SUMMARY NOTES OF THE MAY 2, 2012 MEETING OF THE ROOT RIVER WATERSHED RESTORATION PLAN ADVISORY GROUP

INTRODUCTION

The May 2, 2012 meeting of the Root River Watershed Restoration Plan Advisory Group was convened at the Racine City Hall Annex at 10:05 a.m. The meeting was called to order by Susan Greenfield, Executive Director of the Root-Pike Watershed Initiative Network (Root-Pike WIN). Attendance was taken by circulating a sign-in sheet.

In attendance at the meeting were the following individuals:

Susan Greenfield, Co-Chair Executive Director, Root-Pike Watershed Initiative Network Jeff Martinka, Co-Chair Executive Director, Southeastern Wisconsin Watersheds Trust, Inc.

(Sweet Water)

Michael G. Hahn, Secretary Chief Environmental Engineer, Southeastern Wisconsin Regional

Planning Commission

Joseph E. Boxhorn Senior Planner, Southeastern Wisconsin Regional Planning Commission

Roger Chernik Board President, Root-Pike Watershed Initiative Network Chris Clayton Urban River Restoration, River Alliance of Wisconsin

Thomas Friedel Administrator, City of Racine

Craig D. Helker Water Management Specialist, Wisconsin Department of Natural

Resources

Alan V. Jasperson Secretary-Treasurer, Racine County Board of Drainage Commissioners

Stevan M. Keith Sustainability and Environmental Engineer, Milwaukee County

Architecture, Engineering, and Environmental Services Division Laboratory Director/Research Scientist, City of Racine Health

Julie Kinzelman Laboratory Director/Research Scientist, City of Racine Health

Department

Christopher Magruder Community Environmental Liaison, Milwaukee Metropolitan

Sewerage District

Monte G. Osterman Supervisor, Racine County Board of Supervisors

Brian Russart Natural Areas Coordinator, Milwaukee County Parks/University

of Wisconsin-Extension

Chad Sampson County Conservationist, Racine County

Melissa H. Warner

Andrew D. Yencha

Commissioner, Village of Caledonia Storm Water Utility District

Natural Resources Educator, University of Wisconsin-Extension

Guests

Matthew T. Magruder Systems Data Technician, Milwaukee Metropolitan Sewerage District

Ms. Greenfield welcomed the attendees to the meeting and thanked them for their participation. She noted that the draft chapters to be reviewed were sent to the Group by electronic mail. She asked the Group whether they would prefer to receive forthcoming draft chapters electronically or to have SEWRPC staff print them and bring them to the meeting. The Group decided to receive the draft chapters electronically. Mr. Hahn stated that SEWRPC staff will bring a few extra copies to the meetings.

Ms. Greenfield asked the Group whether forthcoming Advisory Group meetings should be held at the same location. She suggested having future meetings at the Racine County Office Complex in Ives Grove. After discussion of other potential meeting places, the Group agreed to meet at the Racine County Office Complex.

Ms. Greenfield indicated that the location of the public meetings of the Root River Restoration Planning Group would continue to move among sites in the watershed, noting that this will facilitate field trips that are scheduled for some of these meetings.

Mr. Hahn thanked the members of the Group for agreeing to serve. He noted that the task of the Advisory Group is different from that of the Root River Restoration Planning Group. He indicated that the Advisory Group will review the chapters of the plan report. He added that SEWRPC staff wants the Group's comments on the chapters. He stated that Group members can also submit comments by electronic mail or through the comments screen on the SEWRPC website.

[Secretary's Note: The comments screen referred to in the previous paragraph can be found at:

http://www.sewrpc.org/SEWRPC/Environment/Root-River-Watershed-Restoration-Plan.htm]

Mr. Hahn stated that as part of the review process, SEWRPC staff will prepare summary notes of the Advisory Group meetings. These will be provided to the Group to review. Suggested revisions to the chapters will be included in the summary notes for the Group to review and approve. In addition, they will be included as an appendix in the plan report. He added that copies of draft chapters and presentations will be placed on the SEWRPC website.

REVIEW OF PRELIMINARY DRAFT CHAPTER I, "INTRODUCTION," OF SEWRPC COMMUNITY ASSISTANCE PLANNING REPORT NO. 316 (CAPR NO. 316), "A RESTORATION PLAN FOR THE ROOT RIVER WATERSHED"

At Ms. Greenfield's request, Mr. Hahn reviewed the preliminary draft of Chapter I, "Introduction." He said that this watershed restoration plan is a second-level plan that is being developed from the framework established by the 2007 SEWRPC regional water quality management plan update for the Greater Milwaukee watersheds. He indicated that the plan will address four focus issues: water quality, recreational use and access, habitat, and flooding. He noted that it is intended to assist a broad array of groups in their activities.

Mr. C. Magruder noted that Map I-1 does not show the western boundary of the watershed. Mr. Hahn replied that that error has been corrected.

In reference to Map I-2, Mr. C. Magruder noted that a portion of the City of Racine appears to be located in southeastern Caledonia. He asked what this area is. Ms. Warner replied that this is Johnson Park. Ms. Greenfield added that this is part of the City of Racine.

Mr. Yencha asked whether there are hunting opportunities in the Root River watershed. Mr. Jasperson said that there are, but they are mostly on private land.

Mr. C. Magruder asked whether the term invasive species in the first full sentence on page 3 referred to aquatic or terrestrial species. Mr. Boxhorn replied that it referred to both. Mr. C. Magruder asked that this be clarified in the text.

[Secretary's Note: The first full sentence on page 3 was revised to read (text in bold is included here to denote language changed or added onto the text. Text will not be bold in the report):

"Aquatic and terrestrial exotic invasive species are present at many locations and may be displacing native species and degrading habitat."]

Mr. Keith asked the maps show the location of Horlick Dam. Mr. Hahn replied that this would be added to the maps.

[Secretary's Note: Revised maps from Chapters I and II are attached as Exhibit A.]

