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Notice: This application form template was created by the Wisconsin Department of Natural Resources. Application is hereby made to the Wisconsin Department of Natural Resources, Bureau of Watershed Management, for grant assistance consistent with s. 281.66, Wis. Stats., and Chapters NR 151, 154, and 155, Wis. Adm. Code. Collection of this information is authorized under the authority of s. 281.66, Wis. Stats. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law [ss. 19.31 - 19.39, Wis. Stats.]. *Unless otherwise noted, all citations refer to Wisconsin Administrative Code.*

Please read the instructions prior to completion of this form. Complete all sections as applicable. Tab to each section or click in answer spaces.

Applicant Information

Calendar Year of Grant Start 2016

Project Name

Citywide Stormwater Pollutant Reduction Plan

Applicant (governmental unit applying; name and type, e.g. Wausau, City; Randall, Town; Waunakee, Village)

Brookfield, City of

Name of Government Official - Authorized Signatory (First Last)	Name of Government Official - Grant Contact Person (First Last)
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Thomas M. Grisa	Theresa J Caven
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Title	Title
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Director of Public Works	Stormwater Project Engineer
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Area Code + Phone Number (262) 782-9650	Area Code + Phone Number (262) 787-3547
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E-Mail Address	E-Mail Address
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grisa@ci.brookfield.wi.us	caven@ci.brookfield.wi.us
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Mailing Address - Street or PO Box	Mailing Address - Street or PO Box
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2000 N. Calhoun Road	2000 N. Calhoun Road
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City	State	ZIP Code	City	State	ZIP Code
Brookfield	WI	53005	Brookfield	WI	53005

Project Information

A. Location of Project

County	State Senate District number:	State Assembly District number:
Waukesha	5	13

Minor Civil Division (city, town, village, e.g., Wrightstown, Village of)	Township (N)	Range	E or W	Section	Quarter	Quarter- Quarter	Latitude (North, 4 to 7 decimal places)	Longitude (West, 4 to 7 decimal places)
Brookfield, Village of	07 N	20	E				44.7513	-89.7632
	N							
	N							

Method for Determining Latitude & Longitude (check one)

- GPS
- DNR Surface Water Data Viewer (<http://dnrmapping.wi.gov/SL/?Viewer=SWDV>)
- Other (specify):

B. Project Summary and Description. Use this space for the project summary and description, not an attachment.

Mention every activity being proposed in Part II; Question 1.

In 2008, the City of Brookfield completed a citywide Nonpoint Pollution WinSLAMM Analysis (2008 Analysis). This analysis summarized the City's base and existing stormwater pollution conditions and compared the results to the goal of 40% total suspended solids (TSS) reduction stated in NR 151.13. The latest version of WinSLAMM (v9.3.1) available at the time was used in the 2008 Analysis. The City achieved 31 percent reduction in TSS and 23 percent reduction in total phosphorus (TP) at the time of the plan. Because the City had met the regulatory requirement at the time (20% TSS reduction by 2008), stormwater control measures (SCMs) were not included in the analysis. The methodology and approach used to complete the analysis complied with the WDNR guidance developed at that time and the document was reviewed by WDNR. A figure showing the land use used in the 2008 Analysis is included with this application.

The planning project requested under this application will update the 2008 Analysis. This project will also propose SCMs to meet the proposed Milwaukee River TMDL waste load allocation (WLA) percentages. A little over half of the City is part of the Milwaukee River Basin. The remainder of the City is part of the Fox River Basin which does not have a TMDL approved or under development at this time. Because it is likely a TMDL will be developed for the Fox River Basin in the future, SCMs will also be proposed for the portion of the City within that basin.

This planning project will incorporate all of the SCMs the City has implemented since 2008 and changes in WDNR modeling guidance. The latest version of WinSLAMM (currently v 10.1.6) will be used. New SCMs will be proposed to determine how best to meet the TSS and TP WLAs.

In addition to WinSLAMM modeling, small storm event hydrology and hydraulic (H&H) modeling will be conducted. The City's geographic information system (GIS) data contains all the components for 2D modeling. Therefore, XP-SWMM 2D is proposed for this analysis. A H&H model of the City's existing conveyance system will be constructed and the 1-year and 2- year, 24-hour storm events will be analyzed. The purpose of this analysis is to quantify the rate of stormwater entering the proposed SCMs to better size them for pollution reduction effectiveness.

This project will cover the entire City of Brookfield municipal boundary. All sections in Town 7 North, Range 20 East will be included in this analysis.

A complete detailed scope of work is attached to this application.

C. Watershed, Waterbody and Pollutants (see Attachment A and <http://dnrmmaps.wi.gov/SL?Viewer=SWDV>).

Note: Planning areas may encompass several square miles and may affect multiple watersheds.

Watershed Name	Watershed Code	12-digit Hydrologic Unit Code (HUC)	% of Project Area	Nearest Waterbody Name
Upper Fox River - Illinois	FX07	071200060102	30	Fox River
Upper Fox River - Illinois	FX07	071200060101	10	Poplar Creek
Upper Fox River - Illinois	FX07	071200060105	5	Fox River
Menomonee River	MI03	040400030403	15	Menomonee River
Menomonee River	MI03	040400030404	35	Underwood Creek
Menomonee River	MI03	040400030405	5	Menomonee River

Nonpoint Source Pollutant(s) Controlled by the Project

- Nutrients Sediment Other, specify: Heavy Metals, Bacteria

Part I. Screening Requirements

A. Maps and Photographs

Yes

- An 8.5" x 11" map from the DNR data/map viewers, showing the project area, is attached (link to <http://dnrmmaps.wi.gov/SL?Viewer=SWDV>).
- Aerial photo maps and project area photos are also included.

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B. Filters Note: The applicant must be able to check "Yes" to questions 1 through 8 below to be eligible for a grant. Check "Yes" to question 9, if applicable.

Yes

- 1. Project is in an area that is urban or will be urban within 20 years (see Attachment B).
2. Project will be completed within 24 months of the start of the grant period.
3. Staff and consultants designated to work on this project have adequate training, knowledge, and experience to implement the proposed project.
4. Staff or contractual services, in addition to those funded by this grant, will be provided if needed.
5. Planning products prepared under this grant will not work at cross-purposes to (are consistent with) the non-agricultural performance standards under ch. NR 151 (see Attachment D).
6. The local DNR District Nonpoint Source Coordinator has been contacted and the project was discussed. See contacts at: http://dnr.wi.gov/topic/nonpoint/NPScontacts.html.

Table with 3 columns: Name of the District Nonpoint Source Coordinator Contacted, Date Contacted, Subject of Contact. Row 1: Maureen McBroom, 03/11/2015, Overall project purpose and goals.

- 7. The applicant can declare that one of the two statements below is TRUE.
a. Statement A: The grant application is for a local governmental unit that has jurisdiction over the project area.
b. Statement B: The applicant does not have jurisdiction over the project area; however conditions "i" and "ii" or "i" and "iii" are met.
i. The applicant is required to obtain a permit under subchapter I. of ch. NR 216; and
ii. In addition, Inter-Governmental Agreements (IGAs) are in place,
iii. or, will be put in place prior to the commencement of the grant period, to assure urban best management practices included on the grant are installed and maintained (see Attachment G).
8. The applicant can declare that one of the two statements below is TRUE.
a. Statement A: The applicant is not the University of Wisconsin Board of Regents.
b. Statement B: The applicant is the University of Wisconsin Board of Regents and the project will develop recommendations for a UW Campus area located in a municipality that meets both of the following criteria:
i. The municipality is required to obtain a municipal storm water permit under ch. NR 216 and
ii. The municipality is located either in a priority watershed or lake area identified under s. 281.65, Wis. Stats., or in an area of concern as identified by the International Joint Commission under the Great Lakes Water Quality Agreement.
9. This application is a joint application among local units of government, and
If yes, the required Inter-Governmental Agreement (maybe a DRAFT) is attached (see Attachment G).

If the applicant answered "No" to any of the items in 1-8, above, stop here. This project is ineligible.

Part II. Competitive Elements

Question 1. Project Activities and Extent of Pollutant Control

A project can consist of one or more of the following planning activity categories (A through F). For each category below, check the boxes that describe the work products which will be produced under this grant. Do not check boxes based on prior work.

A. Ordinance Preparation

Develop Update The project is to develop or update one or more of the following ordinances (must be the applying Governmental New Existing Unit's ordinances), including associated information, education and public participation activities. Check all that apply.

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- 1. Construction erosion control ordinance including all the requirements of s. NR 151.11.
- 2. Storm water ordinance for new development and re-development including all the requirements of ss. NR 151.12, NR 151.121-128, and NR 151.241-249.
(See NR 151 at: http://docs.legis.wi.gov/code/admin_code/nr/100/151.pdf#page=1.)
- 3. Low impact development/conservation subdivision ordinances.
- 4. Other ordinances such as an illicit discharge ordinance, storm water ordinances affecting runoff from developed urban areas (e.g., pet waste management ordinances, nutrient management ordinances), or ordinances that regulate the application of fertilizers to non-municipal properties in accordance with s. NR 151.14.

B. Financing Mechanisms

Develop New Update Existing The project will evaluate financing mechanisms for storm water management, including associated information, education and public participation activities. Recommendations will be presented to the governing board for approval and DNR will be notified of the governing board's action. Check **one** of the following:

- 1. The project develops a dedicated revenue source, such as a storm water utility, to implement a storm water program focusing on implementation of performance standards in Subchapter III of ch. NR 151.
OR
- 2. The project is a general feasibility analysis of alternative funding mechanisms

C. Storm Water Plan for Developed Urban Areas (includes redevelopment)

Develop New Update Existing The project is to develop or update a storm water management plan for developed urban areas, including redevelopment, which addresses all applicable performance standards under NR 151 including associated information, education and public participation activities. Check **one** of the following

- 1. This project will cover the entire geographic area of the governmental unit.
OR
- 2. This project will cover only part of the geographic area of the governmental unit.

D. Storm Water Plan for New Development

Develop New Update Existing The project will develop or update a storm water management plan for new development that addresses all of the performance standards under ss. NR 151.12, NR 151.121-128, and NR 151.241-249, including associated information, education and public participation activities. Check **one** of the following:

- 1. This project will cover the entire geographic area of the governmental unit.
OR
- 2. This project will cover only part of the geographic area of the governmental unit.

E. Comprehensive Storm Water Information and Education Program

- Check this box if the project will develop and/or implement a comprehensive storm water information and education program.
Note: This category may **not** be checked if any boxes in categories A through D, above, have been checked. Information and education activities are expected to be included as necessary components of projects under categories A through D.

F. Inter-Municipal and Watershed-based Cooperation (bonus)

- Check this box if this project is being conducted as part of an inter-governmental storm water management strategy for a common water resource. This also includes entering into a Watershed-based Storm Water Management Permit with other municipalities.
Note: If more than one local unit of government is joining in this project application (a "joint application"), then an Inter-Governmental Agreement (IGA) meeting the requirements of Attachment G must be submitted with this application.

Provide a description of the inter-governmental effort that will be used to complete the project.

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Question 2. Fiscal Accountability

A. Timeline and Source of Staff
For each applicable milestone listed below, fill in the appropriate data.

Milestone	Target Completion Date (month/year)	Source(s) of Staff
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Basic Milestones

Prepare preliminary scope of services and discuss with DNR NPS Coordinator	02/2016	Consultant and City
Prepare Request for Proposal	02/2016	City
Select Consultant	03/2016	City
Finalize Scope of Service and Professional Services Contract	03/2016	Consultant and City
Get DNR approval of Professional Services Contract	03/2016	Consultant and City
Hold "kick-off" meeting	04/2016	Consultant and City
Interim meeting with DNR	02/2017	Consultant and City
Presentation to Municipal Council	11/2017	Consultant and City
Submit project and final report to DNR	12/2017	Consultant and City

Additional Milestones (list below)

Complete Base Conditions Pollutant Load Analysis	07/2016	Consultant and City
Complete Existing Conditions Pollutant Load Analysis	12/2016	Consultant and City
Complete Existing Conditions Small Storm H&H Modeling	03/2017	Consultant and City
Complete Proposed Conditions Pollutant Load Analysis	08/2017	Consultant and City
Draft Report to City	09/2017	Consultant
Final Report to City	11/2017	Consultant

B. Adequate Financial Budget

Provide detailed budget information for every proposed project activity in Question 1. and supporting activities for which DNR funding is requested. Please note: the state share may not exceed 70% of eligible costs. The grant amount is capped at \$85,000 for the eligible planning activities.

B.1. Financial Budget Table - Planning Activities

A Project Activity for Which DNR Funding is Requested Use this space, not an attachment.	B Estimated Total Cost (\$)	C Amount from Column B Eligible for DNR Cost Sharing (\$)
See Attached	121,500	121,500
1. Total	121,500	121,500

B.1. (continued) Cost Sharing Worksheet

Eligible Costs:

2. 70% of Column C Total Row 1 above	\$	85,050
Cap Test:		
3. Maximum State Share Row 2 or \$85,000, whichever is less	\$	85,000
State and Local Share:		
4. Requested State Share Amount (Enter Requested Grant Amount)		
5. Local Share Amount (Total of Row 1 Column B less Row 4)	\$	121,500

B.2. Use of Additional Funding

- Check this box if both of the following conditions are met.
- The requested state share amount in row 4 is less than the \$85,000 grant cap.
 - The requested state share amount in row 4 is below the maximum state-share in row 3.
 (The resulting cost-share rate is less than 70%.)

