musical gathering place on the Milwaukee River
Middle: Fishing access adjacent to riverfront housing
Bottom: Rock Bottom Brewery draws riverfront business

River Walk

“...Pedestrian-oriented high-density residential district oriented toward riverfront.” 2005 Downtown Plan

A river walk is an economic asset and amenity to new and existing development and a destination for recreation and entertainment. Most importantly, it is a public space. The river walk should be a focal point in the Downtown District.

A Racine river walk should be located along the river’s southeast edge from 6th Street to Main Street and then connect with the existing lakefront walkway, as shown on Figure 1, page six.

In its call for “pedestrian-oriented high-density residential district oriented toward the riverfront,” Racine’s 2005 Downtown Plan recognizes the benefit of a river walk to many other communities. Chicago, Cleveland, Detroit, Milwaukee, Oshkosh and Sheboygan have all incorporated a river walk with their riverfront redevelopment. While each of these communities is unique, they offer many lessons for Racine.

Approved zoning that clearly lays out the requirements and creates a level playing field for all development along the river walk is highly desired by developers. And better that those requirements are laid down before development starts. In some communities, riverfront zoning was adopted after development began, leading to problems, such as significant differences in elevation of the river walk from one property to the next. That, in turn, led to a neighboring development having to spend additional money to connect their river walk to the higher river walk section next door.

Natural vegetation needs to be included with the river walk design. Vegetation can filter runoff, provide habitat for birds and animals, offer shade, and generally provide a pleasing visual aspect. Plants suited for riverfront landscaping will accomplish these needs. The wider such vegetative buffers are, the greater their benefit.

Citizen Comments

The river walk should:

“When I look up from the water, I should see as few buildings as possible”

“Use the natural beauty to enhance the river”



Top: Conceptual image of the Detroit RiverWalk in Detroit, Michigan

Bottom: Conceptual image of the Oshkosh, Wisconsin Riverwalk. Images provided by JJR.

Belle Harbor Marina

The Racine Lakefront Plan Update from August 25, 2006, points out the many challenges for this site to continue to operate as a marina. These include siltation, excess marina space in this area, and the high cost of repairing the dock walls. The lakefront plan provides three suggestions for the future use of the property.

Our preference for this site aligns closer to Concept 6 (Figure 4 below and in Appendix D), which includes a riverfront park and public plaza. These uses fit with the Downtown Plan and this plan. However, Concept 6 also includes a housing tower. Since details have not been created for the concept, we are uncertain if the tower is a good fit for the site and the goals of this plan. We prefer see the entire space be park and open space, including a public non-motorized and motorized boat launch, with boat slips remaining along the outside wall.

We plan to work with the City of Racine, Racine County and the Downtown Racine Corporation to further develop the redesign of this location.



Above: Belle Harbor Marina June 2008

Economic Growth Recommendations

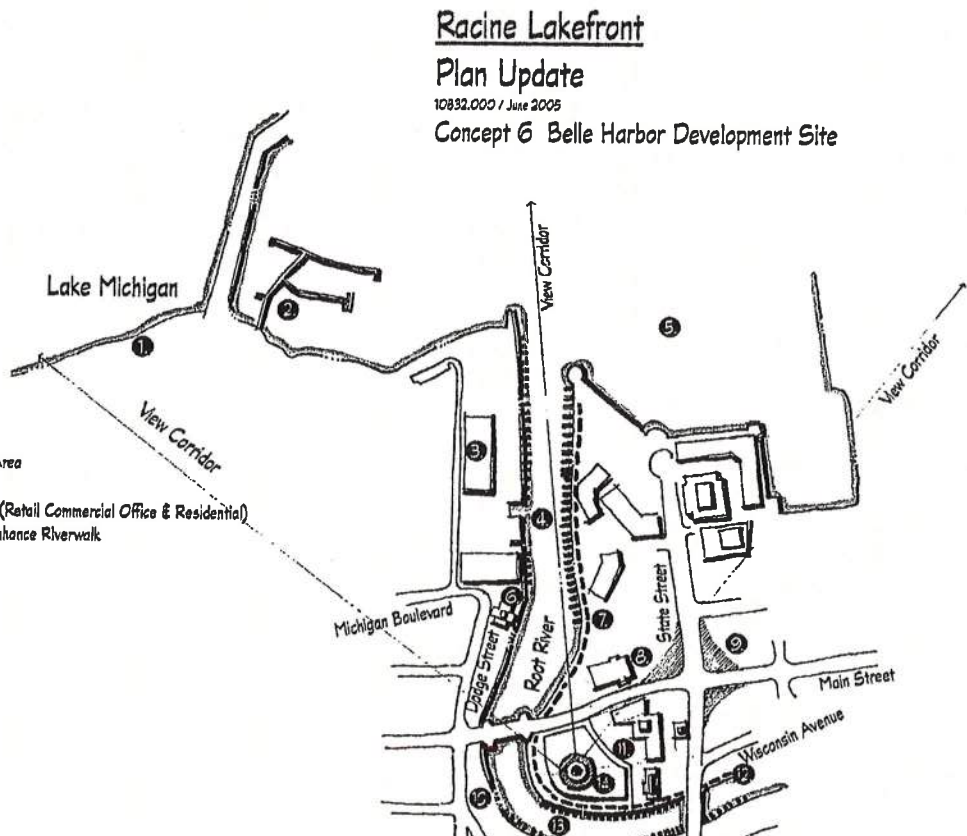
- Create continuous public access along the riverfront combining river walk, pathway and recreational access points
- Sustainably redevelop Belle Harbor Marina

Figure 4: Belle Harbor Concept 6

Key

1. North Beach
2. Racine Yacht Club
3. Pugh
4. Existing Slips
5. Reefpoint Marina
6. Chartroom
7. Riverwalk
8. Bank
9. Gaslight Points Anchor
10. Riverfront Park
11. Public Plaza
12. Riverwalk
13. Existing Slips
14. Belle Harbor Tower

- Abandon Belle Harbor, Reclaim Land Area
- Relocate Boat Haul-Out Facilities
- Construct Multi-Use High-Rise Tower (Retail Commercial Office & Residential)
- Create Adjoining Riverfront Park To Enhance Riverwalk
- Relocate Boat Storage
- Strengthen Gaslight Points Anchor



Allow Public Access and Interaction

"The navigable waters of Wisconsin shall be common highways and forever free..." Article IX, Section 1, Wisconsin State Constitution (the Public Trust Doctrine)

The Root River is a treasure that runs through the city and should be accessible by all residents. More opportunities for residents to safely reach and interact with the Root River are needed. Public access includes fishing, walking and cycling near the river's edge, boating and viewing the river from the shoreline.