Mr. Martinka asked that Chapters V and VI be specific in designating what actions should be taken and where in the watershed they should be implemented. Mr. Hahn replied that this will be done as much as possible. He added that the SEWRPC staff can benefit from the insights of the members of the Group. He noted as an example, that if Group members are aware of obstructions in the streams of the watershed to the passage of fish, that they should let the staff know.

In reference to Table I-1, Mr. Keith asked whether questions 1 and 2 in the column headings refer to the first and second parts of the survey of interested parties. Mr. Boxhorn replied that both questions were from the second part of the survey. Mr. Keith asked that this be explained in the table. Mr. Hahn indicated that footnotes would be added to the table explaining this.

[Secretary's Note: The following footnote was added to the headers of the second and third columns of Table I-1:

"aQuestion 1 was the first question in the second part of the survey. It asked interested persons to rate the importance of addressing each issue in the Root River watershed from 1 to 5, with 1 being the most important and 5 being the least important."

The following footnote was added to the header of the fourth column of Table I-1:

"bQuestion 2 was the second question in the second part of the survey. It asked interested persons to identify the five issues that should be addressed by a watershed restoration plan."]

Mr. Keith commented that the meaning of the first sentence of the focus areas subsection on page 3 was unclear. He indicated that he would suggest an edit to this sentence.

[Secretary's Note: The first three sentences of the second full paragraph on page 3 were revised to read:

"Focus areas are those general themes related to the critical concerns of the watershed. An individual focus area reflects a set of issues and problems **related to one another** through some desired use or state that the public has for the resource."]

Mr. Osterman asked how many people were invited to take the surveys. Mr. Yencha replied that he does not have a solid number on this. He explained that notices of the surveys were sent to about 70 people; however, these notices also asked the recipients to forward the notices to other persons who might be interested. Mr. Boxhorn added that, as an example, the notices were forwarded on an electronic mail list from the Conservation and Environmental Sciences program at the University of Wisconsin-Milwaukee. Mr. Yencha noted that there were more responses to the second part of the survey than to the first.

Mr. Osterman commented that Chapters V and VI should refer to the economic impacts of implementing the plan's recommendations. He cited as an example, the savings to flood insurance programs resulting from the removal of structures from the floodplains. Mr. Hahn replied that this would be done to the extent possible.

Mr. Yencha asked whether SEWRPC has a policy on including photographs in its reports. He noted that this can make text more readable, adding that including scenic pictures can convey that the Root River watershed is a resource worth protecting. Mr. Hahn replied that staff can look for opportunities to add photographs to the report.

[Secretary's Note: A one-half page photograph of the Root River will be added to the first page of

Chapter I of the report, and other opportunities to include photos will be identified as

the report writing and Advisory Group review proceed.]

Mr. Hahn indicated that staff would also produce a newsletter summarizing the plan as a companion document to the report. Ms. Greenfield commented that it is important that such a newsletter be attractive and easy for the public to read. Mr. Hahn asked if she could assist in that. She said she could.

In reference to the first paragraph on page 6, Mr. C. Magruder suggested specifying the five-year period over which the plan will be implemented.

[Secretary's Note: The first sentence of the first paragraph on page 8 was revised to read:

"Chapter VI presents the watershed restoration plan recommended to guide activities over the five-year period 2014 through 2018."]

REVIEW OF PRELIMINARY DRAFT CHAPTER II, "RECOMMENDATIONS OF THE REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE FOR THE ROOT RIVER WATERSHED," OF SEWRPC CAPR NO. 316, "A RESTORATION PLAN FOR THE ROOT RIVER WATERSHED"

At Ms. Greenfield's request, Mr. Boxhorn reviewed the preliminary draft of Chapter II, "Recommendations of the Regional Water Quality Management Plan Update for the Root River Watershed."

Ms. Greenfield asked whether the amendment to the regional natural areas and critical species habitat plan was done after the regional water quality management plan update (RWQMPU), noting that it is important that land trusts have up-to-date direction on which lands to acquire. Mr. Boxhorn replied that the inventories in Chapter II incorporate the findings of the recent amendment to the regional natural areas and critical species habitat plan.

Ms. Greenfield asked what the time frame is for the retirement of the Yorkville wastewater treatment plant. Mr. Boxhorn replied that this is dependent on the increase in flows to the plant relative to the plant capacity, with the flow increase depending upon the amount of development in the plant's service area. He noted that utilities generally begin facilities planning for their plants when they reach about 80 percent of capacity. He added that the land use and population projections in the RWQMPU indicated that the Yorkville plant was unlikely to reach this threshold by 2020.

Ms. Warner asked what the rationale was behind that recommendation that the private wastewater treatment plant serving Fonk's Mobile Home Park be maintained and upgraded as needed. Mr. Boxhorn replied that this was based upon the location. He added that the mobile home park is not within or close to the service area of any municipal wastewater treatment plant. Ms. Kinzelman noted that her sampling has found high instream concentrations of total phosphorus and bacteria downstream from this plant. Mr. C. Magruder asked which branch of the Root River Canal receives the discharge from this plan. Mr. Helker replied that the plant discharges into the East Branch of the Root River Canal. He noted that effluent limitations for wastewater treatment plants depend upon water use classification of the receiving water. He continued that the effluent limitations set for this plant were based upon a classification with poor water quality and do not require disinfection of the effluent. He added that the Department feels that this could be upgraded; however, it would require a change to the Wisconsin Administrative Code, which is not currently planned.

[Secretary's Note: The water use classification for the East Branch of the Root River Canal is given in Section NR 104.06(1) Table 4 (5) of the Wisconsin Administrative Code. Upstream from STH 20, this stream is classified as limited aquatic life. Downstream from STH 20 to the confluence with the West Branch of the Root River Canal it is

classified as limited forage fish. The Fonk's wastewater treatment plant is located approximately three miles upstream of STH 20.]

Mr. Jasperson asked whether there would be money available to upgrade the Fonk's Mobile Home Park treatment plant. Mr. Hahn answered that it may not be covered under the State's Clean Water Revolving Fund. He added that there may be other funding programs that might cover such an upgrade.