B.3. Cost Estimate Quality Describe the quality of cost estimates including whether the cost estimate is based on a competitive bid, scope of services, similar projects conducted locally, similar projects conducted elsewhere in the state or region, or other more generalized data. Provide documentation.

The cost estimate is based on the scope of work negotiated between the City and Brown and Caldwell for completion of the tasks outlined in the scope of work. This cost estimate will be the contracted budget amount, assuming WDNR approval of the Professional Services Contract.

Identify the source of the local share:
 General Tax Levy

Question 3. Project Evaluation Strategy

Information that will be developed and presented to DNR to evaluate the environmental benefits of completing this project. Check all that apply.

- A. Information that quantifies how project implementation is projected to decrease storm water impacts on state waters will be provided to the DNR. The information may be provided as part of the planning product (e.g., storm water plan, I&E plan) or in the Final Report.
- B. Information that tracks progress in carrying out recommendations of this project will be provided to the Department for one or two years after the project is completed. Specify if it is going to be one or two years that tracking information will be provided and describe how this annual post-project tracking process will work:
 City staff will track implementation of the plan. Projects or changes in operation (such as street cleaning frequency increase) implemented during each calendar year will be documented in the Annual Report submitted to the WDNR by March 31st of the following year. This will occur until the City has met its TMDL WLAs for all reachsheds. The grant application asks for specification of if tracking will occur for one or two years. It is anticipated it will take longer than two years to implement SCMs that will meet each reachshed's WLA, therefore tracking will occur longer than two years.

Question 4. Water Quality Needs

The project must be consistent with at least one of the following seven watershed priorities. For each watershed in the project area, identify the category that best identifies the project goals. If more than one category is checked (because the project area contains more than one watershed), estimate the portion of the project area to be assigned to each category.

Note: For border waters where a State of the Basin Report does not exist, another governmental document acceptable to the District NPS Coordinator may be used to identify the water quality need.

	Percent of Project Area (Total should equal 100%)	Surface Water Considerations
<input checked="" type="checkbox"/>	100	<p>A. Clean Water Act section 303(d) List of Impaired Waters Project with water quality goals directly dealing with a water body (lake or stream) on the latest Clean Water Act (CWA) s. 303(d) List of Impaired Waters, where the cause of the impairment is nonpoint source pollution and this project will reduce the type of nonpoint pollutants for which the water is listed (see Attachment A and http://dnrmmaps.wi.gov/SL/?Viewer=SWDV).</p> <p>Name of Applicable Impaired Water: Menominee River, Fox River</p> <hr/> <p>Name of Pollutant Causing Impairment: Menominee River (PCBs, E. Coli, Total Phosphorus, Fecal Coliform, Unspecified Metals), Fox River (PCBs, Total Phosphorus, Sediment/Total Suspended Solids)</p>
<input type="checkbox"/>		<p>B. Outstanding or Exceptional Resource Waters or Other Areas of Special Natural Resource Interest Prevention of degradation due to nonpoint sources of outstanding resource waters (ORW) (per s. NR 102.10) or exceptional resource waters (ERW) (per s. NR 102.11) or other areas of special natural resource interest (ASNRI). To locate ORW/ERW and other ASNRI's see Attachment A and go to DNR's Surface Water Data Viewer Designated Waters Theme at http://dnrmaps.wi.gov/SL/Viewer.html?Viewer=SWDV&runWorkflow=DesignatedWaters.</p> <p>Name of Applicable ORWERW or ASNRI:</p>

<input type="checkbox"/>		<p>C. Not Fully Supporting Uses or NPS Ranking of High or Medium A water body (lake or stream) identified in a DNR-approved Basin/Watershed Plan as not supporting designated uses due to nonpoint sources, but is not on the section 303(d) List. In newer plans, these waters are categorized as "supporting" (as opposed to "fully supporting") designated uses; in plans prior to 2010 they were labeled as "partially meeting" designated uses. Or, the project is located in watershed, lake watershed, or other area ranked high or medium on the NPS Rankings List, where the goals of the project are directly associated with the reason for the ranking on the NPS Rankings List.</p>
<input type="checkbox"/>		<p>D. Surface Water Quality Prevention of degradation of surface water quality due to nonpoint sources</p>
		<p>Groundwater Considerations For assistance with this section, please consult the DNR District Drinking Water and Groundwater Specialist at: http://dnr.wi.gov/topic/drinkingWater/documents/CountyContacts.pdf or the County Extension office.</p>
<input type="checkbox"/>		<p>E. Exceeds Groundwater Enforcement Standard Groundwater within the project area where representative information indicates that stormwater pollutants in groundwater exceed the Enforcement Standard (ES).</p>
<input type="checkbox"/>		<p>F. Exceeds Groundwater Preventive Action Limit Groundwater within the project area where representative information indicates that storm water pollutants in groundwater exceed the Preventative Action Limit (PAL).</p>
<input type="checkbox"/>		<p>G. Groundwater Quality (see Attachment F) The project area is within a geological area defined in Attachment F as susceptible to groundwater contamination.</p>
Total:		
100		

Drinking Water Bonus Points (see Attachment E)

- Yes Check this box if the project water quality goals identified above relate to the reduction of nonpoint source contaminants in community or non-community public drinking water supplies. This includes any of the following: Municipal supplies governed by chs. NR 809 and 811; Other-Than-Municipal (OTM) water supplies governed by chs. NR 809 and 811; Non-Transient water supplies governed by chs. NR 809 and 811; Transient water supplies governed by chs. NR 809 and 812.
1. If "Yes," and you checked boxes E, F, or G, above, then mark a, b, or c, below and move on to question 6. (You will need assistance from your DNR District NPS Coordinator at <http://dnr.wi.gov/topic/nonpoint/NPSContacts.html> or Water Supply Specialist at <http://dnr.wi.gov/topic/drinkingWater/documents/CountyContacts.pdf> to answer.)
- a. Check this box if the project is located: within the wellhead protection area of a municipal well; or within 1,200 feet of a municipal well for which a wellhead protection area is not delineated; or within 1,200 feet of an Other-Than-Municipal (OTM) water supply well; or within 1,200 feet of a Non-Transient water supply well.
- b. Check this box if the project is located within 200 feet of a Transient water supply well.
- c. Check this box if **neither** a nor b applies
2. If "Yes," and you checked box A, B, or C or D above, then place a check mark next to the appropriate drainage area where the project is located. If the project is in more than one drainage area, enter the appropriate percentages in the boxes provided. (See Attachment E.)

Source Water Drainage Area	Portion of Project in Assessment Area (%)
<input type="checkbox"/> Pike River and Creek	<input type="text"/>
<input type="checkbox"/> Root River	<input type="text"/>
<input type="checkbox"/> Oak Creek	<input type="text"/>
<input checked="" type="checkbox"/> Milwaukee River	55
<input type="checkbox"/> Sauk Creek	<input type="text"/>
<input type="checkbox"/> Sheboygan and Onion Rivers	<input type="text"/>
<input type="checkbox"/> Manitowoc River	<input type="text"/>

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- Twin Rivers
- Kewaunee and Ahnapee Rivers
- Menominee River
- Fish Creek
- St. Louis and Nemadji Rivers
- Lake Winnebago

Question 5. Evidence of Local Support

For A. and B., check the applicable situation that exists at the time of application. Submit supporting information and documentation with the application.

A. Government

- 1. The local-share funds for this project's expenses are already included specifically in an **adopted** budget.
 - Evidence of the adopted budget is included with the application submittal.
Describe the document and list date of adoption:
The attached 2015 through 2019 CIP and Goals was adopted November 2014. The 2016 operating budget will be adopted in November 2015.
- 2. The local-share funds for the project expenses are or will be included in a **proposed** budget.
 - Evidence of the proposed budget is included with the application submittal.
Describe the document and list date for adoption;

B. Community Supporting information must be submitted with the application.

- 1. There is local community support from community stakeholders specifically for the project.
 - a. There is local support from citizen groups.
 - b. There is local support from municipal committees or councils representing the applicant.
- 2. There is community support for addressing general water resource needs in the community, even though there may not be evidence of support for this specific project.
 - a. There is general support from citizen groups.
 - b. There is general support from municipal committees or councils representing the applicant.

Question 6. Plans and Regulations

A. Consistency With Resource Management Plans

- Check this box if the proposed project focuses on plans to implement a water quality recommendation from a locally-approved resource management plan. Examples include Smart Growth plans, Legacy Community plans, Water Star plans, local Storm Water Management plans, wellhead protection, lake management, regional water quality plans, Remedial Action plans and other watershed-based nonpoint source control plans.
(This question does not include a TMDL report, TMDL implementation plan, or County Land and Water Resource Management Plan.)

If Yes, summarize the water quality recommendation and describe how it relates to the goals of this proposed project. Cite the title, author and date(s) of publication of the resource management plan. Attach pertinent page(s) or provide URL and page numbers.

Stormwater quality improvement is a priority to the City of Brookfield. It is discussed as a priority in the following locally-approved planning documents. Recommendations for improvement of water quality are also included in the planning documents.

City of Brookfield 2035 Comprehensive Plan; Adopted by City Council December 1, 2009

a. One of the Natural Resources and Recreation Policies stated in the plan is to "Permanently preserve the City's

greenway network and other environmentally sensitive areas to provide passive recreation opportunities, protect natural resources, and provide for flood control and stormwater management.”

- b. URL: <http://www.ci.brookfield.wi.us/index.aspx?NID=629>
- c. Chapter 5

City of Brookfield Park and Open Space Plan; Prepared by the Southeastern Wisconsin Regional Planning Commission; August 2011.

- a. One of the Goals stated in the plan is to “Ensure stewardship of... natural resources through effective management, enhancements, protection, and capital improvement projects.”
- b. <http://www.ci.brookfield.wi.us/DocumentCenter/Home/View/1646>
- c. Pages 25-28, 63

Excerpts from these documents are attached to this application.

B. Supporting Regulations

Check the box for the statement(s) that applies to this project. The project is located within an area which has:

- 1. The applicant (applying governmental unit) has regulations in place to administer and enforce construction erosion controls in the governmental unit that are consistent with the non-agricultural performance standards in s. NR 151.11. Include the web site where the regulation can be found (most direct web page URL) and page number(s).
<http://www.codepublishing.com/wi/brookfield/>
Chapter 15.20 Construction Site Erosion Control

Or check the box if a copy of the regulation is attached to this application.

- 2. The applicant (applying governmental unit) has regulations in place to administer and enforce post-construction runoff for areas of new development and redevelopment in the governmental unit consistent with the non-agricultural performance standards in s. NR 151.12. Include the web site where the regulation can be found (most direct web page URL) and page number(s).
<http://www.codepublishing.com/wi/brookfield/>
Title 14. Stormwater Management

Or check the box if a copy of the regulation is attached to this application.

Question 7. City of Racine

- Check this box if this is an application from the City of Racine for a project that is necessary for the city to comply with state storm water permitting requirements.

Part III. Eligibility for Multipliers

Completion of this part of the application is optional. However, an applicant can increase the final project score by qualifying for a project multiplier.

Local Implementation Program (select all that are in place as of the application submittal date)

- A. The governmental unit is implementing a pollution prevention information and education program targeted for property owners and other residents.
- B. The governmental unit is tracking storm water permitting activity (construction and post-construction) in the governmental unit and can make summary information available to the DNR upon request.
- N/A
- C. The governmental unit is implementing a nutrient management plan for municipally-owned properties of pervious area where nutrients are applied.

Optional Additional Information

Carefully review the answers to all of the questions above. Is there additional information that will add to the understanding of this project? If so, describe here.

The 2008 plan indicated the City had met its current permit requirements at that time. The plan's results, in combination with the legislative action that reduced the 40% TSS reduction requirement to 20%, meant the City did not have to implement additional stormwater management practices. Even though the City did not have to implement further stormwater management practices, they

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chose to participate in a green infrastructure program. Green infrastructure was installed in the following locations since 2008:

- Linfield Crossing - A Green Subdivision
- Saffro Toyota - Pervious Pavement used for their lot expansion
- Wirth Park - New green roof on the bath house

The City has an extensive grass swale network (as opposed to most developed areas). The City spends significant effort maintaining this system. A figure showing the City's drainage network is attached to this application (grass swale drainage is located where right-of-way existing and storm sewer is not shown.)

The city has also implemented number storm sewer projects. Although the main purpose of the projects is to alleviate flooding, storm sewer projects also provide a more efficient conveyance system to stormwater management practices and may reduce illegal connections to sanitary sewer systems if they are found during reconstruction. The following storm sewer projects have been implemented since 2008:

- 133rd Street Storm Sewer, 2009
- Evergreen Court Storm Sewer, 2009
- Cherry Hill Drive Storm Sewer, 2009
- City Library Storm Sewer, 2009
- Three Meadows Subdivision Storm Sewer, 2009
- Willow Ridge Lane Storm Sewer, 2009
- 186th Street Storm Sewer, 2010
- Mountain Drive Storm Sewer, 2010
- Tanglewood Drive Storm Sewer, 2010
- Bishops Woods Storm Sewer, 2011
- Elmridge Storm Sewer, 2011
- Lamplighter Bolter Storm Sewer, 2011
- Bermuda Boulevard Storm Sewer, 2012
- Kinsey Road Storm Sewer, 2012
- St. Therese Storm Sewer, 2012
- St. James Storm Sewer, 2013
- Cardinal Crest Storm Sewer, 2014
- Killarney Derrin Storm Sewer, 2014
- Park Pond Dredging Storm Sewer, 2015
- 145th Street Storm Sewer, 2015

The City is an active participant in the Menomonee River Group – a group formed by municipalities within the Menomonee River Basin to develop, promote and enhance information and education activities and public outreach and participation activities. City staff actively attend meetings and volunteer at the Menomonee Falls Annual Stormwater Education Event in February. As part of the group, the City has already updated their Construction Erosion Control, Post Construction Management, and Illicit Discharge Detection and Elimination ordinances to be consistent with the most recent updates to NR151

Applicant Certification

A Responsible Governmental Official (authorized signatory) must sign and date the application form prior to submittal to the DNR. The governmental official with signatory authority must be the person authorized by the Governmental Responsibility Resolution. I certify that, to the best of my knowledge, the information contained in this application and attachments is correct and true.