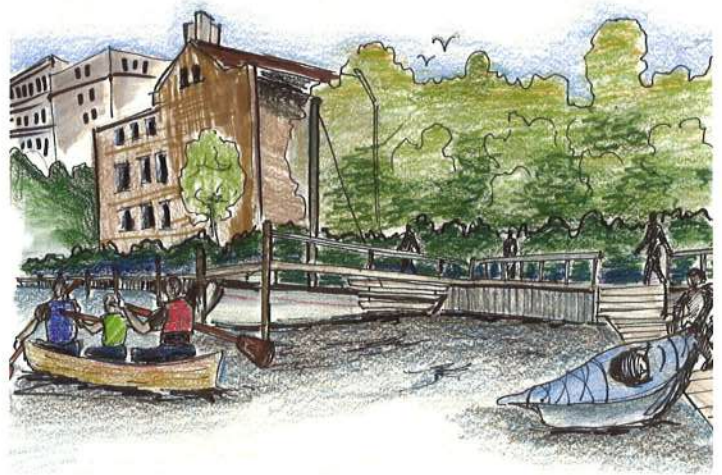
Among the chief recommendations to emerge from the public input sessions was the need to establish continuous public access along the riverfront. The river walk will provide walking, viewing and access to the river in the downtown area. It will be an amenity for residents of river apartments, condominiums and/or townhouses and for businesses such as cafés and restaurants. Public access does not eliminate or conflict with the current boating opportunities along the river. The conceptual images on the right demonstrate how boat slips and a public river walk can coexist.

The Root River Pathway is a great access point into the river parks. While the pathway is well marked, many of the city parks are in need of signs indicating that the Root River is accessible at the park. The signs, with a newly created logo, should be placed at major intersections near each of the river parks.

Access and view points should also be established in each park along the river for fishermen and non-motorized boaters. In general, non-motorized boat launches should be reasonably priced and require low maintenance for the city. Specific recommendations for each park are listed in Appendix E.

Citizen Comments

"Increase opportunities for all to experience the river"



Top : Conceptual image of paddlers and pedestrians using the Root River in downtown

Bottom: Conceptual image of the Oshkosh, Wisconsin Riverwalk. Image provided by JJR.

Bike Path Safety

During our August 2007 bike ride we received comments about improving the bike path from the cyclists that were echoed in our surveys and interviews. The users of the Root River Pathway want a safer route along Mound Avenue. Traffic on Mound Avenue moves quickly and without a designated bike lane, cyclists do not feel safe. Turning left onto the path against traffic from Mound Avenue is dangerous. The intersection at Mound Avenue, Marquette and Liberty Streets is confusing to out-of-town and local residents alike.

We want to see the route of the Root River Pathway amended to be off-street along Mound Avenue, as shown in Figure 5 below. Moving the bike path off of