Mr. Yencha asked whether there were any concentrated animal feeding operations (CAFO) in the Root River watershed. Mr. Boxhorn replied that there had been a large duck farm, but it has closed.

Mr. Yencha asked whether there were any industrial point sources discharging within the watershed. Mr. Boxhorn replied that there were some. Mr. Yencha inquired whether there were any recommendations for industrial point sources other than compliance with the conditions of their discharge permits. Mr. Hahn replied that the RWOMPU concluded that compliance with permit conditions should be adequate.

Mr. Helker commented that an outfall associated with a possible treated wastewater return flow to Lake Michigan relative to a diversion of Great Lakes water by the City of Waukesha for purposes of water supply would be regulated as a point source of water pollution.

[Secretary's Note: The Wisconsin Department of Natural Resources (WDNR) is currently preparing an environmental impact statement relative to an application from the City of Waukesha to divert Lake Michigan water across the subcontinental divide separating the Great Lakes Basin and the Mississippi River Basin. The WDNR review is being conducted according to the requirements of the Great Lakes-St. Lawrence River Basin Water Resources Compact and 2007 Wisconsin Act 227, under which the State adopted the compact. The City of Waukesha application must be approved by the State of Wisconsin and each of the other seven states in the Great Lakes Basin (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, and Pennsylvania). Possible return flow locations include Underwood Creek in the Menomonee River watershed, the Root River, and a direct pipeline to Lake Michigan. The location of a possible future return flow may depend on which water utility is the source of Lake Michigan water.

> Depending on the outcome of the State of Wisconsin review and approval process, the Root River watershed restoration plan may include further detail on the Waukesha return flow issue.]

Mr. Clayton asked whether the recommendations in the RWQMPU relating to agricultural and urban nonpoint source pollution control measures were based upon the stormwater runoff performance standards that were in effect prior to the 2010 revisions of Chapter NR 151 of the Wisconsin Administrative Code. Mr. Hahn answered that they were. Mr. Clayton suggested footnoting this in the chapter.

[Secretary's Note: The following footnote was added at the end of the fifth full paragraph on page 4:

"10The recommended rural nonpoint source pollution control measures in the RWQMPU were based upon, and incorporated, agricultural performance standards from Chapter NR 151, "Runoff Management," of the Wisconsin Administrative Code that were in effect from 2004 through 2007 when the RWQMPU was being developed. NR 151 was revised in 2010, with revisions taking effect January 1, 2011. The current agricultural performance standards are described in Chapter III of this report."

The following footnote was added at the end of the first sentence of the last paragraph on page 6:

"15The recommended urban nonpoint source pollution control measures in the RWQMPU were based upon and incorporated nonagricultural performance standards from Chapter NR 151, "Runoff Management," of the *Wisconsin Administrative Code* that were in effect from 2004 through 2007 when the RWQMPU was being developed. NR 151 was revised in 2010, with revisions taking effect January 1, 2011. The current nonagricultural performance standards are described in Chapter III of this report."

The other footnotes in the chapter were renumbered as needed.]

Ms. Warner asked how nutrient management plans and regulations regarding manure spreading are enforced. Mr. Sampson answered that the counties enforce these plans and regulations. He noted that enforcement is usually driven by complaints and that implementation of some of the requirements is accomplished through installation of practices with cost-share funding.

Ms. Warner asked for clarification as to whether the subsection discussing exotic and invasive species management on pages 18 and 19 deals with aquatic or terrestrial invasive species. Mr. Boxhorn replied that the text would be revised to indicate that it refers to both.

[Secretary's Note: The first sentence of the last paragraph on page 18 was revised to read:

"As described above, the RWQMPU recommends that programs to reduce the introduction and spread of **aquatic and terrestrial** exotic and invasive species, including programs to educate the public, be supported and continued."]

Mr. Russart asked whether municipal ordinances related to invasive species have been inventoried. He noted that the City of Franklin has a good ordinance. Mr. Boxhorn replied that this has not yet been done, but such an inventory could be added to the chapter.

[Secretary's Note: The following paragraph was added after the third paragraph on page 20:

"At the local level, management of invasive species may be addressed through municipal ordinances. A few municipalities in the watershed have ordinances that specifically address invasive species. The Cities of Franklin and Greenfield have ordinances that define certain invasive plant species as noxious weeds and require that these species be controlled with other noxious weeds. Most of the municipalities in the watershed have noxious weed ordinances. While the content of these ordinances vary among the communities, they generally define certain plant species as noxious weeds and require their destruction or control. Some of these ordinances, such as those of the Cities of Milwaukee and Oak Creek, specifically relate to plant species that cause hay fever or skin rashes."]

In reference to subsection discussing implementation of the recommendation to convert marginally productive agricultural lands to wetland and prairie conditions, Mr. Russart indicated that the area that the chapter indicated had been restored to prairie, savanna, and wetlands conditions by the Milwaukee County Department of Parks, Recreation and Culture (DPRC) may not be correct. He added that DPRC also has agricultural land in the Root River watershed that is enrolled in the Conservation Reserve Program. He indicated that he would check on the restored area.

[Secretary's Note: The fifth sentence of the last paragraph of page 22 was revised to read:

"DPRC has also restored **19 acres** of farmland within the Franklin State Natural Area to native prairie and is restoring **16 acres at this site to native savanna**."]

Mr. Sampson noted that the Racine County Land Conservation Division also has a 15- to 20-acre wetland restoration in the works. He indicated that he would provide information on it.

[Secretary's Note: In discussions with SEWRPC staff subsequent to the meeting, Mr. Sampson indicated that the project he referred to at the May 2, 2012 meeting of the Advisory Group is under consideration by the landowner; however, no decision has been made as to whether the project will be undertaken. Mr. Sampson also indicated that his Department has recently completed a project along the East Branch of the Root River Canal in which three acres of marginally productive farmland were converted to wetland. The following sentence was added to the end of the first partial paragraph on page 23 of the chapter:

> "In June 2012, the Racine County Land Division completed a project along the East Branch of the Root River Canal in the Town of Yorkville in which three acres of marginal farmland were converted to wetland."]