Signature of Government Official - Authorized Signatory

Date Signed

Thomas M. Grisa

4/14/15

Name (Please Print)

Title

Thomas M. Grisa

Director of Public Works

- Check this box if the required, completed Governmental Responsibility Resolution (GRR) (see Attachment H) is attached. Authorized signatory must be approved in the GRR.

Submittal Directions

To be considered for funding, provide the following for each application submitted:

- One hard copy of the completed application form [DNR Form 8700-299A (R 1/15) with original signature in blue ink and all attachments.
- Three additional hard copies of the completed, signed application form and all attachments.
- One electronic copy of the completed application form (this saved application form) in PDF format only plus all attachments on CD.

Project Name:

Citywide Stormwater Pollutant Reduction Plan

**UNPS&SW Program - Planning Grant
Application**

Form 8700-299A (R 1/15)

Page 12 of 13

All application materials must be postmarked by midnight **April 15 of the same calendar year.**

Mail to: State of Wisconsin
Runoff Management Section-WT/3
Department of Natural Resources
101 South Webster Street
Madison, WI 53703

PO Box 7921
or Madison WI 53707-7921

Project Name:

Citywide Stormwater Pollutant Reduction Plan

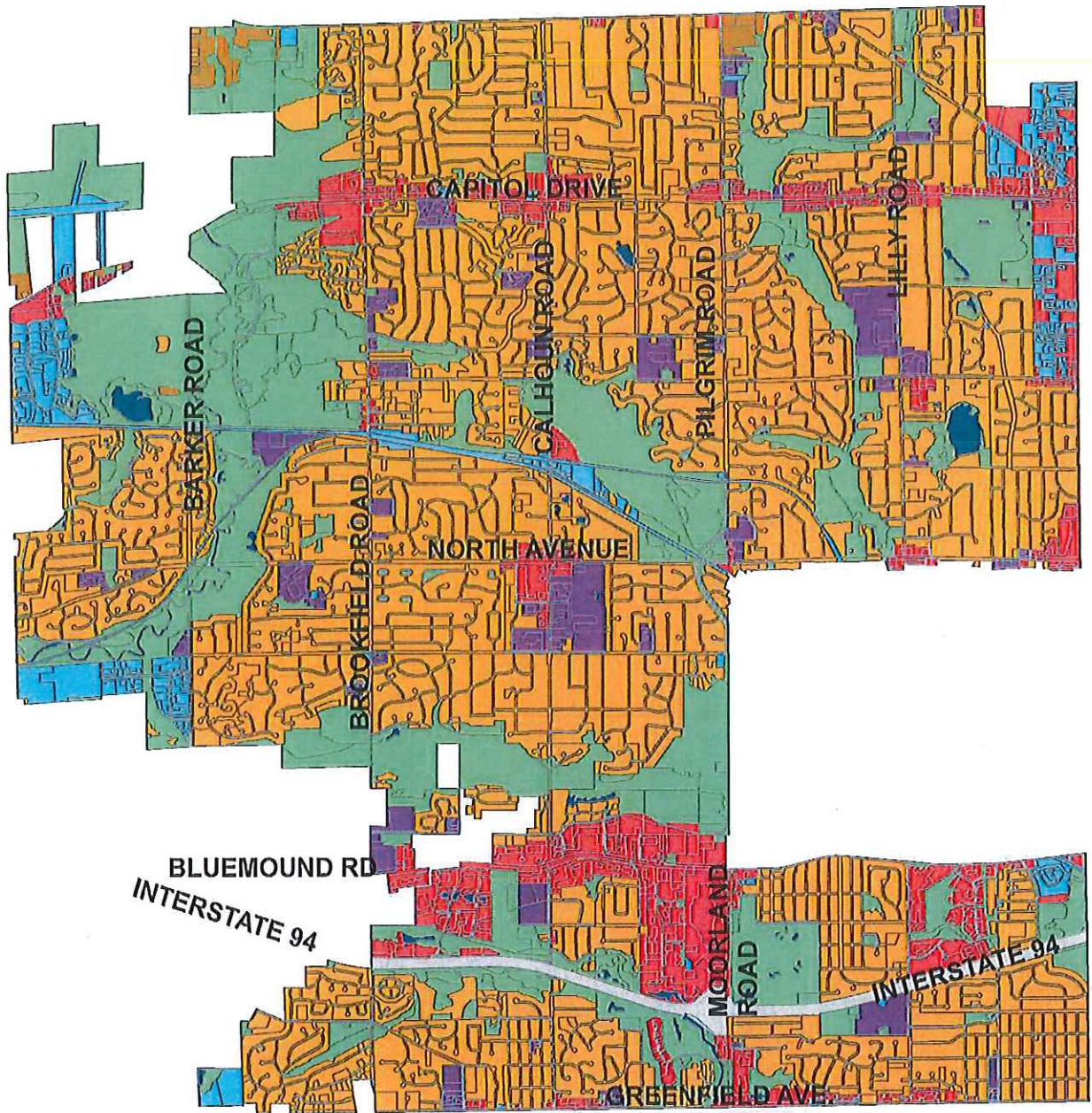
**UNPS&SW Program - Planning Grant
Application**

Form 8700-299A (R 1/15)

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Please use this page to write any constructive comment(s) you might have to improve this application.

Thank you.



- Schools and other institutional
- Commercial
- Industrial
- Residential
- Parks, cemeteries, open space
- Agricultural (excluded from model)
- Freeway (excluded from model)

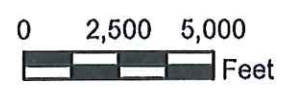


FIGURE 3

LAND USE CATEGORIES

City of Brookfield
 Nonpoint Source Pollution Analysis

**City of Brookfield
Citywide Stormwater Pollutant Reduction Plan
Scope of Work**

A. BACKGROUND

The City of Brookfield's stormwater discharge quality is regulated under a Wisconsin Department of Natural Resources (WDNR) issued Municipal Separate Storm Sewer System (MS4) permit. The City is part of the Menomonee River Watershed Permittees and the permit for the group was issued in 2012. The permit requires the City conduct various stormwater management programs including reduction of stormwater pollution from its existing stormwater conveyance system.

Additionally, a Total Maximum Daily Load (TMDL) is currently being developed for the Milwaukee River Basin. A little over half of the City is included in this basin. Draft waste load allocations (WLAs) are expected to be released in 2016. These WLAs will be new goals for phosphorus and sediment reduction from the City's stormwater conveyance system. Once reissued, the group permit will specify a schedule and requirements for the City to meet the TMDL pollution reduction requirements. The first step for permit compliance is the development of a city-wide stormwater management plan.

The scope of work described below will fulfill the Milwaukee River Basin TMDL stormwater planning requirements for the City of Brookfield. It will also provide a summary of the current pollutant reduction occurring in the portion of the City in the Fox River Basin. The work will build upon the information generated during the 2008 City of Brookfield Nonpoint Pollution WinSLAMM Analysis project (2008 Analysis) and minimize any duplication of effort. This study will update the 2008 plan for the existing urban areas. Also, the study will update the stormwater pollution loading analysis for each TMDL subbasin. The plan will be conducted in coordination with the WDNR so that the plan meets future MS4 permit requirements.

B. SCOPE OF WORK

Task 1.0 Project Meetings and Project Management

Face-to-face meetings with City staff and CONSULTANT are budgeted to allow for full communication during the project. An initial kick-off meeting will be held with the City and the WDNR to finalize the project goals, communications, schedule, and procedures. Three additional face-to-face meetings will be scheduled as determined best during the project.

Other forms of communications will include web-based meetings, conference phone calls, and emails as necessary to conduct the project in an efficient manner. Work under this task includes all meeting preparation, attendance, and meeting summary notes.

The budget for this task also allows for four (4) face-to-face meetings and four (4) web-based meetings over the course of the project.

Task 2.0 Re-establish Base Stormwater Pollutant Load Using Most Recent WDNR Guidance

CONSULTANT will conduct the following subtasks to re-establish the City's base stormwater pollutant load in keeping with the MS4 – TMDL Guidance. The loading analysis will be conducted for total suspended solids (TSS) and total phosphorus (TP).

2.1 Review and Modify GIS data per WDNR Guidance

CONSULTANT will compare the analyzed area in the 2008 Analysis to the area that must be used for purposes of TMDL compliance. CONSULTANT will modify the GIS data where needed. CONSULTANT will rely on City staff review of data to aid in the process and approve the revisions.

**City of Brookfield
Citywide Stormwater Pollutant Reduction Plan
Scope of Work**

Areas that will be reviewed for inclusion within the TMDL compliance area shall be limited to:

- October 2004 Land Use
- Undeveloped lands as of October 1, 2004
- NR 216 industrial permitted land
- Agricultural land as of October 1, 2004 and the “cut-off date” of the new TMDL stormwater management plan (this project)
- WDOT right-of-way areas within the municipal boundary (eligible state highways within the City)
- Riparian lands with no MS4 discharge
- Internally drained areas

Additionally, new areas developed (urbanized) since October 2004 will be added to the GIS coverage and categorized appropriately for pollution modeling purposes.

2.2 Re-Run Base Conditions

The City of Brookfield is subject to two permit requirements: 1) TSS reduction requirements as stated in the 2012 permit and 2) TSS and TP reduction requirements as stated in the TMDLs. The WinSLAMM stormwater pollution model (version 10.1 or newer) will be used to analyze the stormwater pollution discharged from the City’s regulated MS4 for both permit requirements. Base conditions for the 2012 permit requirement are defined by NR 216 and subsequent policy memos from the WDNR. CONSULTANT will conduct this analysis in accordance with the Administrative Code and WDNR guidelines. In general, the “base conditions” represent the urban stormwater pollution that existed under the land use conditions as of October 1, 2004, with no Stormwater Control Measures (SCM) measures in place. The TSS loading under base conditions establishes the “benchmark” against which TSS reductions are measured.

Base conditions for the TMDL purposes will be defined as land use conditions that exist October 1, 2004 at a 20% TSS control level.

The results for this task will be reported for both TSS and TP annual loading for the entire City and by TMDL subbasin.

Task 3.0 Re-establish Existing Conditions TSS and TP Loads

CONSULTANT will conduct the following subtasks to re-analyze the pollution reduction achieved by the City’s existing SCM. Measures in existence or under design as of October 1, 2015 will be included in the analysis.

3.1 Update Street Cleaning Modeling

At the time of the 2008 Analysis, the city conducted street cleaning in most areas of commercial, industrial, and institutional land uses approximately once per month using a regenerative air sweeper. The remainder of the City was swept once each spring. The city’s street cleaning schedule and current equipment will be updated to reflect current conditions, and remodeled using WinSLAMM v10.

3.2 Update Grass Swale Modeling

**City of Brookfield
Citywide Stormwater Pollutant Reduction Plan
Scope of Work**

The modeling conducted for the 2008 Analysis will be updated using WinSLAMM v 10.1. The newer version of WinSLAMM allows incorporation of multiple measures in series (such as stormwater ponds and grass swale drainage) to be modeled more accurately.

3.3 Model Wet Detention Basins Included in 2008 Analysis (Approximately 40 Basins)

The 2008 Analysis accounted for the existing wet detention basins within the developed urban area. The basins will be re-modeled under this task:

3.4 Account for SCMs treating Development since October 2004 (Approximately 40 SCMs)

There are numerous SCMs treating areas that were developed after October 2004. The SCMs will be accounted for either by modeling the SCMs or utilizing the information from the Stormwater Management Plans created for the developments.

3.5 Summarize Existing Results

CONSULTANT will model annual loadings of stormwater pollutants for TSS and TP using WinSLAMM for the City's existing SCMs. The results will be presented in the following formats:

- 1) Tabular
 - a. Base TSS and TP load for each watershed and reachshed
 - b. Existing TSS and TP annual load for each watershed and reachshed
- 2) Graphical
 - a. GIS maps of base TSS load by watershed, and by load/acre/yr for each watershed and reachshed
 - b. GIS maps of existing TSS load by watershed, and by load/acre/yr for each watershed and reachshed

As with the base conditions modeling, the results will be reported two ways: 1) TSS reduction requirements as stated in the 2012 permit and 2) TSS and TP reduction requirements as stated in the TMDL.

Task 4.0 *Evaluation of Proposed SCMs*

4.1 Develop Proposed Stormwater Control Measures

The 2008 Analysis did not include a proposed SCM implementation plan as the City was meeting their permit goal at that time. The CONSULTANT will develop an SCM Implementation plan that meets the draft WLAs of the Milwaukee River Basin TMDL. Proposed SCMs will be located via desktop analysis followed by site visits. The selected proposed SCMs will then be evaluated using WinSLAMM v10. The evaluation will include both TSS reduction and TP reduction on an annual basis. Because the Fox River Basin TMDL is not anticipated for several years and thus WLAs are not available, proposed SCMs will only be located and evaluated for the area of the City in the Milwaukee River Basin.