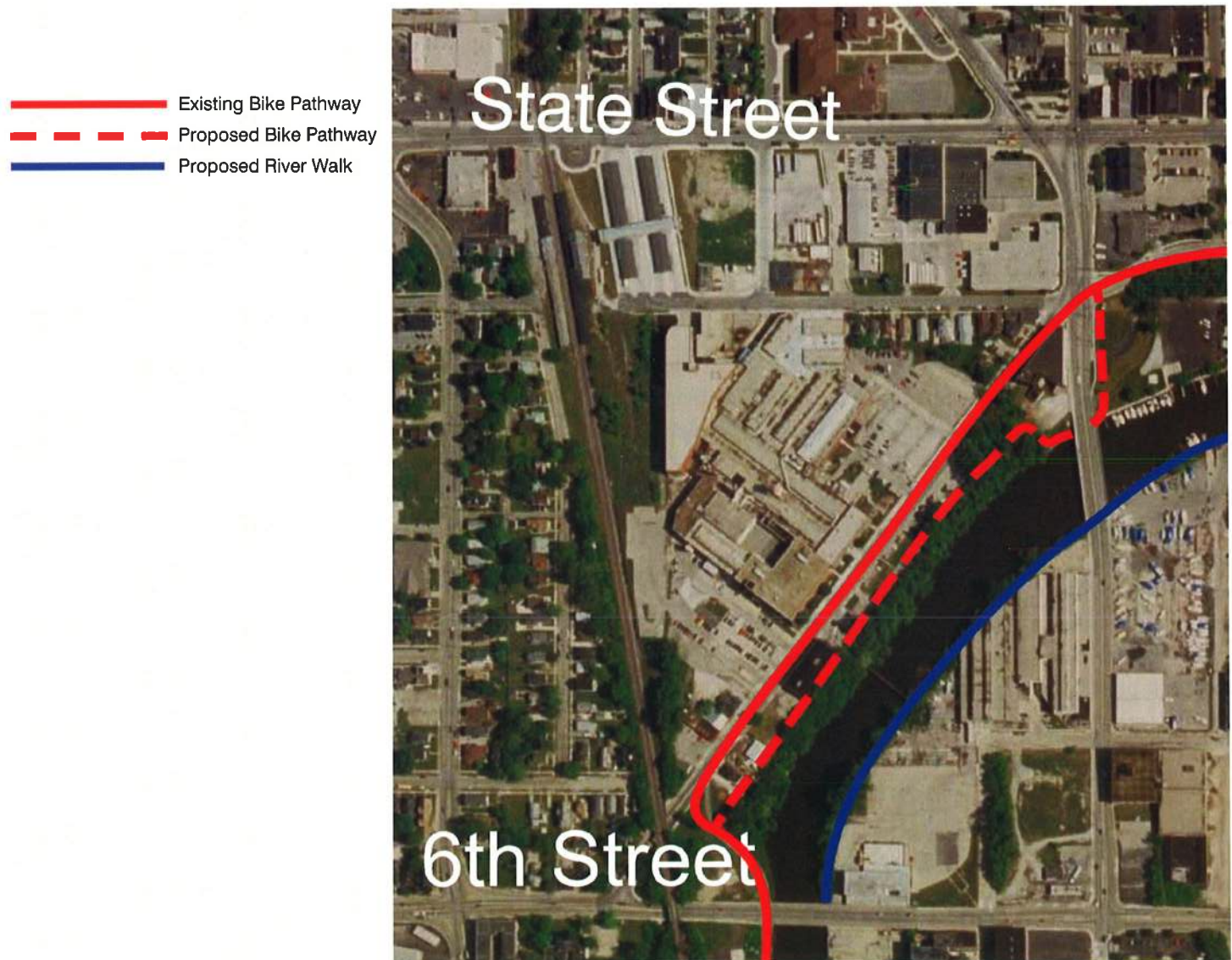
Citizen Comments

We would like to see the pathway:

“Continuous, safe, walking and riding path”
“Better crosswalks, more signs, and less bike path on streets”

the busy street will also keep this section of the river as green space. This is the last large area of green space in the urban area, and wildlife like the black-crowned night-heron, fox, and beaver are frequently found here. The existing and proposed bike path routes are shown below and details can be found in Appendix C.

Figure 5: Proposed Root River Pathway Route



Water Street Retaining Wall

Improving the appearance of the large steel retaining wall along Water Street will draw positive attention to the river. Of the many options, we prefer fabric murals because they can be mounted over the existing wall and changed periodically. Public art can be printed on the fabric murals, which could be made from parachutes or sail material. One citizen's suggestion was to use the fabric to create a movie screen and hold a special movie night on the river.

This project can also engage the community. Organizations such as the Racine Arts Council and local artists could help implement this idea.

The refurbished wall and the adjacent Sam Azarian Park should become a focal point that can connect the river with downtown. To create easier access between the river and downtown, the stairs at 4th Street need to be improved and matching pedestrian access needs to be added on the Park Avenue side of the wall.

Public Access and Interaction Recommendations

- Provide access points for public fishing, boating, and viewing the river
- Draw people to the river by placing signs directing them to recreational opportunities along the river
- Move the Mound Avenue section of the Root River Pathway off the street between 6th and Marquette Streets
- Improve the Water Street retaining wall by placing public art over the wall
- Connect the river walk to downtown by improving the 4th Street stairs and adding matching access on the Park Avenue side of the Water Street retaining wall



Image: Conceptual drawing of murals on the retaining wall Inset: Existing condition of the retaining wall

Improve Water Quality

“Address the health of downtown in a holistic manner, considering environmental quality and long-term benefits to downtown activity and vitality.” 2005 Downtown Plan

The number one improvement the public wants for the Root River is high water quality. Over the last 100 years this river worked hard and was treated poorly. We now have the opportunity to reverse these actions. Our economic activities should improve rather than degrade water quality.

In this urban setting, the main water quality issue to address is stormwater. Stormwater carries pollutants, such as bacteria, sediment, nutrients, and detergents as it runs over roofs, driveways, and streets. New developments are required to create and implement stormwater and erosion plans to reduce the stormwater leaving the site during and after construction. Techniques for reducing stormwater impacts include green roofs, rain gardens, rain harvesting devices (rain barrels or cisterns), and permeable pavements.

One technique to reduce the impacts of stormwater in the river parks is a vegetative buffer. A vegetative buffer absorbs rain water, reduces soil erosion, provides habitat for wildlife, and also deters geese. The City of Racine Parks Department already increased the vegetative buffer along the Root River by eliminating mowing of the grass along the river's edge. We applaud this effort. We understand that to some citizens a vegetative buffer is not visually appealing or limits access to the river. To address these issues we recommend maintenance of the buffers to remove weeds such as thistles and non-native plants such as buckthorn. We acknowledge that City Park staff may not have enough resources to provide the labor to accomplish this work. The city's Adopt-a-River program should work with the new Weed Out! Racine program to train volunteers to assist in the removal of nonnative plants and weeds. A public education effort should also take place to explain the benefits of the vegetative buffer.

Fortunately, several studies have been completed and are still being conducted by the City of Racine to determine the current water quality in the river.

In 2007 the health department prepared the report *Baseline Assessment of Root River Water Quality*. The results showed high E.Coli levels at several sites. Turbidity (murkiness) of the water was above average at all of the sites. Detergents were also detected frequently. The City of Racine Health Department will be continuing this study in 2008. Having long-term data about the health of the river will help prioritize ways to continue to improve the river's water quality.



Top: This vegetative buffer was installed in Island Park by Earth Tech
Bottom: Carthage College student Tristan Begotka collects water for testing from an outfall at Washington Park.
Photo provided by Dr. Julie Kinzelman

Water Quality Recommendations:

- All new development within the urban planning boundary must incorporate best management practices to control stormwater
- Maintain vegetative buffers along the river's edge in the river parks

Implementation

Creating a vision for the Root River is only the first step. Implementing the recommendations is a long-term effort and relies on several next steps:

- Adopt the plan
- Continue to involve city staff
- Pursue funding opportunities
- Pursue catalyst projects
- Continue to involve citizens

We will request that the Racine City Council and appropriate committees adopt this plan in concept.

Success relies on the continued close partnership with city staff. In the immediate future, we will jointly pursue funding from the Department of Commerce to further refine and carry out recommendations.

Funding is obviously a key requirement to implementing this plan. There are many federal and state programs that could support portions of the plan.

While it may take a number of years for the riverfront to redevelop, several projects can begin right away. These projects can become catalysts for the redevelopment of the Root River.