During Mr. Boxhorn's review of the illicit discharge detection and elimination recommendations of the RWQMP, Ms. Kinzelman noted that the City of Racine has a long-standing program for detection and elimination of illicit discharges from storm sewers.

In reference to the subsection discussing implementation of the recommendations of the RWQMPU related to chloride reduction programs, Mr. Friedel stated that the City of Racine is purchasing a brine system to use in its ice control operations. He added that they will start using on arterial streets.

[Secretary's Note: The following paragraph was added after the third full paragraph on page 23:

"The City of Racine is purchasing a brine system for use in its deicing operations, which is initially intended to be used for ice control on arterial streets."]

In reference to the subsection discussing the implementation of the recommendations of the RWOMPU related to beach and riparian litter and debris control programs, Ms. Kinzelman noted that the City of Racine has an Adopt-A-Beach program for Lake Michigan beaches.

[Secretary's Note: The following sentence was added to the end of the first paragraph on page 24:

"The City of Racine also conducts an Adopt-A-Beach program for Lake Michigan beaches."]

Mr. Boxhorn indicated that the subsection, "Protect Remaining Natural Stream Channels," will be added and presented to the Advisory Group at the next meeting.

[Secretary's Note: There is no readily available information on instances since this recommendation was made in 2007 where development was explicitly designed to protect natural streams. The SEWRPC staff will discuss this issue at the September 5, 2012, Advisory Group meeting.]

In reference to the subsection discussing the implementation of the recommendations of the RWQMPU related to restoring wetlands, woodlands, and grasslands adjacent to stream channels and establishing buffers that are a minimum of 75 feet in width, Mr. Russart stated that the Milwaukee County Department of Parks, Recreation and Culture is implementing a grassland restoration near Mud Lake in Grobschmidt Park and is conducting tree planting in Hales Corners. He indicated that he would provide information on these projects.

[Secretary's Note: The following sentences were added after the third sentence in the sixth paragraph on page 24:

"Other DPRC projects addressing this recommendation include planting of a mixture of native hardwood trees on five acres adjacent to the Root River in Hales Corners in 2010 and removal of brush from 12.5 acres of grassland adjacent to Mud Lake."]

In reference to the subsection discussing the implementation of the recommendations of the RWQMPU related to restoring and enhancing stream channels, Ms. Kinzelman noted that the City of Racine is updating its 2005 study on streambank erosion.

[Secretary's Note: The following sentences were added to the end of the first partial paragraph on page 25:

"In 2005, the City of Racine commissioned a study to evaluate the condition of storm sewer outfalls and streambanks and associated erosion and erosion potential along the Root River within the City.³² The City is currently updating this study.

³²Earth Tech, Inc., Root River Outfall and Streambank Erosion Assessment, January 2005."

The footnotes following this note were renumbered.]

In reference to the subsection discussing the implementation of the recommendations of the RWQMPU related to considering more intensive fisheries manipulations, Mr. Boxhorn indicated that he would add a sentence referring to the WDNR's stocking of catchable-size trout into some ponds in the watershed. Mr. Helker asked whether the Milwaukee County Department of Parks, Recreation and Culture still stocks fish into County park ponds. Mr. Russart replied that this has been taken over by the Hunger Task Force.

[Secretary's Note: The following paragraph was added after the second full paragraph on page 25:

"As part of its Southeast Region Urban Fishing Program, the WDNR annually stocks catchable-size rainbow trout into Franklin High School Pond, Quarry Lake, Schoetz Park Pond, and Scout Lake. In addition, the Hunger Task Force stocks several species of fish into Milwaukee County park ponds and lagoons."

In reference to the sections of the chapter on monitoring, Ms. Greenfield noted that Root-Pike WIN has funded a study of freshwater mussels in the Root River. Mr. C. Magruder noted that the MMSD Corridor Study included collection of biological assessment and monitoring data.

[Secretary's Note: The following sentences were added after the last sentence of the first full paragraph on page 25:

"In 2004 and 2007, fish and macroinvertebrate data were also collected at two sampling stations along the mainstem of the Root River in Milwaukee County as part of the MMSD Corridor Study. ³³ In addition, Root-Pike WIN has funded a study of freshwater mussels in the Root River watershed. This study will examine the mainstem of the River and the canals for the presence and species of mussels. Field work for this study will be conducted in 2012.

³³U.S. Geological Survey Scientific Investigations Report No. 2007-5084, Water-Quality Characteristics for Selected Sites within the Milwaukee Metropolitan Sewerage District Planning Area, Wisconsin: February 2004-September 2005, 2007;

U.S. Geological Survey Scientific Investigations Report No. 2010-5166, Biological Water-Quality Assessment of Selected Streams within the Milwaukee Metropolitan Sewerage District Planning Area of Wisconsin: 2007, 2010."

The footnotes following this note were renumbered.]

Mr. Russart indicated that DPRC has been conducting monitoring of ephemeral wetlands for amphibians and macroinvertebrates. Mr. Yencha indicated that Joy Wolf at UW-Parkside may also have monitoring data relative to ephemeral wetlands.

[Secretary's Note: Mr. Russart has provided DPRC data to SEWRPC staff. These data will be reviewed for inclusion among the inventories presented in Chapter IV of the report.]

In reference to the subsection on establishing long-term monitoring stations in inland lakes, Ms. Kinzelman noted that Quarry Lake has been monitored since at least 1990.

[Secretary's Note: The last sentence of the fourth full paragraph on page 25 was revised to read:

"The City of Racine Health Department has sampled Quarry Lake for bacteria since at least 1990."]

Mr. Chernik commented that a stewardship plan is being implemented for River Bend Nature Center. Ms. Greenfield added this activity is funded by Root-Pike WIN and that she can provide a copy of the plan.