4.2 Develop SCM Cost Estimates

Cost estimates for each proposed SCM will be developed using information from the most recent bid tabs for other stormwater projects within the City and surrounding area.

4.3 Incorporate Proposed Redevelopment Areas

**City of Brookfield
Citywide Stormwater Pollutant Reduction Plan
Scope of Work**

There are areas within the City of Brookfield that may have planned redevelopment. Redevelopment is subject to the post-construction standards of NR151. Additionally, municipalities with areas subject to TMDL requirements may enact ordinances requiring additional pollution reduction to aid in TMDL compliance. CONSULTANT will work with the City to identify areas that have planned redevelopment and determine a realistic pollution reduction that can be applied to these areas when they redevelop.

Task 5.0 Small Storm Conveyance System Analysis

The CONSULTANT will develop an XP-SWMM 2D model of the City's stormwater conveyance system and overland flow areas. The 1- and 2-year, 24-hour storm events will be evaluated. The purpose of the analysis will be to quantify the low flow/water quality flow rates reaching each proposed SCM.

5.1 Hydrology

Because the smaller storm events will be analyzed under this scope, NRCS hydrology will be utilized with TP-40 rainfall reference. The same subbasins used for the stormwater quality analysis will be used for the conveyance system analysis. Curve numbers and time of concentrations for each subbasin will be developed and entered in the model.

5.2 Hydraulics

The conveyance system will be built based on the City's existing GIS data. Storm sewers 24 inches in equivalent diameter or larger will be modeled. The grass swale conveyance system will generally be depicted by the 2D grid built in Task 5.3. However, where appropriate, up to ten "1D" channels will be generated based on available topography and entered into the model.

Up to ten flood control basins will be modeled. The basins will be selected by City staff and the CONSULTANT based on their expected attenuation of the smaller storm event hydrographs. The basins will be modeled using "1D" links and nodes.

The major streams will not be included in the model – only the City's conveyance system that discharges to the streams.

5.3 2D Model and Results

LiDAR data will be brought into XP-SWMM 2D to create the surface model that will be used to define overland flow paths. The City's impervious surface data will be used to develop the overland flow land use.

The model will be run for the specified storm events and the results will be summarized in a tabular format. Should street flooding occur in the smaller storm events, a graphical representation of the flooded areas will also be generated.

Task 6.0 Prepare Updated Stormwater Management Plan for TMDL Compliance

CONSULTANT will prepare a plan which: 1) documents modeling methodology, 2) compiles annual TSS and TP pollution loadings into appropriate tabular format(s), 3) documents the pollution control

**City of Brookfield
Citywide Stormwater Pollutant Reduction Plan
Scope of Work**

(TSS and TP) achieved by existing management measures, 4) identifies the potential new SCMs' pollutant removal efficiency and cost, and 5) documents the small storm event analysis. Finally the report will provide a direction and compliance schedule for the City to meet the TMDL requirements as contained in the MS4 permit.

The report will also contain maps displaying the results of the modeling and the potential locations of proposed SCMs. The City will review this report and provide comment to the CONSULTANT before it is finalized.

CONSULTANT will provide 2 hard copies of the draft report for City review. CONSULTANT will provide 5 hard copies and an Adobe format file of the final report to the City. In addition, CONSULTANT will provide GIS files prepared under this scope of work as requested by the City.

C. ASSUMPTIONS

1. The City shall furnish CONSULTANT all available maps, orthophotographs, stormwater conveyance system drawings, stormwater management plans, parcel graphical and tabular data, previous stormwater management planning data, and other relevant stormwater management data, all of which may be relied upon without independent verification in performing the Scope of Work. It is also assumed that the above information will be provided at no cost to the project. Data files will be provided digitally to CONSULTANT if available or paper copy format (if a digital format is not available).
2. Some information provided by the City may be inaccurate or unreliable. CONSULTANT cannot be responsible for inaccuracies in the data supplied by the City. Field verification of the data is not included in the Scope of Work.
3. Preparation of design plans, specifications, or construction documents are not included in this scope of work.
4. The scope of work includes site visits for proposed SCM siting. It does not include any field investigations including, but not limited to: wetland delineations, environmental investigations, floodplain mapping, endangered species investigation, or archeological investigations.

D. BUDGET AND COMPENSATION

The estimated budget for the scope of work is provided in the table below.

Tasks and Sub Tasks		Hours	Budget
1.0	Project Meetings & Project Management	132	\$18,620
2.0	Re-establish Base Load Using Most Recent WDNR Guidance	128	\$13,570
2.1	Review and Modify GIS data per WDNR Guidance	100	\$10,060
2.2	Re-Run Base Conditions	28	\$3,510
3.0	Re-establish Existing Conditions TSS & TP Loads	340	\$32,260
3.1	Update Street Cleaning Modeling	23	\$2,290
3.2	Update Grass Swale	35	\$3,500

**City of Brookfield
Citywide Stormwater Pollutant Reduction Plan
Scope of Work**

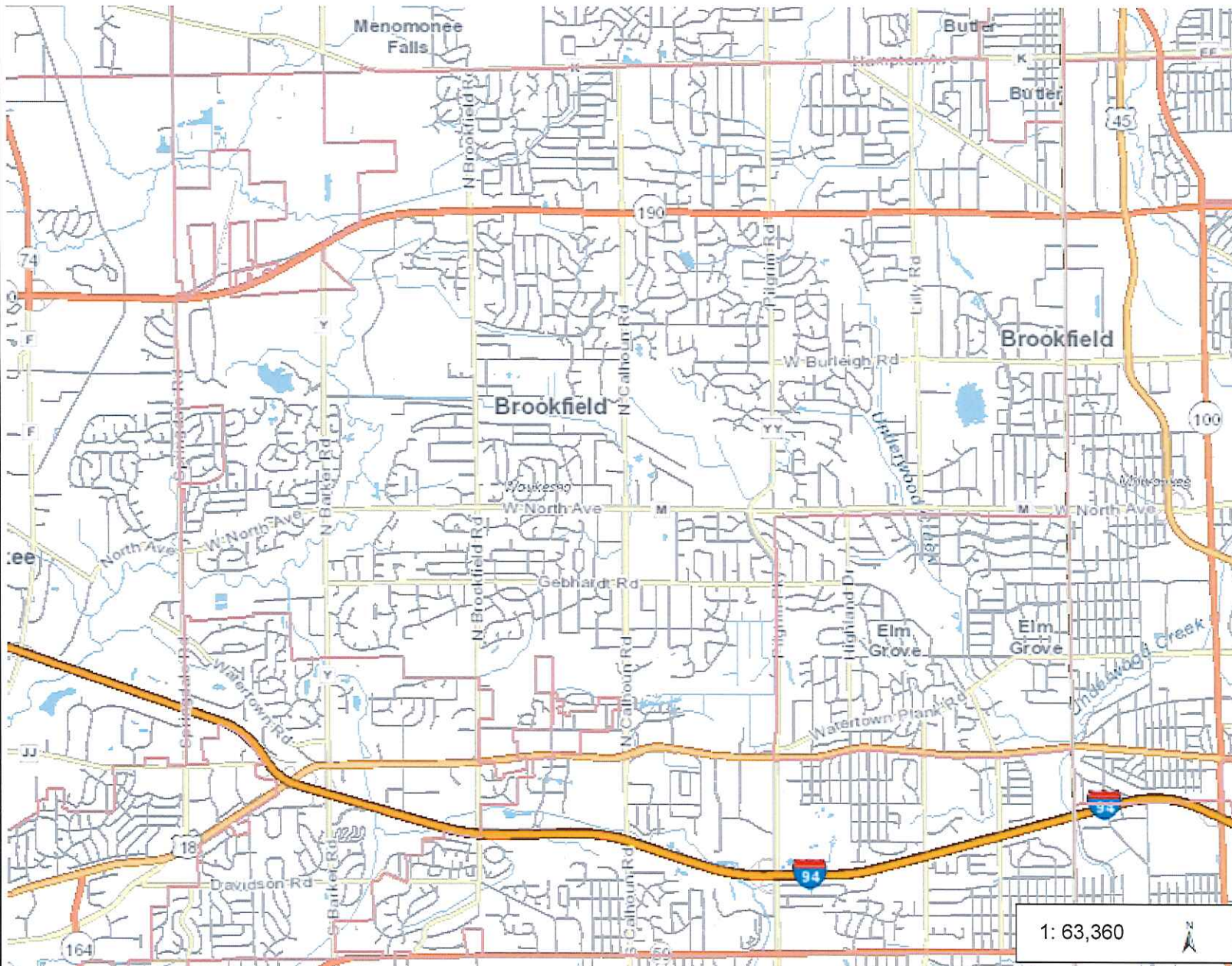
3.3	Update Wet Detention Basin Modeling for Basins Included in 2008 Analysis	116	\$10,610
3.4	Account for SCMs on Development since Oct 2004	116	\$10,610
3.5	Summarize Existing Results	50	\$5,250
4.0	Evaluation of Proposed Stormwater Control Measures	157	\$15,450
4.1	Update Proposed Stormwater Control Practice Evaluation	108	\$10,440
4.2	Update Stormwater Control Practice Cost Estimates	26	\$2,720
4.3	Incorporate Proposed Redevelopment Areas	23	\$2,290
5.0	Small Storm System Conveyance System Analysis	308	\$28,290
5.1	Hydrology	104	\$9,580
5.2	Hydraulics	104	\$9,580
5.3	2D Model and Results	100	\$9,130
6.0	Prepare Updated Stormwater Management Plan for TMDL Compliance	125	\$13,290
	Total:	1,190	\$121,480

E. SCHEDULE

The project schedule is expected to require twenty months to complete from the start date.



Surface Water Data Viewer Map



Legend

- Cities, Towns & Villages
 - City
 - Village
 - Civil Town
- Rivers and Streams
- Open Water

1: 63,360



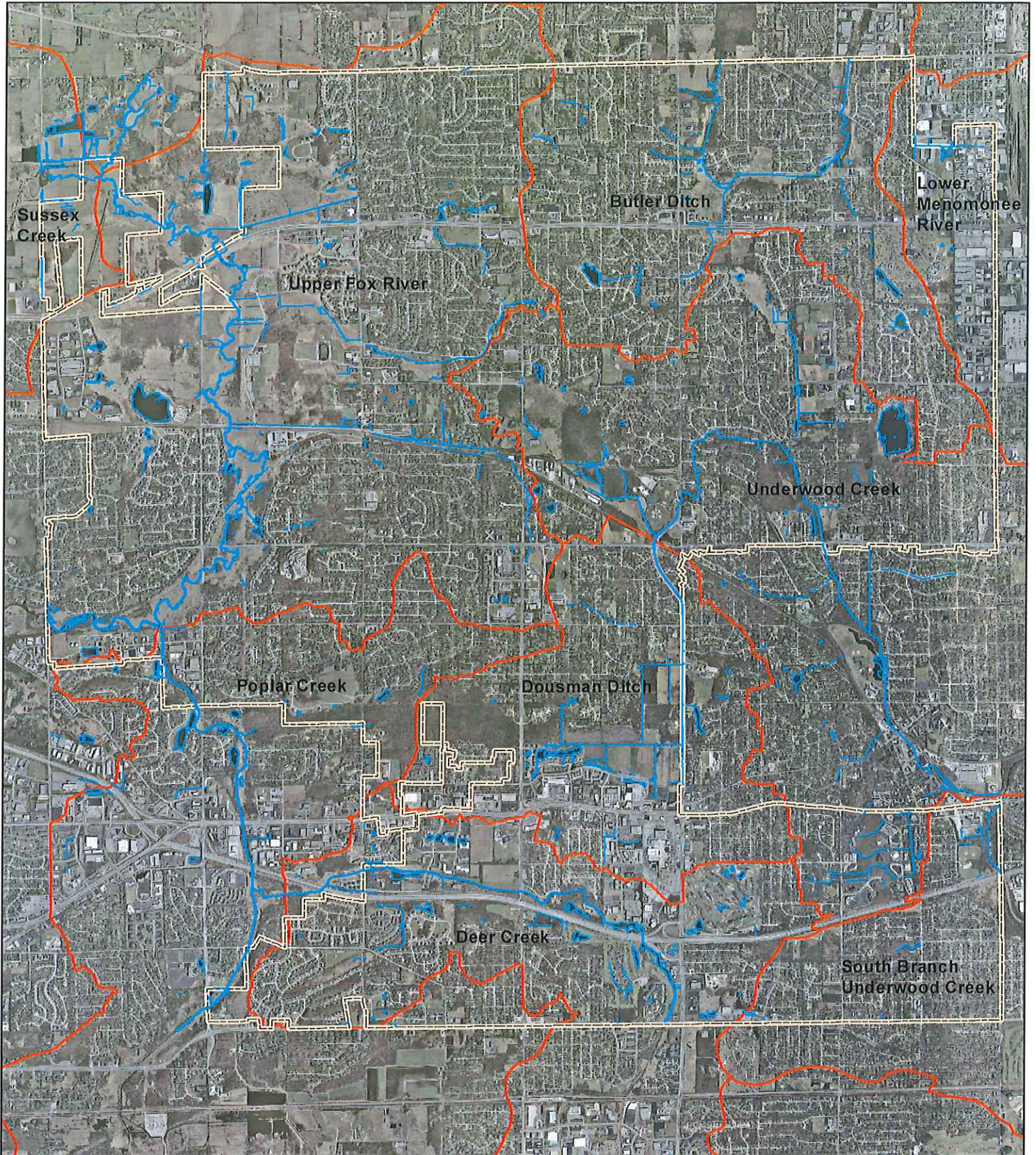
2.0 0 1.00 2.0 Miles

NAD_1983_HARN_Wisconsin_TM
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Notes