The projects best suited for city staff leadership are:

- Bike Path improvements along Mound Avenue
- Repair of stairs at 4th Street
- Belle Harbor redevelopment planning
- Root River identity creation (i.e. logo and sign design)
- Promotion of the plan to developers

The projects that citizens could organize around in the near future include:

- Retaining wall mural design and installation
- Vegetative buffer maintenance in parks
- Public education about buffers
- New boat launches in parks
- New benches and viewing places in parks

Participation of community groups will be key to realizing the revitalization of the Root River. Some of the key partners include:

- 21st Century School
- Adopt-a-River
- Downtown Racine Corporation
- Historic Sixth Street Association
- Hoy Audubon Society
- Kenosha Racine Bike Club
- Leadership Racine
- Racine Arts Council
- Root-Pike Watershed Initiative Network
- Root River Chapter of Wild Ones
- Root River Environmental Education Community Center
- Salmon Unlimited
- Southeast Gateway Group Sierra Club
- St. Catherine's High School Environmental Club
- UW-Parkside
- Walden III Environmental Club
- Weed Out! Racine

Appendices

Appendix A: Survey and Discussion Questions

Root River Survey-Fall 2007

Thank you for sharing your comments about the Root River!

1. What are your experiences with the Root River? Please mark all that apply.
 - Fishing
 - Biking
 - Walking
 - Boating, what type _____ (canoe, kayak, motor boat)
 - Bird watching
 - I live nearby the river
 - I work nearby the river
 - I own a business near the river
 - Other _____
2. What do you love about the Root River?
3. What changes would you like to see?
4. Later this fall we will be holding meetings to discuss the future of the Root River in the downtown and upstream park areas (Island and Colonial, etc.). Would you be interested in attending a meeting to share your concerns and help plan improvements for the Root River?
 - Yes
 - No

If yes, is a week night or Saturday better? Please check one.

- Weeknight
- Saturday morning
- Saturday afternoon

Which location would be most convenient for you to attend the meeting? Please check one.

- Downtown area
- West 6th Street area
- Lincoln Park area
- Location does not matter
- If no, may we ask why not?
- Too busy
- Not interested in meetings
- Other _____

Thank you for taking the time to complete this survey!

If you would like to be contacted about future Root River meetings please provide us your contact information on the page provided.

Survey and Discussion Questions Continued

November 2007

Root River Conversation Questions

Conversation 1: Accessibility / River Experience

- How can the root river be made easier to access?
- How can the Root River play a bigger role in your daily life?
- What activities are you most interested in participating in and along the river?
- What do you feel is restricting people's access to the river?
- Where are do you think new river access points could be added?
- How can existing access points be improved?

Conversation 2: Downtown District

- How should the river look and feel as it flows through the downtown area?
- What do you think should be the size and frequency of public access?
- What should the functions of the buildings be that are adjacent to river?
- Where should the entrances be located?
- What should the character of river walk be?

December 2007

Root River Conversations Questions

Parks

- What type of vegetation should be along the Root River in each of the parks?
- How much of the river bank vegetation should be cleared for access/view?
- Who should/could maintain the vegetation?
- Where should boat launches be placed between the Quarry and REC Center?

River Walk

- If there was a river walk along the downtown section of the river, where would it be placed?
- What activities would take place on or along a river walk?
- What infrastructure would need to be created to have those activities and where should they be placed?

Retaining Wall

Should this wall:

- Be Painted
- Have vegetation planted (vines, etc.) that would trail down the wall
- Be used a movie screen for public events
- Be removed and terraced with an amphitheater

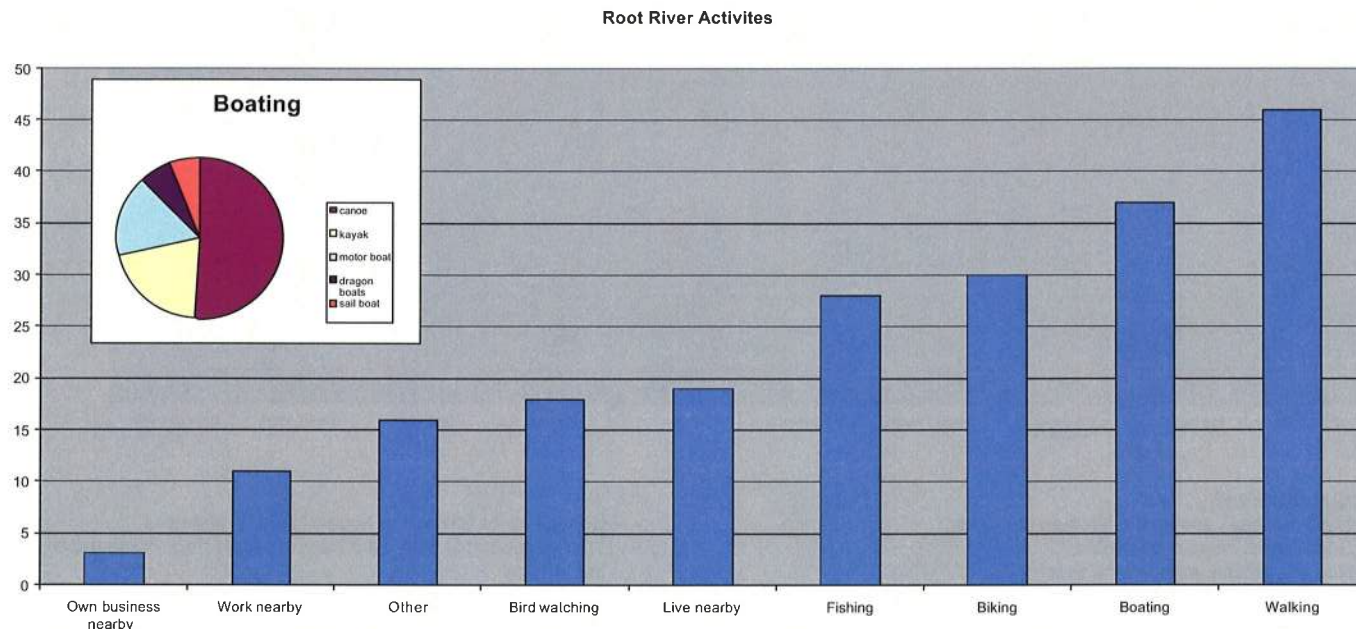
Downtown Connections

- Where should connections be made from the river to downtown and what type of connections should they be?

Appendix B: Survey Results

2007 Root River Survey Results
83 Respondents

Question One: What activities/experiences have you had in or along the river?