Mr. Boxhorn drew the Group's attention to the section on groundwater management measures on page 29. He noted that two subsections will be added to the chapter and presented to the Group at the next meeting. Mr. Yencha commented that the upper portions of the River flowing through the City of New Berlin and Milwaukee County have low flows. He noted that a possible recommendation would be to promote infiltration in this area. He asked whether there were data to support this line of thinking. Mr. Boxhorn replied that the lack of soil survey data for much of Milwaukee County creates difficulties in classifying recharge potential in this part of the watershed

[Secretary's Note: Following review of relevant materials by SEWRPC staff, the subsection titled "Consider Groundwater Sustainability Guidance from the Regional Water Supply Plan in Evaluating the Sustainability of Proposed Development and Local Land Use Planning" was moved from the section on nonregulatory management strategies that are in various stages of implementation to the section on management strategies recommended by the RWQMPU that are not yet implemented. The following changes were made to the chapter:

> The subsection heading "Consider Groundwater Sustainability Guidance from the Regional Water Supply Plan in Evaluating the Sustainability of Proposed Development and Local Land Use Planning" was deleted from page 29.

> The second row under the section "Groundwater Management Measures" was deleted from Table II-3.

> A row including a recommendation to consider the groundwater sustainability guidance from the regional water supply plan in evaluating the sustainability of proposed development and local land use planning was added to Table II-5. The revised table in included herein as Exhibit B.

Following examination of the relevant chapters of the *Wisconsin Administrative Code* by SEWRPC staff, the subsection titled "Consider the Potential Impact on Groundwater Quality in the Design of Stormwater Management Facilities" was moved from the section on nonregulatory management strategies that are in various stages of implementation to the section on existing regulatory management strategies. The following changes were made to the chapter:

The subsection heading "Consider the Potential Impact on Groundwater Quality in the Design of Stormwater Management Facilities" was deleted from page 29.

The last row was deleted from Table II-3.

A row including a recommendation to consider the impacts on groundwater quality of stormwater management facilities was added to Table II-2. The revised table is attached herein as Exhibit C.

The following subsection was added after the first partial paragraph on page 21:

"Consider the Potential Impact on Groundwater Quality in the Design of Stormwater Management Facilities

As previously noted, the RWQMPU recommends that the design of stormwater management facilities that directly or indirectly involve infiltration of stormwater consider the potential impacts on groundwater quality, and that the provisions in the WDNR's post-construction stormwater management technical standards that are intended to protect groundwater quality be applied in the design of stormwater management facilities. These recommendations are addressed by regulations contained in Chapters NR 151, "Runoff Management," and Trans 401, "Construction Site Erosion Control and Storm Water Management Procedures for Department Actions," of the *Wisconsin Administrative Code*. Chapter NR 151 sets forth post-construction performance standards for new development and redevelopment and infiltration performance standards for both nonagricultural (urban) areas and transportation facilities.²⁷ Trans 401 sets forth post construction performance standards for those transportation facilities that are regulated by the Wisconsin Department of Transportation. These performance standards include several elements that are intended to protect groundwater quality:

- They prohibit the infiltration of runoff that originates from certain types of source areas that can be expected to contribute contaminants that could degrade groundwater quality. Examples of these source areas include fueling and vehicle maintenance areas, storage and loading areas from certain types of industrial facilities, and rooftops and parking areas of certain types of industrial facilities.
- They prohibit infiltration of runoff that originates from certain types of source areas in close proximity of features of the landscape or improvements to the landscape that can cause groundwater to be susceptible to contamination. Examples of these include prohibitions against infiltrating any runoff within 1,000 feet upgradient or 100 feet downgradient of karst features and infiltrating runoff from commercial, industrial, and institutional land uses or regional devices for residential development within 400 feet of a community water system well or 100 feet of a private well.

- They specify required soil characteristics and separation distances between the bottom of an infiltration system and the elevation of seasonal high groundwater or the top of bedrock. These specified soil characteristic and separation distances depend upon the source of the runoff.
- They prohibit infiltration of runoff in areas where contaminants of concern are present in the soil through which infiltration will occur.
- They require pretreatment prior to infiltration of runoff from parking lots and new road construction in commercial, industrial, and institutional areas.
- They require that infiltration systems shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and to maintain compliance with the preventive action limits for groundwater pollutants promulgated by the WDNR.²⁸

²⁷The post-construction performance standard for new development and redevelopment in nonagricultural (urban) areas is set forth in NR 151.12. The infiltration performance standard for nonagricultural (urban) areas is set forth in NR 151.124. The post-construction performance standard for transportation facilities is set forth in NR 151.24. The infiltration performance standard for transportation facilities is set forth in NR 151.244.

²⁸Preventive action limits are groundwater quality criteria. They are set forth in Chapter NR 140, "Groundwater Quality, of the Wisconsin Administrative Code."

The footnotes following these were renumbered appropriately.]

Mr. Sampson noted that Racine County is pursuing the adoption of an animal waste management ordinance. He indicated that the second reading is scheduled for around June 13, 2012. He added that this will be a zoning ordinance; however, his office will administer it.