Sub-watershed Basins
City of Brookfield, Waukesha County



Department Category	2015	2016	2017	2018	2019	Total	Future
------------------------	------	------	------	------	------	-------	--------

Police Department

Buildings

Public Safety Building HVAC Update 140,000 140,000

Category Sub-Total 140,000 140,000

General Equipment

Automatic License Plate Reader systems 31,000 31,000

Property Room Upgrade 85,000 85,000

Category Sub-Total 31,000 85,000 116,000

Department Total: 171,000 85,000 256,000

Stormwater

Storm sewer prior to road work

North Avenue / Hollyhock Lane storm sewers 750,000 750,000

Ann Rita / Macaulay storm sewer 50,000 50,000

Calhoun Rd. - North Ave to RR tracks storm sewer 300,000 300,000

Category Sub-Total 800,000 300,000 1,100,000

Storm Sewers

N. 145th St: Butler Ditch to Cameron Dr. upper 1,800,000 1,800,000

Harvest/Green Valley/ Bonnie Ln. 935,000 935,000

Gebhardt Rd.: Averno to Churchview 95,000 95,000

Lucy Circle / Evergreen CL storm sewer 50,000 50,000

Burdawn CL / Burlawn Pkwy storm sewer 15,000 16,000

Calhoun Rd. storm sewer - Civic Area 800,000 800,000

Category Sub-Total 1,800,000 935,000 160,000 800,000 3,695,000

Stormwater conveyance

Update City Stormwater Management Plan 250,000 250,000

Category Sub-Total 250,000 250,000

Department Total: 1,800,000 1,185,000 960,000 1,100,000 5,045,000

Transportation - Bike Paths

Bike Paths

Miscellaneous Bike Path sections 50,000 50,000

N. 124th St: Burrelgh Rd. to pl. N/ of North Ave. 200,000 200,000

Pilgrim Rd.: Burrelgh to Pomona 75,000 75,000

Elm Grove Rd.: Bluemound to Greenfield 250,000 250,000

Brookfield Road: at Burrelgh over wetlands 100,000 100,000

Brookfield Rd.: Ashbourne La. to Davidson Rd. 50,000 50,000

North Avenue: Barker Road to Springdale Road 250,000 250,000

North Ave.: N. 124th St. to Pilgrim Pkwy 300,000 300,000

Calhoun Road: North Avenue to Capitol Drive 250,000 250,000

North Ave.: Pilgrim Pkwy to Calhoun Road 150,000

Category Sub-Total 275,000 350,000 300,000 300,000 300,000 1,525,000 150,000

Department Total: 275,000 350,000 300,000 300,000 300,000 1,525,000 150,000

	Meadows of Brookfield Park (City borrowing)	The 2035 Park and Open Space Plan, adopted by the Common Council, recommends that this 5 acre undeveloped site located in Section 26 in the southeastern portion of the City be developed as a neighborhood park to serve the outdoor recreation needs of the residents in the surrounding service area (i.e. 1/2-1 mile radius). A substantial number of area residents have expressed support for the project through a formal petition presented to the Parks & Recreation Commission and the Commission has endorsed moving the project forward in 2015. Facilities proposed for the site include a playfield area, playground, an area for picnicking and other passive use, and appropriate support facilities.
Police Department		
	Public Safety Building HVAC Update (City borrowing)	Replace chiller and related HVAC equipment at the Public Safety Building. Existing equipment is original to construction of building in 1991 and has reached end of its useful life. Performance of equipment and comfort of building occupants is substandard. Project would be combined with other Public Safety building modifications/repairs. Utility cost savings would be expected from modernized equipment.
	Automatic license plate reader (ALPR) systems (City borrowing or surplus funds)	ALPR technology consists of 3 or 4 cameras mounted on a patrol vehicle, combined with software mapping & GPS systems that automatically scan license plates as they are encountered on the roadway or in parking lots and immediately cross-references the information with criminal and transportation data bases. Time, date, location and vehicle information would be recorded for future investigative purposes.
	Property Room upgrade (City borrowing)	Renovate and expand property/evidence areas to include new high density shelving, property and evidence software, and security/access upgrades.
Stormwater		
	North Avenue/Hollyhock Lane storm sewers (City borrowing)	Storm sewer improvements in coordination with Waukesha County's improvements on North Avenue.
	Storm Sewers (Funded by combination of annual tax levy allocation and City borrowing): - 145 th Street: Butler Ditch to Cameron Drive - Ann Rita/Macauley - Calhoun Road – North Avenue to RR tracks - Harvest Lane/Green Valley/Bonnie Lane - Gebhardt Road – Alverno to Churchview - Lucy Circle/Evergreen Court - Burlawn Court/Burlawn Parkway	New storm sewers or related improvements prior to repaving of road, to improve conveyance, or to address identified capacity deficiencies in some areas. Addition of storm sewers may increase maintenance costs. Additional storm sewer cleaning in response to DNR mandates may also impact operating costs.
	Calhoun Road storm sewer - Civic Area (tax levy allocation and City borrowing)	Storm sewer improvements as part of drainage improvements in the Civic Center/along Calhoun Road.
	Update City stormwater management plan (tax levy allocation)	Update would include stormwater conveyance, compliance with Total Maximum Daily Loads (TMDL) and adherence to watershed based permit requirements for stormwater quality. The City's stormwater plan had its last comprehensive update in 2003.



March 25, 2015

Wisconsin Department of Natural Resources
101 South Webster Street
P.O. Box 7921
Madison, WI 53707-7921

RE: Letter of Support - Urban Nonpoint Source & Storm Water Management Planning Grant
City of Brookfield

To Whom It May Concern:

On behalf of Waukesha County's Park and Land Use Department, please accept this letter in support of for the above noted grant application from the City of Brookfield. This grant will help the City develop a long-range strategy for improving water quality in the Menomonee and Fox River Watersheds. The Menomonee River is the subject of a recent TMDL plan while the Upper Fox River Watershed has been a target area for County nonpoint pollution abatement efforts for many years.

This grant would be one small step toward meeting the water quality goals outlined in the Waukesha County Land and Water Resource Management Plan.

Thank you for this opportunity to share our support for this project.

Sincerely,

A handwritten signature in black ink that reads 'Perry M. Lindquist'.

Perry Lindquist
Waukesha County Land Resource Manager

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607 • TELEPHONE (262) 547-6721
FAX (262) 547-1103

Serving the Counties of:

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WASHINGTON
WAUKESHA



March 12, 2015

Mr. Thomas M. Grisa, P.E.
Director of Public Works
City of Brookfield
2000 North Calhoun Road
Brookfield, WI 53005

Dear Mr. Grisa:

We are writing in support of the City of Brookfield's application to the Wisconsin Department of Natural Resources (WDNR) for an Urban Nonpoint Source & Storm Water Management Grant. It is our understanding that the grant would be used by the City to improve stormwater treatment through updating its stormwater management plans for both the Menomonee River watershed (Lake Michigan Basin) and the Fox River watershed (Mississippi River Basin) portions of the City, including preparing updated Source Loading and Management Models (SLAMM), and to establish a program for the City to address third-party total maximum daily loads (TMDLs) that are being developed for streams in the Menomonee River watershed by the Milwaukee Metropolitan Sewerage District in collaboration with WDNR and the U.S. Environmental Protection Agency. The program to address the TMDLs for stream reaches within the City would be developed in anticipation of TMDL wasteload allocations being incorporated in the next WDNR municipal separate storm sewer system (MS4) discharge permit for the City.

In our role as the designated areawide water quality planning agency for the Southeastern Wisconsin Region, we prepared, and continually amend and update, the regional water quality management plan for the seven-county Southeastern Wisconsin Region. The most recent major subregional update to that plan was completed in 2007 under a collaborative planning project with MMSD and WDNR under which the MMSD 2020 facilities plan was developed in conjunction with preparation of an update to the regional water quality management plan for the greater Milwaukee watersheds. The Menomonee River watershed was included under that study. In addition, we worked with eleven Menomonee River watershed municipalities, including the City of Brookfield, WDNR, and MMSD to develop a framework which formed the basis for the current Menomonee River watershed-based MS4 permit for the eleven municipalities. Finally, we prepared the initial stormwater management plans for the Menomonee River watershed portions of the City of Brookfield.

The proposed City stormwater management program is consistent with the objectives of the regional water quality management plan, and will be an important component of an overall program to improve water quality in the Fox and Menomonee River watersheds. Also, in light of the anticipated new

Mr. Thomas M. Grisa
Page 2
March 12, 2015

regulatory framework under which TMDL wasteload allocations would be included in stormwater discharge permits, it is appropriate, and necessary, that the City's stormwater management plans be updated. We commend the City of Brookfield for undertaking this important project.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth R. Yunker". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Kenneth R. Yunker, P.E.
Executive Director

KRY/MGH/dd
#00224342.DOC

cc: Ms. Theresa J. Caven, P.E., City of Brookfield

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CHAPTER FIVE: NATURAL RESOURCES AND RECREATION

The community's greenways are one of the three major components of the City's overall community development and preservation approach (neighborhoods and Targeted Investment Areas are the other two)—and for good reason. Brookfield enjoys two active community parks—Mitchell and Wirth—and Foxbrook County Park, a growing and extremely popular greenway trail network, natural assets like the Fox River, and a community attitude that supports green space preservation. The City of Brookfield also practices progressive open space and wetland preservation for the multiple benefits they provide, including flood control, natural resource and habitat protection, and tangible relief from the impacts of development.

This chapter is intended to lay out where and how the City will preserve, provide, and restore sensitive natural areas, parks, greenways, and recreation areas. Its relatively short length should not be interpreted as a reflection of the importance of natural resources and recreation in the community. Instead, it is a reflection of the fact that the City has a tradition of complete and regularly updated set of park and greenway plans, upon which most of the recommendations in this chapter are based.

Natural Resources and Recreation Principle (Goal)

Brookfield enjoys vibrant parks, trails, and restorative natural landscapes; is a careful steward of water and other resources; and is a center for culture, recreation, hospitality, and entertainment.

Natural Resources and Recreation Objectives

1. Ensure the provision and distribution of parks, open spaces, and recreational facilities to provide all residents access to such facilities.
2. Provide safe and convenient pedestrian and bicycle access between residential neighborhoods and schools, parks, other recreational facilities, and major shopping and job destinations.
3. Work to permanently preserve the City's greenways.
4. Balance the interest in acquiring and developing new park and recreational facilities with the need to maintain and upgrade existing park sites and facilities.

Natural Resources and Recreation Policies

1. Refer to the City's Park and Open Space Plan for objectives and policies related to the greenway trail network.
2. Update the City's Park and Open Space Plan every five years to retain City eligibility for a wide array of state and federal funding sources.
3. Refer to the City's Greenway Trail Plan for objectives and policies related to the greenway trail network.
4. Integrate trail/path planning with road reconstruction projects to enhance transportation options in Brookfield, considering the combined recreational and transportation purposes that trails and paths can provide.
5. Permanently preserve the City's greenway network and other environmentally sensitive areas to provide passive recreation opportunities, protect natural resources, and provide for flood control and stormwater management.

6. Protect wetlands, river and stream corridors, groundwater and surface water resources as central to environmental and human health, and evaluate City decisions and private land developments to the degree that they protect or even enhance these resources.
7. In the consideration of land acquisition and the review of private development proposals, consider the impact on rare, threatened and endangered species and wildlife habitat in general.
8. While the City has scattered woodlots that it has taken measures to protect and in some cases purchase, it no longer has forests, productive agricultural areas, or opportunities for future active metallic and non-metallic mineral resource excavation, and therefore this Plan has no policies related to those types of resources.
9. Utilize the trail and parks system to host events that bring visitors to Brookfield, such as softball, running, bicycling, fitness training, and other team and club events and tournaments.
10. Recognize the City's greenways as opportunities to create engaging community gathering places and contributors to the City's overall identity.
11. Coordinate City park, trail, open space, and natural resource planning and improvements with Waukesha County, the Southeastern Wisconsin Regional Planning Commission (SEWRPC), and the Wisconsin Department of Natural Resources (WisDNR). Where feasible, provide continuous public ownership and trail access between City and regional recreational facilities.
12. Encourage volunteer participation and resident stewardship in maintaining existing and future parks.
13. Support existing and future hospitality and entertainment land uses, particularly in the Moorland Road corridor, to draw and serve visitors and enhance the City's tax base. In addition, enhanced hospitality venues serve to widen the appeal to Brookfield residents to dine, shop and access entertainment locally. See Chapter Eight: Special Places for additional recommendations.

Natural Resources and Recreation Programs and Initiatives

The City intends to pursue the following initiatives in support of its vision for natural resources and recreation:

Prioritize Implementation of the City's Current Park and Trail Plans

Brookfield's park, recreation, and open space system is one of the key assets of the City and its completion was consistently ranked as a high priority for participants in the planning process. There are currently approximately 1,800 acres of protected open space in the City including lands used for public and private recreation, and floodplains and wetlands that are publicly owned. As suggested in the Community Vision Report, it is anticipated that with full development of the City and full implementation of existing park and greenway plans, there will be a total of 3,400 acres of permanently protected open space, either because it will be publicly owned or protected through regulation of private land.

The City's current park, greenway acquisition, and greenway trail plans are depicted on Map 2. The City intends to complete this system for the multiple recreational, stormwater management, flood control, and neighborhood and community enhancement purposes they serve. Trail linkages within the greenways will be completed for both recreation and transportation purposes, leading to a more healthy and sustainable community.