Notes from those that checked other or added a comment:

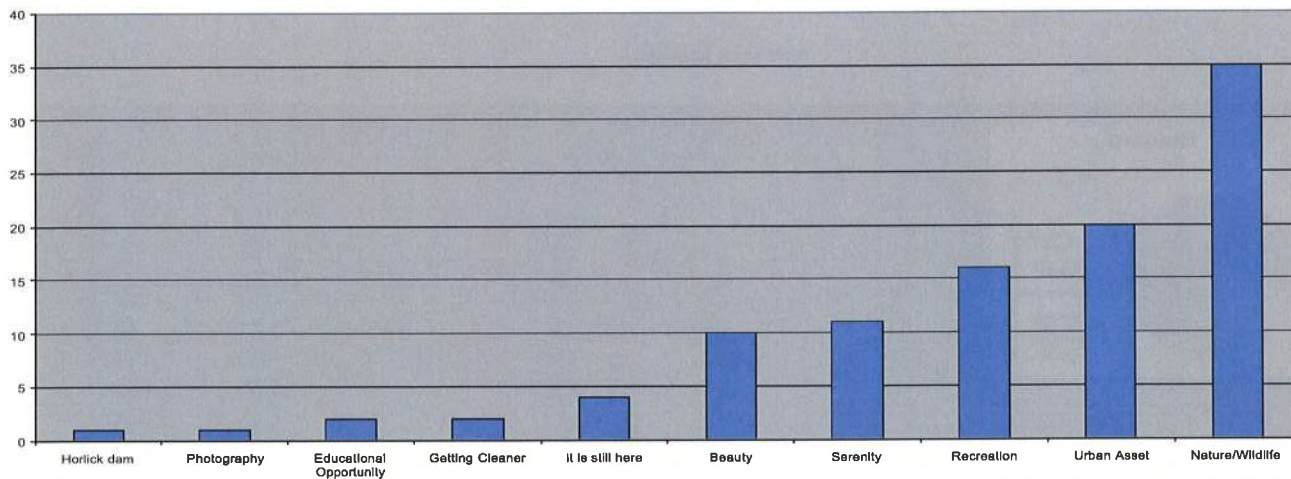
- Drive by the river
- Past member/President of Root River Restoration
- Grew up near the river
- Crab fishing as a kid, for bait
- Sitting by the river
- Former sail boat owner that docked on the river
- Friends that live on the river
- Kayak dog park to lake, canoe Hwy 31 to lake, sail boat, Azarian to lake
- Ice skating, X-country skiing, paintball on the ice
- Former Rotarian involved with dragon boats on the river

Survey Results Continued

2007 Root River Survey Results

Question Two: What do you love about the Root River?

What I love about the Root River



A sample of responses

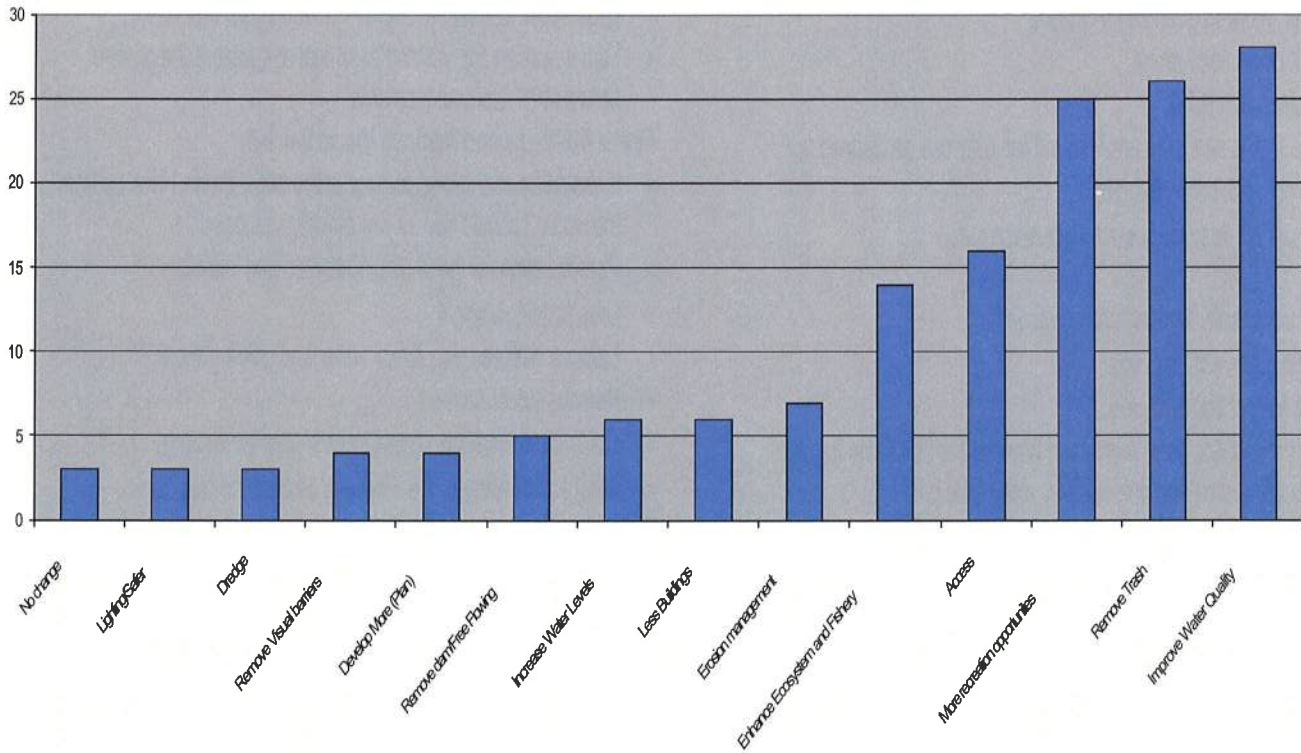
- The "wildness", seeing the birds and animals
- Gentle, wild, meanders, shallow
- I like the greenery around the river
- A natural resource that can be shared by everyone in a sustainable fashion
- It helps to identify our city.
- Natural resource, beauty to compliment the urban environment
- Oasis in the middle of the city
- Root River goes through heart of Racine
- It is a nearby recreation resource and wildlife refuge
- It is fun to boat on
- I love riding my bike along the bike path
- I like the opportunities it offers for various recreational activities as well as photographic opportunities.
- Parks and bike paths are a gem, close to home, safe place to bike to work-off of city streets
- Good place to fish and sit and watch birds and relax.
- The salmon trap. I have sent several people from Illinois to see it this spring
- Serenity, the sounds of the river flowing-peacefulness
- Beauty, the natural beauty
- The sound and the fact that it is here
- The quiet and the green space
- How each time I visit it is growing cleaner
- I love that it (the river) is still here
- That is it a river!
- It's history
- It runs throughout most of Racine-many opportunities for different schools to experience it.
- Living near water is important to me
- Racine Horlick Dam

Survey Results Continued

2007 Root River Survey Results

Question Three: How would you like to see the river changed?