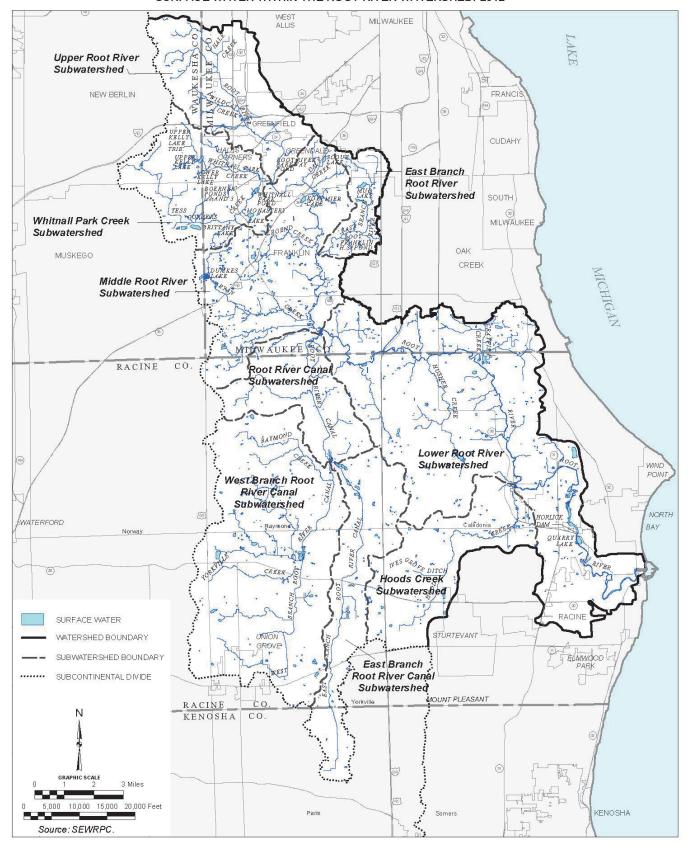
ADJOURNMENT

There being no further business, the meeting was adjourned by unanimous consent at 12:15 p.m.

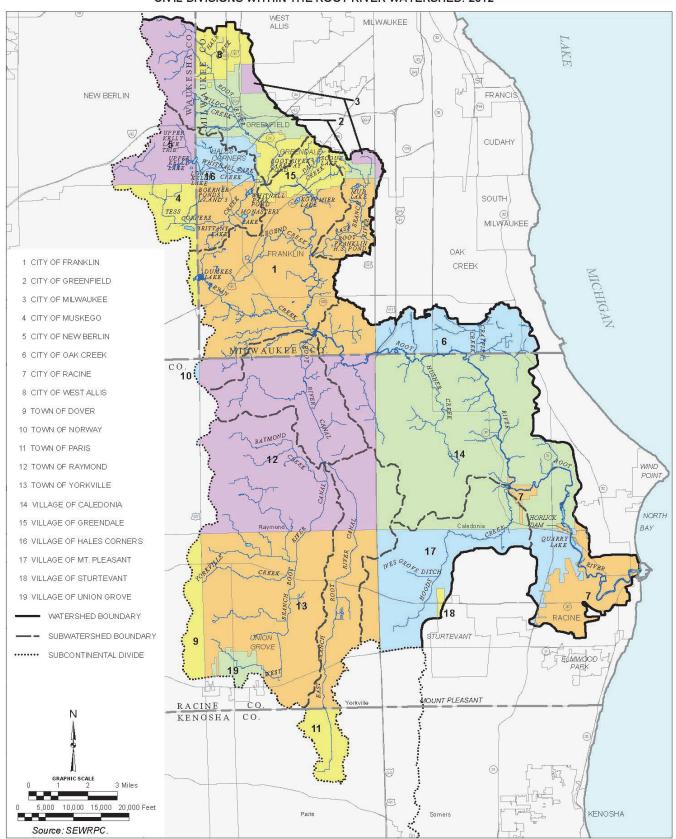
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Exhibit A