Specifically, unless a future park or trail plan update suggests otherwise, the City intends to prioritize the acquisition and development of the following new parkland and recreational facilities:

- Acquisition and development of new neighborhood parks in the northeastern and southeastern portions of the City.
- Additional lands added to Mary Knoll Park.
- Acquisition and development of pocket parks in certain Targeted Investment Areas (Brookfield Square-Executive Drive for example).
- Development of the Northeast District Park, Section 4 neighborhood park (Imperial Site leased from the School District of Elmbrook), Meadows or Brookfield Park, Mound Zion Park, and Mitchell Park.
- Development of additional trails, trailheads, and wayfinding signs that are part of the greenway trail network.



The pool in Wirth Park is a key recreational and gathering spot for Brookfield residents

Consider New Ideas in Planned Updates to City Park and Trail Plans

Both the City's Park and Open Space Plan and Greenway Trail Plan are scheduled for updates in 2010. As part of those updates, the City will consider the following new ideas that emerged during the comprehensive planning process:

- Possible additional trails, including a trail between the Village Area and Springdale Road to better connect nearby neighborhoods, the Gateway West Commerce Center, Mitchell Park, and the potential high-speed rail station in the Village Area.
- Potentially applying themes to trails/greenways in different parts of the City to mark differences and emphasize sustainability and "Garden City" opportunities. The initiative that follows provides additional details on this idea.
- Within Mitchell Park or elsewhere, consider the creation of a botanical garden, perhaps with a focus on native/prairie vegetation. The idea of a botanical garden or similar destination proved very popular in the community survey conducted as part of the comprehensive planning process.
- A continuing emphasis on maintenance and stewardship of existing and future parks and recreation facilities through effective management, enhancements, protection, and capital improvement projects.
- A continuing consideration of partnerships and alliances to increase community outreach and effectively enhance the provision of all aspects of parks and recreation services and facilities. This may include an expanded partnership with the School District of Elmbrook and Brookfield Academy (e.g., Safe Routes to School) and expanded volunteer programs. The City could potentially work more with the Eagle Scouts, Key Club, persons requiring court-ordered community service, members of the business community, and seniors.

- A continuing consideration of grant opportunities, and working to best position projects for grants. For example, positioning or doubling the greenway trail update to also meet “Safe Routes to School” criteria would significantly increase non-City funding options.

Consider Establishing Unique Identities for Different Greenway Segments

One component of the City’s vision is enhancing its identity based on its history and open space character. The greenway network and associated trail corridors provide opportunities to accomplish this aspect of the 2035 Vision. The following ideas (or others) for unique trail identities will be explored as part of the next park and trail plan update processes.

- Mitchell Park Greenway: This greenway could have an arts theme with art works, artist designed landscape, and informal performance spaces.
- Calhoun Road Greenway: This greenway could celebrate Brookfield's agrarian past by utilizing decorative crop and or edible plantings.
- 124th Street Corridor Greenway: This greenway could include "green nodes" at major intersections that tell the story of Brookfield’s natural resources and their role in creating industrial opportunities in the Milwaukee area.
- Village Area: This greenway could tie into the historical character of this area by showcasing Heirloom plantings and information about Brookfield’s history. Discussion of the City’s rail history would be particularly relevant because the Village Area was the first stop completed on the first railroad built in Wisconsin (from Milwaukee to La Crosse), a historic depot still exists, there remains significant freight rail traffic, and there is a real possibility of the reintroduction of passenger rail service.
- Civic Center: This greenway could highlight local, state, and national civics, acknowledging that Brookfield is part of something larger. For example, displays could include information on the official state tree (sugar maple), the official state flower (wood violet), the official state grain (corn), the official state rock (red granite), the official U.S. tree (oak), and official US flower (rose). In fact, roses are already planted by the City as part of the Civic Center landscaping.
- Northwest Gateway: This greenway could focus on sustainability, with native plantings, pervious trail surfaces, and views of natural areas.



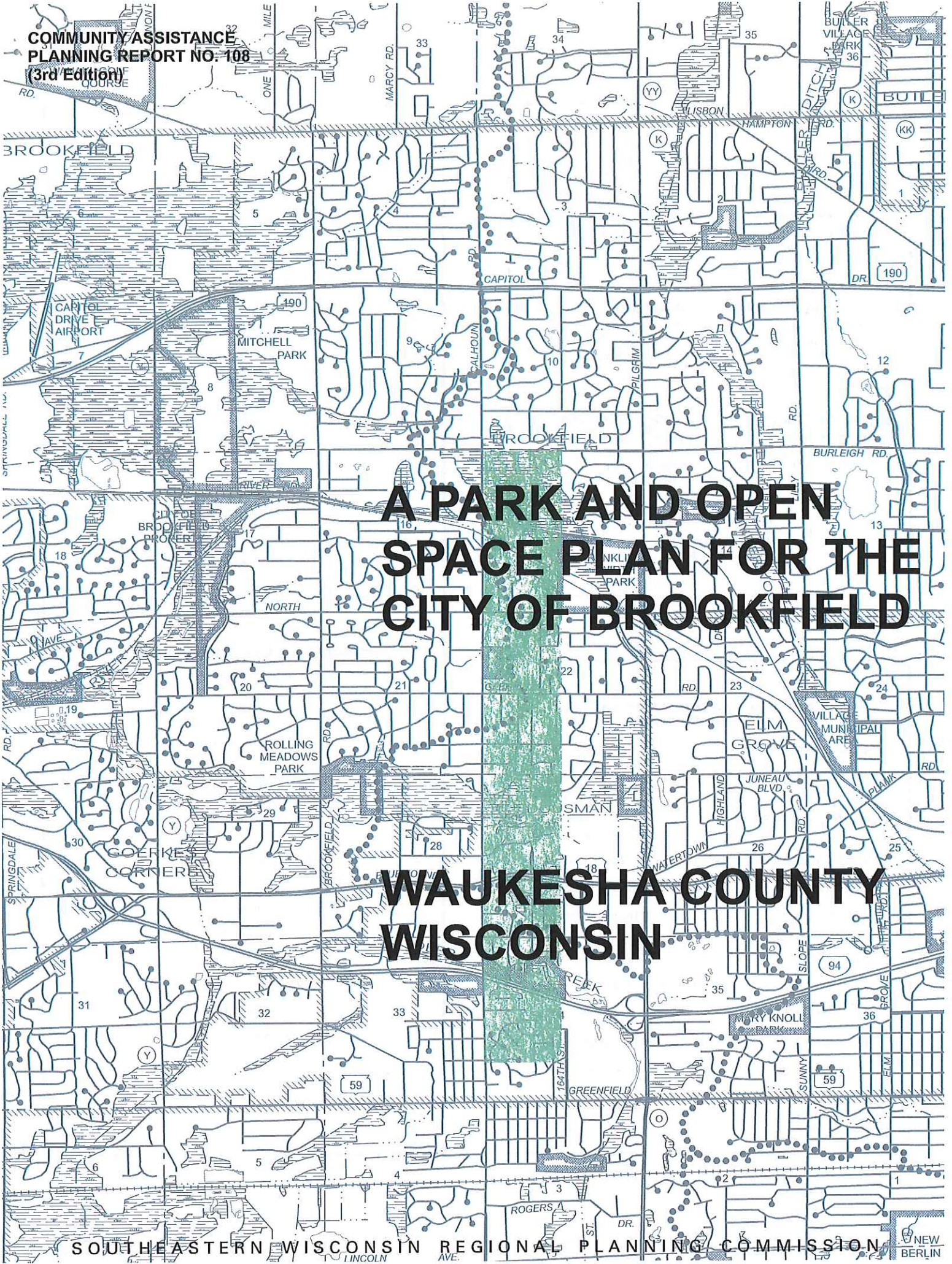
The greenway trail in Wirth Park is one of several recent trails added to the City’s growing network

Update and Coordinate Park and Recreational Planning

The City intends to continue to update park and trail plans in an effort and format to integrate them where possible and to maximize non-City funding options. Currently, the City has a Park and Open Space Plan (last updated in 2001), a Greenway Corridor Recreational Trail Plan (last updated in 2002), and a comprehensive/strategic park plan that is more frequently updated. The proposed update to the Park and Open Space Plan would maintain the City eligibility for to State Stewardship and federal LAWCON grant funding. The proposed update to the Greenway Corridor Recreational Trail Plan could potentially be linked with a “Safe Routes to School” plan (a federal program designed to enhance safe access to and from schools), which would open up trail development to federal transportation funds for that purpose. The Trail Plan could also consider and provide

recommendations to cross major barriers, like wide roads and the railroad. Other new concepts to explore include trail identities discussed briefly in this chapter and a future botanical garden (see Chapter Eight: Special Places).

Map 2: Future Park, Recreational, and Open Space Lands



A PARK AND OPEN SPACE PLAN FOR THE CITY OF BROOKFIELD

WAUKESHA COUNTY WISCONSIN

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Special acknowledgment is due SEWRPC Planner Robbie L. Robinson for his contributions to the preparation of this report.

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COMMUNITY ASSISTANCE PLANNING REPORT
No. 108 (3rd. Edition)

**A PARK AND OPEN SPACE PLAN
FOR THE CITY OF BROOKFIELD
WAUKESHA COUNTY, WISCONSIN**

Prepared by the

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The Greenway Corridor Recreational Trail system included in the previous edition of this plan were the Beverly Hills, Civic Center, Deer Creek, Dousman, Elm Grove, Fox River, Lilly Heights, Rolling Meadows, Underwood Creek, and Village Center trail systems. In 2010, the trail system provided about 14 linear miles of bicycle and pedestrian trails within the City, including about 12 miles located off-street and about two miles located on-street. The interim segments associated with the Greenway trail system located on or within street rights-of-way are planned to be relocated as off-street trails, where possible. When the proposed off-street segments of the trail system are developed, the remaining on-street segments are planned to become connector or alternate routes, or removed.

Existing trailhead facilities are located at seven City parks: Beverly Hills, Krueger, Lilly Heights, Mary Knoll, Mitchell, Mound Zion, and Wirth Parks. The Greenway Trail system and trailhead facilities identified in the previous edition of this plan are shown on Map 5. The updated Greenway Corridor Recreational Trail system is shown on Map 12 in Chapter V.

On-street bikeways are located throughout the City on or within arterial and residential street rights-of-way or linking subdivision to subdivision or subdivision to park or trail, as shown on Map 6, and provide 70 miles within the City. The 70 miles of on-street bikeways includes all bike paths or lanes, some of which are located on both sides of a street. Some of the on-street bikeways coincide with on-street segments associated with the Greenway Trail system. Numerous City-owned park and open space sites also contain recreation trails, such as nature trails and other pedestrian trails, and support facilities, as listed on Table 4.

The Village of Elm Grove also provides a trail between Elm Grove Village Park and the southeast corner of the Village, which connects to the City trail system. Existing trails and pathways in the Village of Elm Grove are shown on Maps 5 and 6.

NATURAL RESOURCE FEATURES

The natural resources of an area are important determinants of the ability of an area to provide a pleasant and habitable environment for all forms of life and to maintain its social and economic well being. The park and open space plan should seek to preserve the most significant remaining aspects of the natural resource base to help retain the ecological balance and natural beauty of the City of Brookfield study area. A description of natural resources within the study area, including surface water resources, wetlands, woodlands, environmental corridors, natural areas, and critical species habitat sites, is presented in this section.