Changes to the River



Survey Results Continued: A summary of all of the written comments by category.

Improve Water Quality and Remove Trash

- Anything that would make the water cleaner
- Improvement in water quality-most visible to me is turbidity, is this from runoff?
- Cleaned up, both of debris and water quality
- Cleaner, more frequented by citizens
- Keep it clean and natural
- Kept clean and public
- I would like to see if the area around the river can be cleaned up
- Clean up trash below the dam
- Clean up! No fertilizer flowing in, garbage out.

Recreation

- Continuous, safe, walking and riding path
- Walking paths with benches.
- Places to rent boats/kayaks.
- Better crosswalks, more signs, and fewer paths on streets for bike path, seating area and concessions along bike path
- More public outings, canoe hiking, biking paths
- Room for paddlers
- Canoe Rental Service
- Events along the river, concerts, fishing
- Increase opportunities for all to experience

Access

- Great access, i.e. walkways perhaps
- Add access, walkways, paths, etc.
- More accessible recreationally for more people
- More public access and use
- More entry places
- Non-motorized river access

Enhance Ecosystem and Fishery

- Remove invasive species, ask adopt-a river groups to help
- I would like to see more gardens and parks around it
- Restored to natural setting as much as possible
- Remove invasive species; reduce upstream storm water flow, by installing things like rain gardens
- Use the natural beauty to enhance it
- Continue to support Steelhead facility

Erosion Management

- Shoreline management to control erosion and protect natural setting and control runoff

- Buffering lands to protect/increase the water quality which will also provide increased opportunities for recreation.
- More aquatic plants, more buffering
- Help stop erosion around the river, pollution, increasing fish populations at least as long as it is healthy for the river
- I am a riparian nut, wishing to protect and restore the pristine nature of all rivers and streams

Fewer Buildings and Remove Visual Barriers

- It should be maintained as spot of the wilds. When I look up from the water, I should see as few buildings as possible.
- Remove some of the impinging homes and industry
- Less building along it
- Balance between vegetative buffer and viewing the river
- Remove visual barriers
- Continue to increase access to its shores for viewing
- What I don't want to see if condos all over the river banks.

Water Levels

- Return to its natural flow, protected from all types of pollution and not over used
- More water flowing in so as to be able to navigate it, that's up to nature I guess
- To be at proper level. Fallen trees removed
- Reporting on levels to plan trips down from Island Park
- Restore a more consistent water level and flow rate, which was lost with the wetlands buffering action (impossible dream)

Remove Dam

- I would like to see the dam taken out and to see the river more clear like it historically was.

Developed with a plan

- Developed more with overall plan yet keep it as natural as possible.
- Promoted.
- Restaurants with outdoor seating.
- It could be cleaner, developed more and promoted

Lighting/safer

- Safer
- Perhaps, lighting around the bridges

No Change

- No changes Not changed, no development that takes away from (the river)
- Seems fine as it is

Survey Results Continued

This chart summarizes the top comments made in written surveys and during three Root River Conversations in 2007

River Activities	Love About the River	Changes to the River	Restricting Use of the River	Connect River and Downtown	Parks
Walking/hiking	Nature/Wildlife	Improve water quality	Safety concerns (real and perceived)	River walk	Balance riparian vegetation and river views
Boating	Urban Asset	Remove trash	Access points	Access points, stairs, etc.	Pursue a new park at Belle Harbor
Biking	Recreation	More recreational opportunities and events	Water quality and cleanliness	Riverfront development guidelines	Fulfill Jens Jensen's design of Island Park
Fishing	Serenity/Beauty	Increase access, including ADA	Lack of water depth	Riverfront events and activities	More boat launches and better signage
Bird watching		Enhance ecosystem and fishery	Lack of signage	Image and amenities: Appearance, parking, restrooms	Access point to the river at Quarry Park
		Increase signage and safety		Improve retaining wall	Teach fishing at the steelhead facility and Horlick dam
				Water Street as a focal point	

Appendix C: River Walk and Bike Path Recommendations

River Walk Recommendations

The following are a few detailed recommendations related to the river walk.

- A river walk will be created on the south side of the river within the urban river planning boundary (Figure 1, on page six), from the 6th Street Bridge to the Main Street Bridge.
- The river walk should be no wider than 15 feet wide, meet all Americans with Disabilities Act requirements, and minimize impervious surfaces.
- The elevation of the river walk will be consistent from property to property. No stairs, ramps or change in elevation should be necessary to connect the river walk from one parcel to the next.
- Fully vegetated buffers should extend from the river inland of the river walk and natural vegetation should extend from the river walk to adjacent development.
- Sam's River Road will become multi-purpose with shared space for the river walk and vehicles.
- There will be at least one public non-motorized boat launch along the river walk.
- The requirement of a river walk with specific details will be placed in any future ordinance or policy related to the river walk to ensure uniformity.

Root River Pathway Recommendations

The following are a few detailed recommendations related to the Root River Pathway.

- The route of the Root River Pathway should be amended to become off-street along Mound Avenue.
- The newly routed bike path will turn right before Mound Avenue as you are heading east from 6th Street, and continue along the top of the slope, parallel to Mound Avenue, with a proper setback to avoid erosion. (This will require purchase of and/or easements from several properties). A former parking lot has left a flat surface that is an appropriate distance from the top of the slope.
- Have the newly routed path go under the Marquette Street Bridge. There is more than 10 feet of height under the bridge, which is adequate for an underpass.
- The path could be routed onto city sidewalk and connect to the existing path.
- In the future, the bike path could be extended along or near the river.