Map I-1
SURFACE WATER WITHIN THE ROOT RIVER WATERSHED: 2012

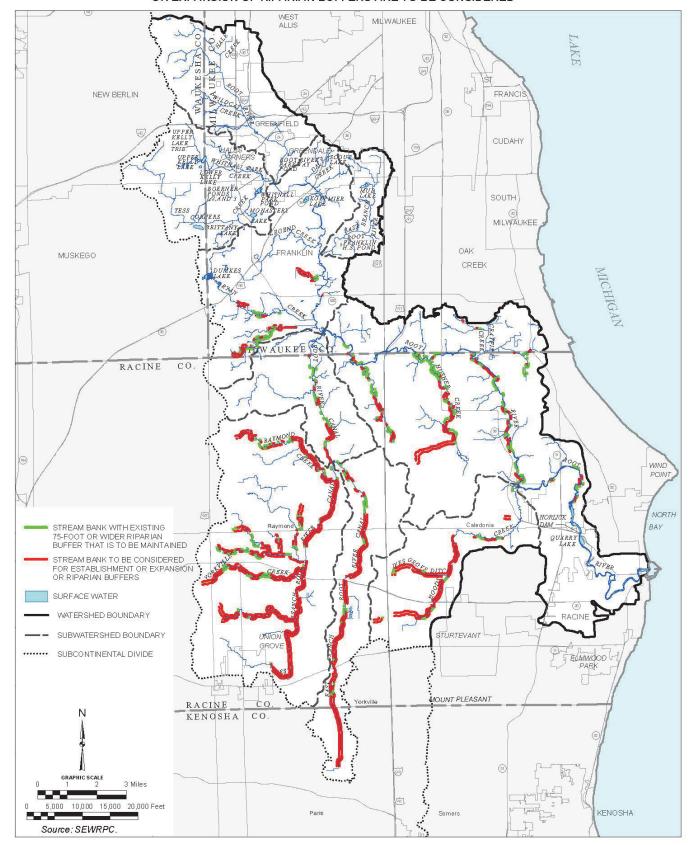


Map I-2
CIVIL DIVISIONS WITHIN THE ROOT RIVER WATERSHED: 2012



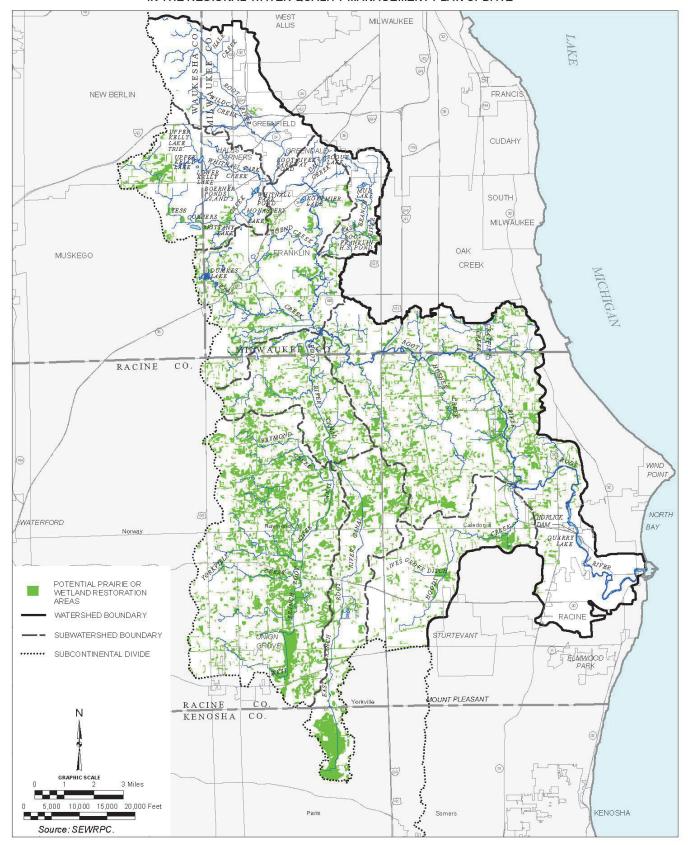
Map II-1

STREAM REACHES IN THE ROOT RIVER FOR WHICH ESTABLISHMENT OR EXPANSION OF RIPARIAN BUFFERS ARE TO BE CONSIDERED



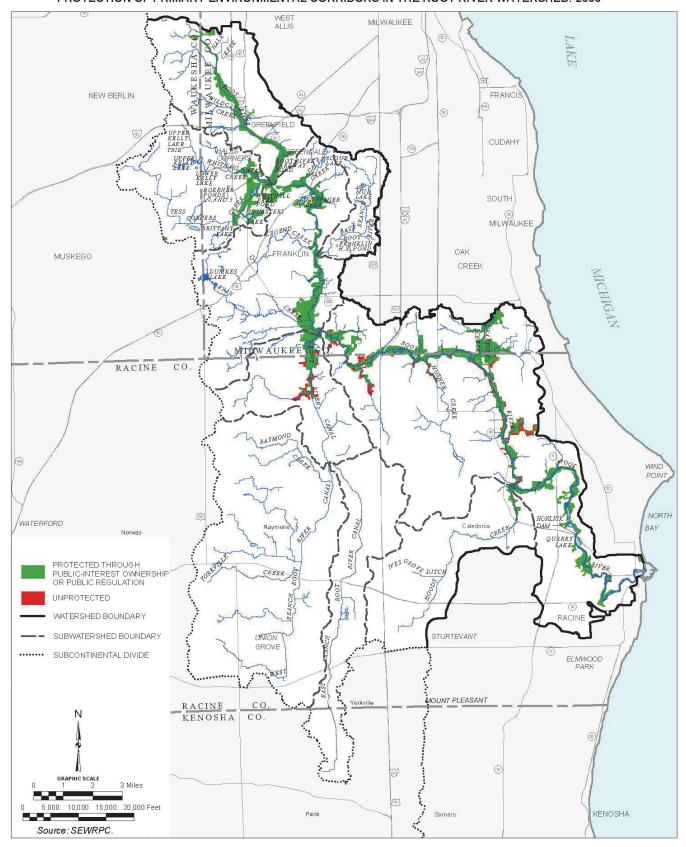
Map II-2

POTENTIAL PRAIRIE OR WETLAND RESTORATION AREAS IDENTIFIED IN THE REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE



Map II-3

PROTECTION OF PRIMARY ENVIRONMENTAL CORRIDORS IN THE ROOT RIVER WATERSHED: 2000



Map II-4

PROTECTION STATUS OF NATURAL AREAS AND CRITICAL SPECIES HABITAT SITES IN THE ROOT RIVER WATERSHED

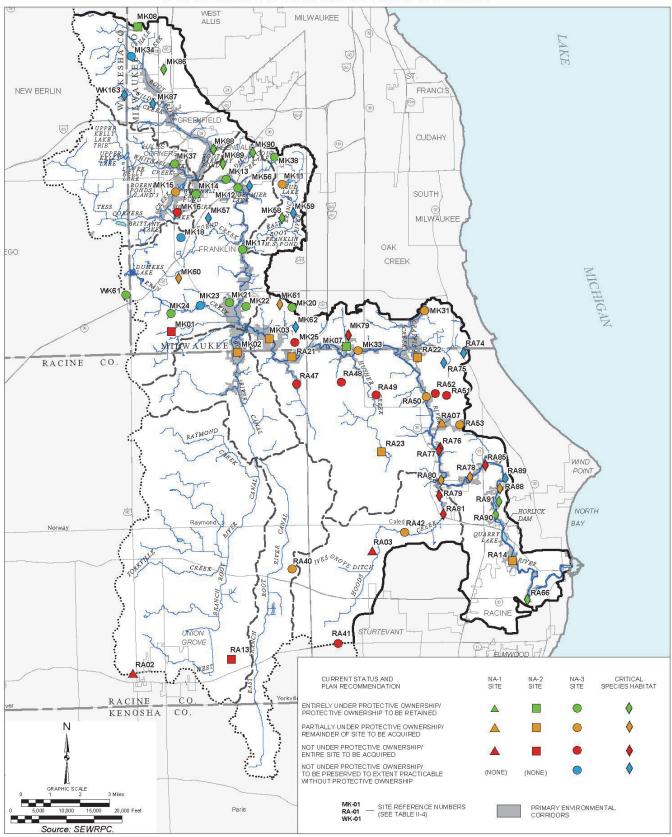


Exhibit B

Table II-5 MANAGEMENT STRATEGIES RECOMMENDED FOR IMPLEMENTATION IN THE REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE BY NOT YET IMPLEMENTED