Surface Water Resources

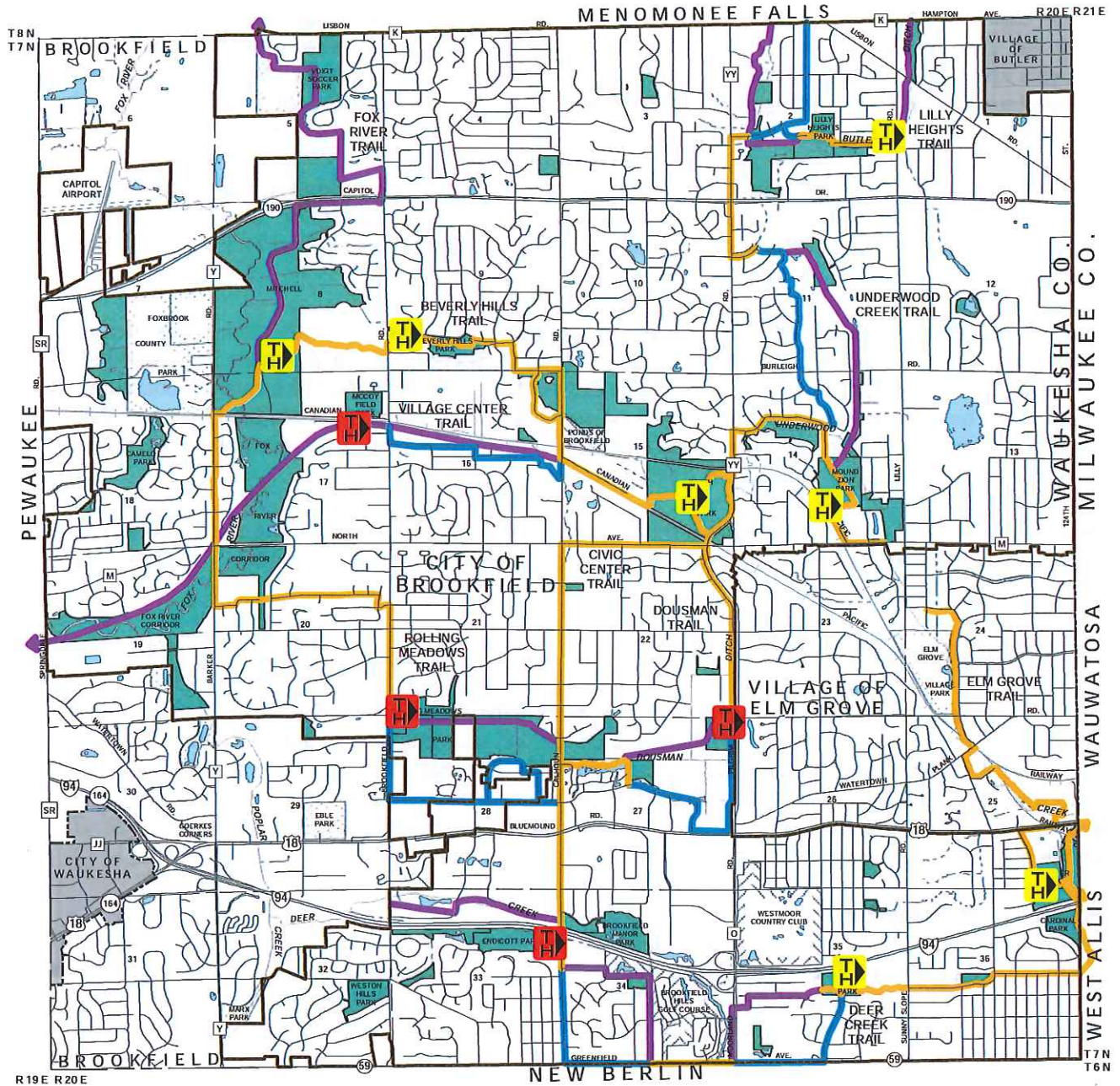
Surface water resources and associated floodplains form an important element of the natural resource base of the City of Brookfield study area. The subcontinental divide runs north to south through the center of the study area. The eastern portion of the study area lies within the Menomonee River watershed, which ultimately drains to Lake Michigan, while the western portion of the study area lies within the Fox River watershed, which ultimately drains to the Mississippi River. The surface water drainage and subcontinental divide are shown on Map 7. Subwatershed boundaries, which provide the basis for identifying greenway corridors within the City, are also shown on Map 7.







Surface water resources, including lakes, streams, and associated floodplains, form a particularly important element of the natural resource base of the City of Brookfield study area. Surface water resources provide recreational opportunities, influence the physical development, and enhance the aesthetic quality of the City. Lakes and streams constitute a focal point for water-related recreational activities and greatly enhance the aesthetic quality of the environment. Surface water resources are shown on Map 7.

Approximately 30 linear miles of streams have been identified in the study area. Perennial streams within the study area include the Fox River, Butler Ditch, Deer Creek, Dousman Ditch, Poplar Creek, and Underwood Creek. Perennial streams are defined as watercourses that maintain, at a minimum, a small continuous flow throughout the year except under unusual drought conditions. Intermittent streams are defined as watercourses that do not maintain a continuous flow throughout the year.

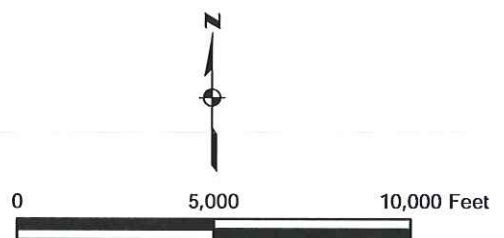
Map 5

GREENWAY RECREATIONAL TRAIL SYSTEM IN THE CITY OF BROOKFIELD STUDY AREA: 2010

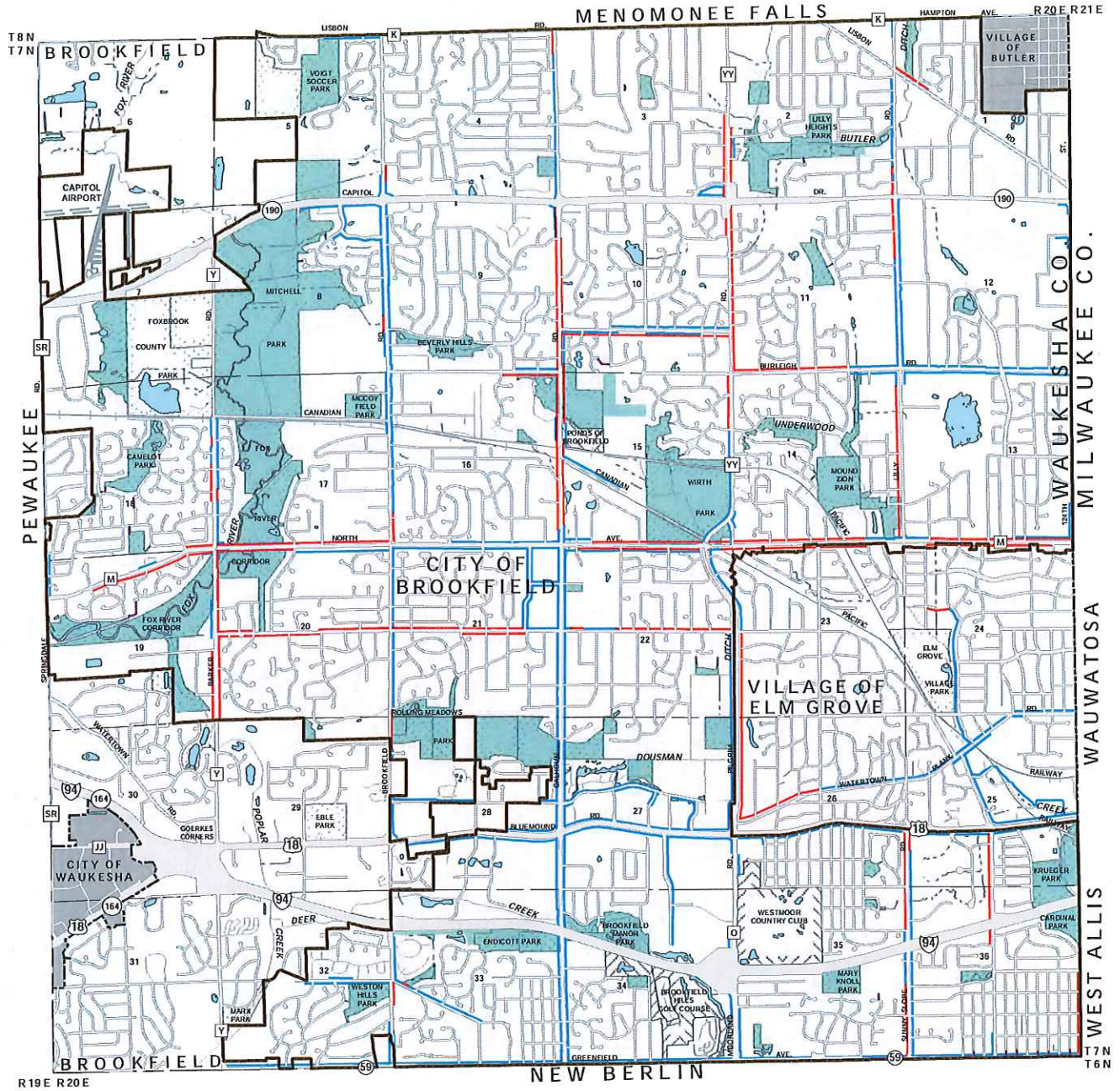


-  EXISTING TRAILHEAD
-  RECOMMENDED TRAILHEAD
-  EXISTING TRAIL
-  INTERIM TRAIL
-  RECOMMENDED TRAIL
-  CITY PARK, OPEN SPACE, OR CONSERVANCY SITE

Source: City of Brookfield, Village of Elm Grove, and SEWRPC.

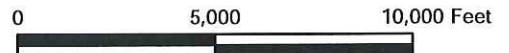


EXISTING BIKEWAYS IN THE CITY OF BROOKFIELD STUDY AREA: 2010

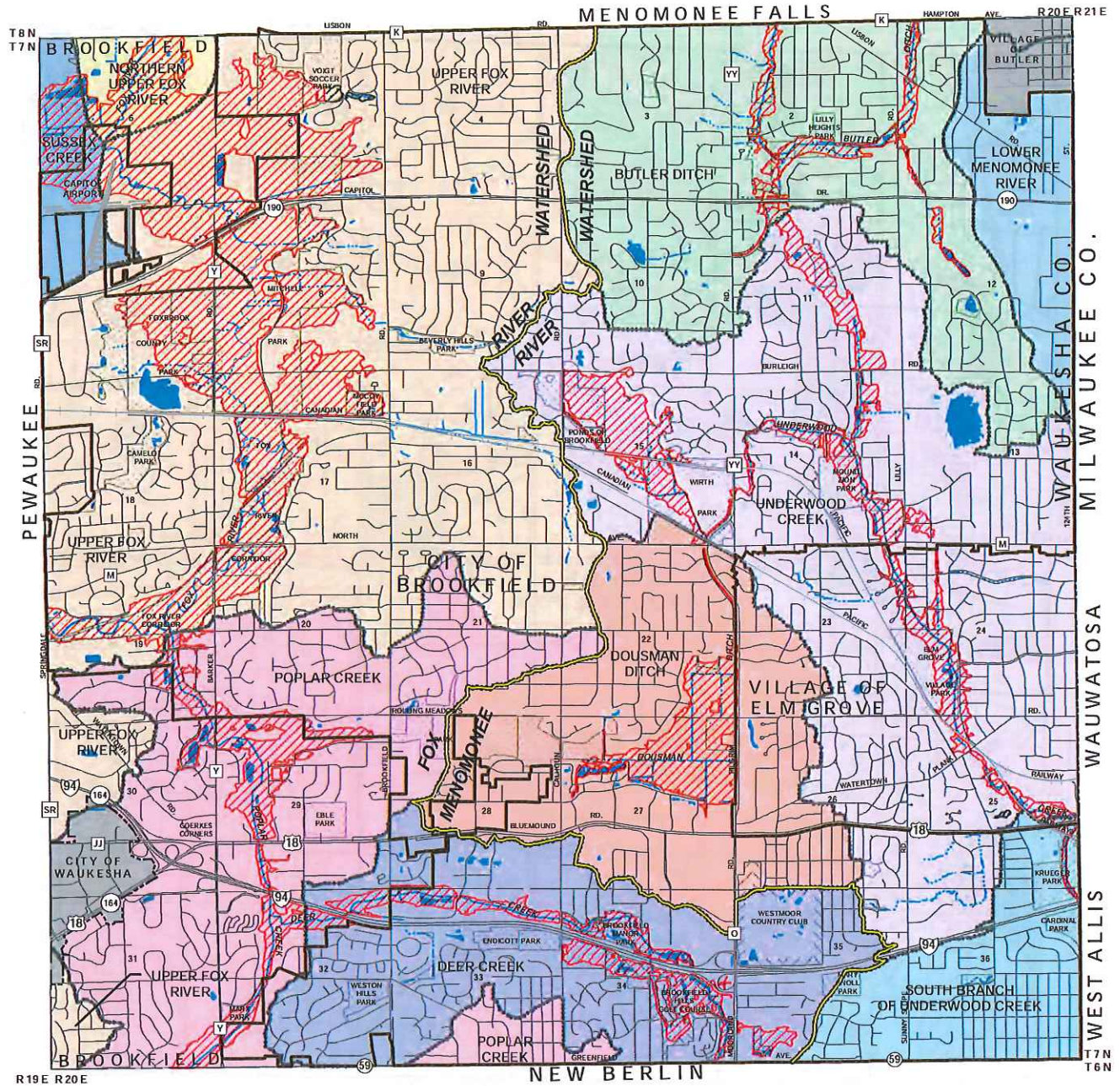


- BIKE LANE
- BIKE PATH
- CONNECTION PATH
- CITY PARK, OPEN SPACE, OR CONSERVANCY SITE

Source: City of Brookfield, Village of Elm Grove, and SEWRPC.

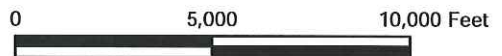


WATERSHEDS AND FLOODPLAINS IN THE CITY OF BROOKFIELD STUDY AREA: 2010



- SUBCONTINENTAL DIVIDE
- SUBWATERSHED BOUNDARY
- SURFACE WATER
- PERENNIAL STREAM
- INTERMITTENT STREAM
- 100-YEAR FLOODPLAIN (BASED ON KNOWN ELEVATION)
- 100-YEAR FLOODPLAIN (APPROXIMATE)

Source: Federal Emergency Management Agency, Wisconsin Department of Natural Resources, City of Brookfield, and SEWRPC.



The floodplains of a river or stream are the wide, gently sloping areas contiguous to, and usually lying on both sides of, the river or stream channel. Rivers and streams occupy their channels most of the time. However, during even minor flood events, stream discharges increase markedly, and the channel may not be able to contain and convey all of the flow. As a result, water levels rise and the river or stream spreads laterally over the floodplain. The periodic flow of a river or stream onto its floodplains is a normal phenomenon and, in the absence of flood control works, can be expected to occur periodically regardless of whether urban development exists on the floodplain or not.

For planning and regulatory purposes, floodplains are normally defined as the areas, excluding the channel, subject to inundation by the 100-year recurrence interval flood event. This event has a 1 percent chance of being equaled or exceeded in any given year. Floodplain areas are generally not well suited to urban development, not only because of the flood hazard, but also because of the presence of high water tables and of soils poorly suited to urban use. The floodplain areas, however, generally contain such important elements of the natural resource base as woodlands, wetlands, and wildlife habitat and, therefore, constitute prime locations for needed open space areas. Every effort should be made to discourage indiscriminate and incompatible urban development on floodplains, while encouraging compatible park and open space use.