Above: Former parking lot that could be the location of the bike path along Mound Avenue

Appendix D: Belle Harbor Concept 6

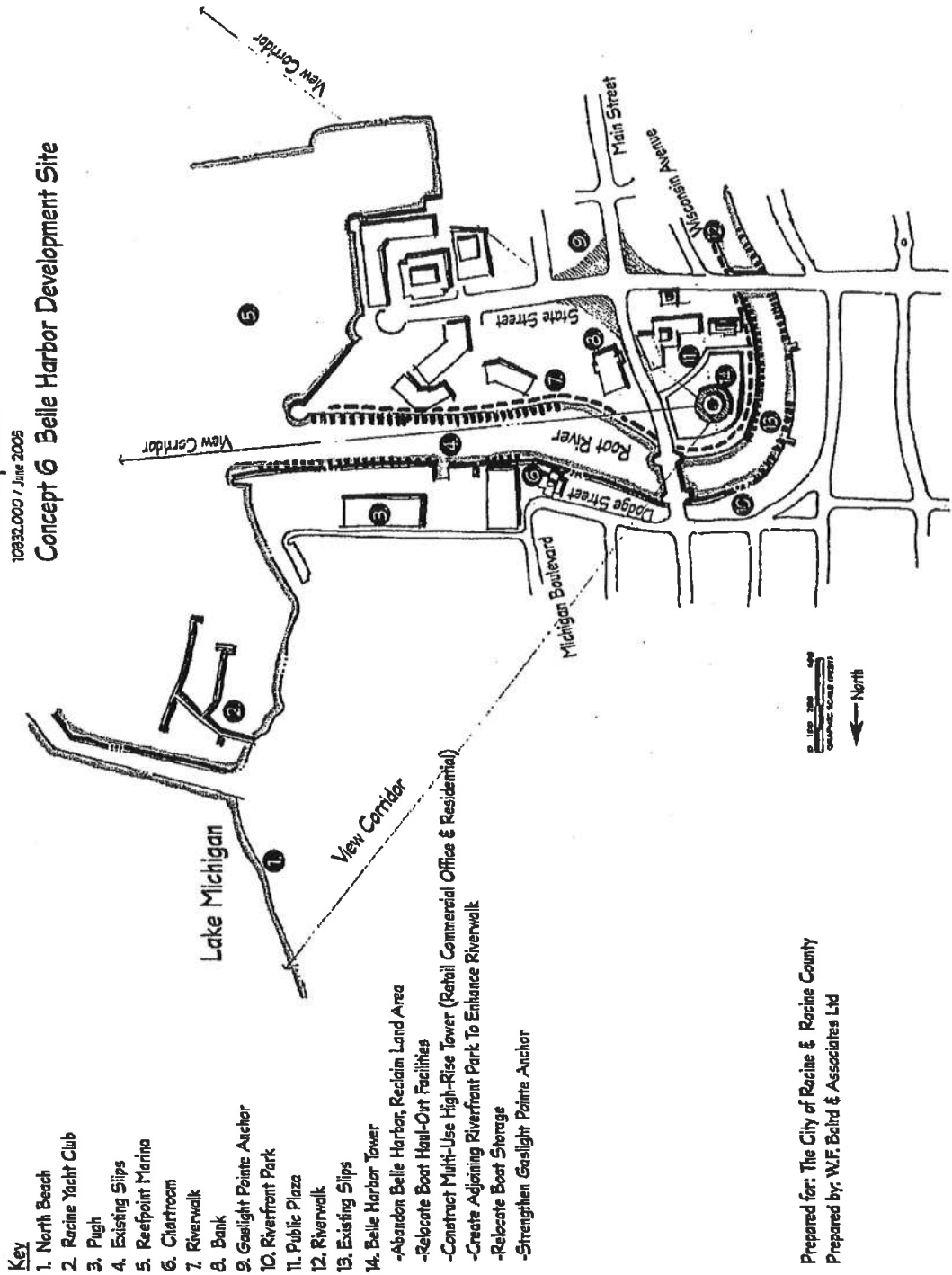
Concept 6 Belle Harbor Development Site

Racine Lakefront

Plan Update

10/32/00 / June 2005

Concept 6 Belle Harbor Development Site



Prepared for: The City of Racine & Racine County
Prepared by: W.F. Baird & Associates Ltd

Due to the apparent economic realities of rehabilitating Belle Harbor as a boat basin, **Concept 6** explores a possible alternate use of the basin.

The location of Belle Harbor becomes a very strategic location in the concepts being presented here and within “The Downtown Racine Development Plan”, prepared by Crandall-Arambula.

Concept 6 offers the possibility of filling in the Belle Harbor boat basin and developing mixed-used improvements on the site. The multi-use development could enhance Gaslight Pointe and the Main Street Corridor and provide a combination of retail, commercial and office space combined with downtown residential units. A high-rise structure would have commanding views of the lakefront and downtown areas and could become a landmark focal point for downtown Racine. The Riverwalk could be expanded and enhanced to provide a small riverfront park. A new underpass could be provided under Main Street. Short-term transient dockage could be provided to serve area restaurants, businesses and other entertainment venues.

All existing boat storage and haul-out facilities would have to be relocated off-site.

An in-depth market analysis would have to be performed to establish the optimum size of the structure and square footage allocations for each use. The County could abandon Belle Harbor, create a new riverfront edge, fill in the boat basin, prepare the site for development and solicit development proposals from the private sector.

Concept 6 has the potential to create a great deal of synergy with Gaslight Pointe, the Main Street corridor, the Riverwalk, the remaining downtown, and the existing/proposed residential areas.

The Lakefront Advisory Group liked the idea of creating a new development site at the end of Main Street to enhance the Gas Light Pointe anchor. They also noted that the existing lease with Skipper Marine for operation of Belle Harbor includes Skipper Marine’s use of the existing haul-out facilities, and questioned what might be done to honor that part of the agreement. The haul out facilities would have to be relocated elsewhere on the river or at the Reefpoint Marina. Early plans for the development of Reefpoint Marina included plans for a haul out facility there.