	Focus Area Primarily Addressed						
Recommendation or Management Strategy	Water Quality	Recreational Use and Access	Habitat Condition	Flooding	Responsible and Participating Organizations ^a		
Abandon Yorkville sewage treatment plant at the end of its useful life	Х	Х			Yorkville Sewer Utility No. 1		
Evaluate the need to reduce infiltration and inflow of clearwater into sanitary sewers	Х	Х			MMSD, municipalities		
Consider increasing the levels of cost-share funding for barnyard runoff BMPs	Х	Х			Counties, USDA		
Conduct targeted research on bacteria and pathogens and research on stormwater BMP techniques and programs	Х	Х			MMSD WDNR, RHD		
Prepare abandonment and riverine restorations plans for dams			Х		Racine County, WDNR		
Conduct assessments and evaluations of the significance for human health and wildlife of the presence of pharmaceuticals and personal care products in surface waters	Х				MMSD, USGS		
Continue efforts to facilitate consolidation of data from different monitoring programs	Х	Х	Х		MMSD, WDNR, UWEX, USGS, USEPA		
Continue and expand citizen-based monitoring efforts, with an emphasis on filling geographical data gaps	Х	Х	Х		UWEX, WDNR		
Upgrade objectives for Hoods Creek, Tess Corners Creek, and Whitnall Park Creek to Fish and Aquatic Life	Х	Х			WDNR		
Upgrade objective for Ives Grove Ditch to Limited Forage Fish	Х	Х			WDNR		
Consider groundwater sustainability guidance from the regional water supply plan in evaluating the sustainability of proposed development and local land use planning	Х		Х		Counties, municipalities		

^aAbbreviations for organizations are:

MMSD = Milwaukee Metropolitan Sewerage District

RHD = City of Racine Health Department
USDA = U.S. Department of Agriculture USEPA = U.S. Environmental Protection Agency

USGS = U.S. Geological Survey
UWEX = University of Wisconsin-Extension
WDNR = Wisconsin Department of Natural Resources

Source: SEWRPC.

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Exhibit C

Table II-2
SUMMARY OF EXISTING REGULATORY MANAGEMENT STRATEGIES IDENTIFIED IN THE REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE

	Focus Area Primarily Addressed			ed		
Recommendation or Management Strategy	Water Quality	Recreational Use and Access	Habitat Condition	Flooding	Responsible and Participating Organizations	Relevant Regulations
Develop according to approved land use plans		Х	Х	Х	Municipalities	66.1001 STATS ^a
Refine sanitary sewer service areas	Х	Х			Municipalities, SEWRPC, WDNR	NR 110 for public systems SPS 382 for private systems ^b
Continue operation and maintenance of MMSD, Racine, Union Grove, and Yorkville wastewater treatment plants	Х	Х			Municipalities, MMSD, WDNR	NR 208, NR 210, and WPDES permit conditions
Implement Capacity, Management, Operations, and Maintenance (CMOM) programs	Х	Х			MMSD, municipalities	Section 3.105 MMSD rules
Continue operation and maintenance of Fonk's Mobile Home Park wastewater treatment plant	Х	Х			Plant owner, WDNR	NR 208, NR 210, and WPDES permit conditions
Continue to regulate wastewater treatment plant and industrial discharges under the Wisconsin Pollutant Discharge Elimination System	Х	Х			Municipalities, MMSD, WDNR	Regulated through WPDES system (NR 200–299)
Apply manure and supplemental nutrient to crop land in accordance with nutrient management plans ^C	Х	Х			Agricultural operators, counties, DATCP, NRCS, WDNR	ATCP 50.04, ATCP 50.08, ATCP 50.48, ATCP 50.50, NR 151.07
Restrict livestock access to streams	Х	Х	Х		Agricultural operators, counties, DATCP, WDNR	NR 151.08
Implement county-enforced inspection and maintenance programs for private onsite wastewater treatment systems constructed after counties adopt private sewage system programs	Х	Х			Counties, WDNR; Wisconsin Department of Safety and Professional Services; municipalities in Milwaukee County	SPS 383.255, SPS 383.54 Chapter 15 Kenosha County Municipal Code; Section 19, Racine County Code of Ordinances; Section 14-589 Waukesha County Ordinances; Section 190-28 Franklin Municipal Code;
Implement construction erosion control and urban nonpoint source pollution controls consistent with standards in NR 151	Х	Х	Х		WDNR, counties municipalities	NR 151, NR 216

Table II-2 (continued)

	Focus Area Primarily Addressed			ed		
Recommendation or Management Strategy	Water Quality	Recreational Use and Access	Habitat Condition	Flooding	Responsible and Participating Organizations	Relevant Regulations
Implement fertilizer management programs ^d	Х				Counties, WDNR	NR 151.13, NR 151.14, 94.643 STATS
Implement pet litter management programs	Х	Х			Counties, municipalities, UWEX	County and municipal ordinances ^e
Conduct aquatic plant surveys in those lakes in which plant management activities are being conducted			Х		Counties, municipalities, lake associations	A common permit condition for aquatic plant management permits under NR 107 and NR 109
Continue and support programs to reduce the introduction and spread of exotic and invasive species			Х		WDNR	Some aspects regulated under NR 40 and ATCP 21
Water Utilities develop and implement utility-specific conservation programs	Х		Х		Water utilities	Required for withdrawals from surface water and groundwater in Great Lakes Basin under NR 852
Consider the potential impacts on groundwater quality in the design of stormwater management facilities	Х				WDNR, WDOT, municipalities, counties	NR 151.12, NR 151.124, NR 151.24 NR 151.244, Trans 401.106

^aSection 66.1001(3) of the Wisconsin Statutes requires that county and local general zoning ordinances; county, city, and village shoreland and floodplain zoning ordinances; county and local subdivision ordinances; and local official mapping ordinances enacted or amended on or after January 1, 2010, be consistent with the comprehensive plan adopted by the unit of government enacting or amending the ordinance.

Source: SEWRPC.

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^bNR 110.08(4) and SPS 382 require that sewer service areas conform with areawide water quality management plans.

^CCompliance required in order to be eligible for cost-share funding.

^dIncludes the State ban on fertilizers containing phosphorus.

^eCounty ordinances apply to county parks and trails and apply to dogs in all counties, except in Milwaukee and Waukesha Counties where they apply to any animal under a person's control. Municipal ordinances vary among jurisdictions.