Appendix E: Park Recommendations

This section provides recommended river edge maintenance and public access for each park along the Root River.

Quarry Park

This Racine County Park is the first park below the Horlick Dam. This is a destination kayaking site, however, there is no designated boat launch. Repeated boat launching can cause bank erosion. We recommend a boat launch in this park.

Colonial Park

This park is the most ecologically sensitive park along the river. There are ongoing efforts to remove non-native and invasive species and several plant restoration projects in this park. The river edge is already vegetated and includes many trees. This park should have no formal boat or viewing access.

Lincoln Park

The Department of Natural Resources steelhead facility creates a challenge in Lincoln Park. To help boaters portage around the weir the existing, but unused, DNR boat ramp upstream of the weir needs to be modified. The large rocks at the end of the ramp need to be rearranged to both stabilize the bank and allow easier access by boaters.

Downstream of the weir a simple boat launch needs to be created, similar to the one in Clayton Park to allow for safe access to the river. There is a section of the bank currently used by paddlers that can be modified with a launch. The launch should be kept within the “no fishing zone” section of the river to alleviate conflicts with fishermen. This park is used by fisherman daily because of the location of the steelhead facility. Therefore, a high amount of fishing access should be made available in this park. However, consideration needs to be made for bank stabilization.

Sedimentation is one of the largest water quality issues for the Root River. Excessive foot traffic on river banks can cause soil erosion, which is harmful to fish. A large section of bank “fell” into the river several years ago and the bank had to be stabilized at great expense. To avoid this situation, certain sections of

the river in this park need to have limited foot traffic. An educational effort needs to take place to increase awareness of this issue with fishermen, especially in peak fishing seasons in spring and fall when many out-of-state fisherman utilize the river.

To increase viewing opportunities in this park, a bench should be placed upstream of the steelhead facility.

Brose Park

Only a short piece of Root River goes through Brose Park. One side is privately owned, and stabilized with stones or a wall. The other side is rocky with difficult boating access. However, it is suitable for fishing access and has a nice pavilion for the public.

Island Park

In the non-recreation areas (ball fields), it is important that vegetative buffers are maintained in this park, especially along the western branch of the river. In August 2007 and June 2008, when the river was over its capacity, the park land demonstrated its function for handling flood waters. Without vegetation on the river banks, it is likely that the bank and soil would have been washed away during the flood.

A boat launch could be added near the north parking lot. This could also be a good location for a buffer/rain garden to address parking lot runoff. We suggest contacting the Root Pike WIN’s Rain Garden Initiative and requesting information on being a demonstration site for 2009.

Riverside Park and Horlick Drive

There is a lot of honeysuckle (a non-native and invasive species) in this area. It should be cut and the stumps should be painted with glyphosate (herbicide). Leave the roots, in order to avoid destabilizing the banks. Removing honeysuckle will open the views to the river. If it seems too open, other native shrubs could be planted. In some areas the banks are being undercut and need stabilization. The DNR should be consulted for recommendations. Hard materials such as rip rap should only be used if “softer” methods such as bio-logs are not adequate stabilization for that section of the river.

Park District Recommendations Continued

Cedar Bend Park

We need to go back to this park before recommendations are made. The bike path stays along the edge of the park and city streets. It is also a small park.

Clayton Park

There is a nice simple boat launch in this park, but few people know about it. This is an example of why new River Park District signs need to be created. The launch area also doubles as fishing access.

This park should have one bench for viewing added between the boat launch and the bike pathway railing as shown in the conceptual drawing.

Barbee Park

This park was created when the bike pathway was constructed. It was dedicated to the late Alderman Bob Barbee. The park is intended to be an urban green space and had been maintained by volunteers.

The park is in need of new volunteers to maintain the vegetation, which should include early season mowing to reduce the weeds and encourage the native plants. Prescribed burning can accomplish this as well, but can be more difficult to arrange and manage in an urban setting.

Suggested native shrubs

Ninebark	<i>Physocarpus apulifolia</i>
Witch hazel	<i>Hamamelis virginiana</i>
Nannyberry	<i>Virburnum lentago</i>
American highbush cranberry	<i>V. trilobum</i>
Blackhaw viburnum	<i>V. prunifolium</i>
Hazelnut	<i>Corylus americanum</i>
Black chokeberry	<i>Aronia melanocarpa</i>
Elderberry	<i>Sambucus canadensis</i>
Red osier dogwood	<i>Cornus stolonifera</i>
Eastern wahoo	<i>Euonymus atropurpurea</i>

Appendix F: Publications Reviewed

The following is a sample of publications the Root River Council reviewed to provide background to this plan.

Baseline Assessment of Root River Water Quality Within the City of Racine
http://www.cityofracine.org/Depts/health/root_river_assessments.aspx

City of Racine Root River Pathway Bike Path
http://www.cityofracine.org/Depts/public_works/bicycle_paths.aspx

DNR State of the Basin Report, 2002
<http://www.dnr.state.wi.us/org/gmu/rootpike/watersheds/rootriver.htm>

EPA 303d Designation
<http://dnr.wi.gov/org/water/wm/wqs/303d/303d.html>

MMSD Water Quality Initiative
<http://www.mmsd.com/wqi/publications.cfm#rootriver>

Racine 3rd District-Neighborhood Revitalization, Jude Gagliano, Sustainable Racine, 2000

Racine Downtown Plan
www.racinedowntown.com/d-plan.html

Racine Outfall Assessment Report
http://www.cityofracine.org/depts/public_works/storm_sewers_drains.aspx

Racine Park and Open Space Plan, 2003
http://www.sewrpc.org/publications/capr/capr-270_park_plan_city_racine.pdf

Reconnecting Racine: Transforming and Industrial Riverfront Into a Neighborhood, Jill Matthews Thesis- 1999

Re-Rooting, Richard Pipek's Thesis

SEWRPC Regional Water Quality Management Plan Update
<http://www.sewrpc.org/waterqualityplan/>

Suggested Highway and Streetscape Concepts for the Highway 20/Sixth Street Reconstruction and Enhancement Project