Updated floodplain delineations were prepared by the Federal Emergency Management Agency (FEMA) as part of its Map Modernization Program, the findings and recommendations of which are set forth in a Flood Insurance Study, *Waukesha County and Incorporated Areas, Volumes 1 through 3, Waukesha County, Wisconsin, 2008*. The Flood Insurance Study revises and updates information on the existence and severity of flood hazards in the incorporated and unincorporated areas of Waukesha County. Floodplain information associated with the Flood Insurance Study and flood insurance rate maps consists of 100-year floodplain data, including the floodway and floodfringe areas, and 500-year floodplain data. The Flood Insurance Study 100-year floodplain information consists of floodplains delineated by known flood elevations and floodplains where flood elevations have not been precisely determined; the "approximate" floodplains were based on less precise floodplain maps and by other factors, such as soil type and vegetative growth. The 100-year floodplain for streams in the City of Brookfield study area are shown on Map 7. Detailed floodplains have been identified along all major streams and tributaries. Approximate floodplains have been identified around isolated ponds and in portions of Voigt Soccer Park.

The 100-year floodplain encompasses 2,264 acres within the City, or about 13 percent of the City. An additional 978 acres within the study area outside the City are located within the floodplain, for a total of 3,242 acres, or about 14 percent, of the study area within the 100-year floodplain.

The dispersal of urban land uses over large areas and the accompanying increase in impervious areas increases stormwater runoff, which must be accommodated by a stream network or by engineered stormwater management systems. Such facilities may include 1) curbs and gutters, 2) catch basins and inlets, 3) storm sewers, 4) infiltration facilities, and 5) stormwater storage facilities for quantity and quality control such as dry and wet detention basins, respectively. Detention basins serve to moderate peak rates of runoff following rainstorms and wet detention basins further provide a permanent volume of water to capture and store pollutants. To help control stormwater runoff in various areas, the City has developed ponds and dry detention basins that function as stormwater management facilities at Beverly Hills, Camelot, Fairview, Kinsey, Lamplighter, Lilly Heights, Rolling Meadows, and Brookfield Manor parks. The ponds or storage basins provide floodwater and stormwater management benefits, and provide opportunities for limited outdoor recreation use.

Wetlands

For planning and regulatory purposes,⁶ wetlands are commonly defined as areas in which the water table is at, near, or above the land surface and which are characterized by both hydric soils and the growth of sedges, cattails, and other wetland vegetation. Wetlands generally occur in depressions and near the bottom of slopes, particularly along lakeshores and stream banks, and on large land areas that are poorly drained.

⁶Wetlands are regulated under Chapters 103 and 117 of the Wisconsin Administrative Code and Section 404 of the Federal Clean Water Act.

The per capita standards presented in Table 9 are those developed by the City of Brookfield, which differ from the standards developed by SEWRPC. The City's park service standards call for 11 acres of park land to be provided for each 1,000 City residents, allocated as follows: five acres of community parks per 1,000 residents; 3.5 acres of district parks per 1,000 residents, and 2.5 acres of neighborhood parks per 1,000 residents. SEWRPC per capita standards are shown under Objective No. 1 in Appendix A.

The accessibility or service area standards are intended to insure that public parks are spatially distributed in a manner that is convenient and efficient for the population they are intended to serve. Because the spatial distribution of anticipated urban development in the City has not changed significantly since the preparation of the two previous park and open space plans, a new analysis based on the accessibility standards is not repeated in this plan.

The accessibility analysis for district and neighborhood parks contained in the previous edition of this report called for the acquisition and development of three new neighborhood parks to serve residents in the north-central, south-central, and eastern portions of the City. The City has completed a lease agreement with the Elmbrook School District for future development and use of the neighborhood park site in the north-central portion of the City recommended in the previous plan (referred to as the "Imperial" site). The need for new neighborhood parks to serve the south-central (the "South Gateway" site) and eastern (the Section 13 – Quarry Site) portions of the City still exists.

Application of Standards to Recreational Facilities

The results of applying the adopted SEWRPC per capita facility standards for recreational facilities in the City are presented in Table 10. The existing quantity of each facility includes those located in public parks and schools and at private sites within the City. Facilities at private sites include those at private schools and subdivision park sites, and commercial recreational facilities.

As shown by Table 10, application of the per capita standards identified a need for three additional public basketball goals. The accessibility analysis for recreational facilities contained in the 2020 park plan called for the development of additional playfields, playgrounds, baseball/softball diamonds, and tennis courts to assure that such facilities are conveniently located to serve neighborhood residents. Table 8 in Chapter III indicates that a number of recommended recreational facilities should be developed at the two proposed new neighborhood parks and at Endicott Park;⁸ soccer fields, playfields, and supporting parking and restrooms should be developed at Lilly Heights Park; athletic playfields should be developed at Mary Knoll Park; and playgrounds and playfields should be developed at Meadows of Brookfield Park and the South Gateway pocket park recommended in the 2020 park plan.

CITY OF BROOKFIELD GOALS AND OBJECTIVES/STRATEGIES

The City Park and Recreation Commission developed Goals and Objectives/Strategies, referred to as a comprehensive plan for the park system, to help implement the 2020 park and open space plan. Since many of the recommendations from the 2020 plan have been carried forward into this updated plan, the goals and objectives were used to develop the recommended plan presented in Chapter V. The goals developed by the City, which are listed below, complement the objectives included in the Regional Park and Open Space Objectives, Principles, and Standards. The goals with the accompanying objectives/strategies are included in Appendix B.

Goals

Goal No. 1:

The provision of an integrated, neighborhood-based system of public outdoor recreation sites and facilities, and related open space areas, which will afford City of Brookfield residents adequate opportunities to participate in a wide range of structured and non-structured outdoor recreation activities.

⁸As indicated on Table 8 in Chapter III, a number of recreational facilities are programmed for development at Endicott Park during 2010 and 2011.

Table 10

NEED FOR SELECTED OUTDOOR RECREATION FACILITIES IN THE CITY OF BROOKFIELD: 2035

Minimum Per Capita Standard ^a				Facility Need Based on Standard ^b	Existing Number of Facilities	Additional Facility Need ^c
Activity	Facility	Owner	Facility per 1,000 Residents			
Baseball	Diamond ^d	Public	0.09	4	5 ^d	--
		Private	0.01	1	1	
		Total	0.10	5	6	
Basketball	Goal	Public	0.91	46	43	3 Public
		Private	0.22	11	42	
		Total	1.13	57	85	
Playfield Activities	Playfield	Public	0.39	20	25	--
		Private	0.11	5	9	
		Total	0.50	25	34	
Playground Activities	Playground	Public	0.35	18	22	--
		Private	0.07	3	12	
		Total	0.42	21	34	
Soccer	Field	Public	0.69	35	45 ^e	--
		Private	0.17	8	11	
		Public	0.86	43	56	
Baseball/ Softball	Diamond ^f	Public	0.53	27	29 ^f	--
		Private	0.07	3	7	
		Total	0.60	30	36	
Swimming	Pool or Beach	Public	0.015	1	2	--
		Private	--	--	3	
		Total	0.015	1	5	
Tennis	Court	Public	0.50	25	43	--
		Private	0.10	5	19	
		Total	0.60	30	62	

^a Per capita facility requirements are set forth under Objective No.2 in Appendix A.

^b The facility requirement was determined by multiplying the facility requirement per 1,000 residents by the projected 2035 City population of 50,400 persons.

^c The facility need was determined by subtracting the existing number of facilities from the facility need. In cases where the existing number of facilities exceeds the facility requirement, no facility need was identified. In cases where either the number of existing public facilities or the total number of facilities was less than the number called for under the standards, a need for additional public facilities to fulfill the requirement was identified.

^d Includes one Little League baseball diamond at Mitchell Park and adult regulation baseball diamonds.

^e Includes soccer fields suitable for league play and practice fields.

^f Includes three Little League ball diamonds at Mitchell Park and baseball/softball diamonds suitable for league play and practice diamonds.

Source: City of Brookfield and SEWRPC.

Goal No. 2:

The provision of a system of safe and accessible local multi-use trails, as part of the overall community-wide transportation system, which would link the environmental corridors and existing and proposed City parks that have a community-wide service area, and connect such parks with the proposed regional system of recreational trails.

Goal No. 3:

The preservation of environmentally sensitive lands in essentially natural, open uses to assure the protection of the underlying and sustaining natural resource base and enhancement of the social and economic well being and environmental quality of the City.

Goal No. 4:

The provision and/or facilitation of diversified leisure opportunities and experiences for all ages, ability levels and interests, and the effective delivery of quality, participatory and benefit based recreational programs and services to meet the expressed needs of the community.

Goal No. 5:

Ensure stewardship of existing and future parks and open space, recreation sites and facilities, and other natural resources through effective management, enhancements, protection, and capital improvement projects.

Goal No. 6:

Develop partnerships, strengthen alliances, and increase community outreach and communication to effectively enhance the provision of all aspects of parks and recreation services and facilities.

CITY OF BROOKFIELD COMMUNITY OPINION SURVEY

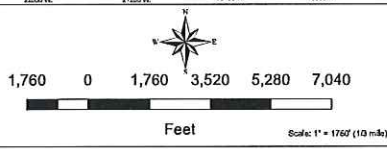
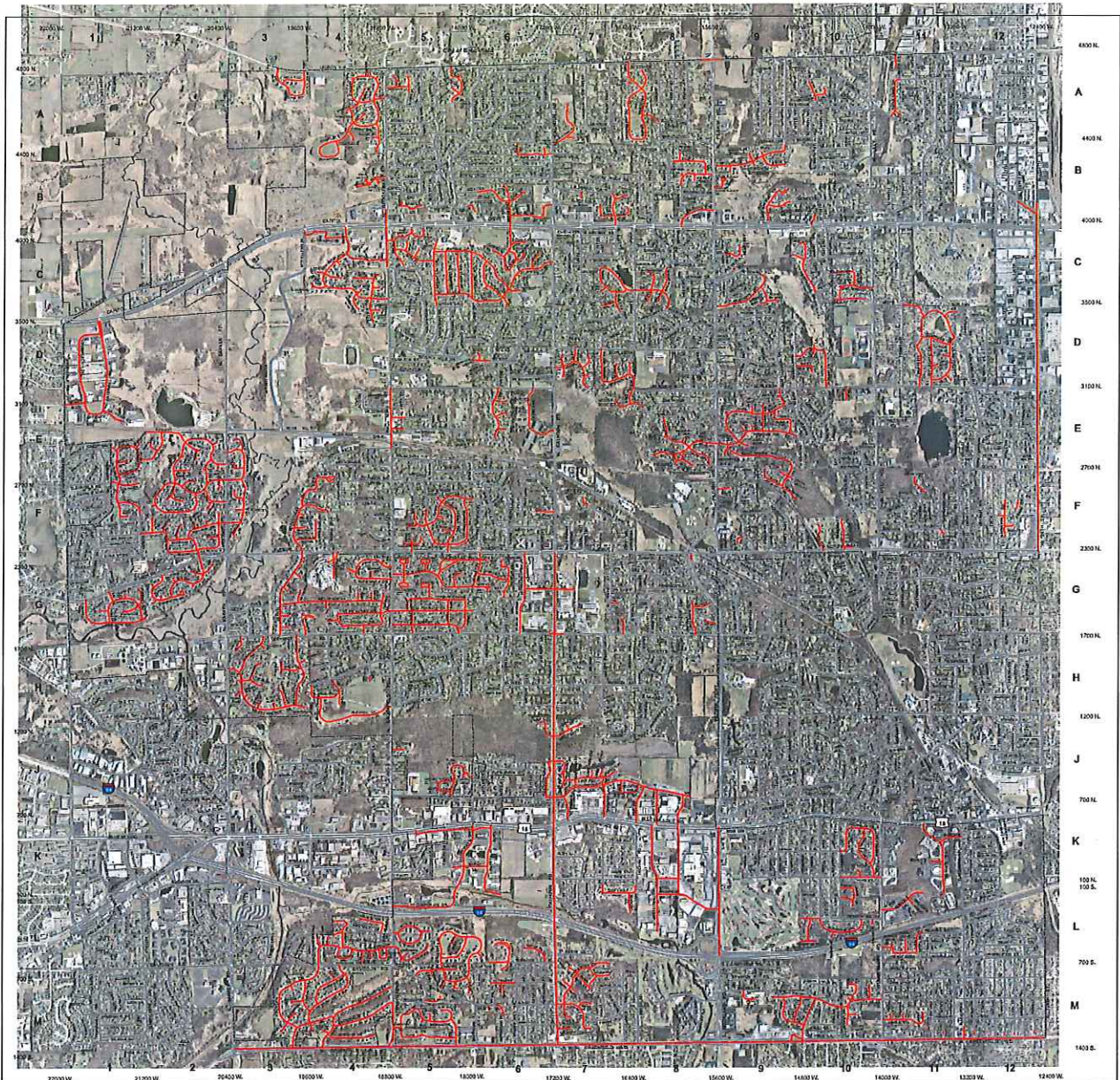
A Community Opinion Survey was conducted by the University of Wisconsin-Milwaukee at the request of the City in 2010.⁹ The primary purpose of the survey was to assess the opinions of City residents about the present and future needs of existing and planned parks and recreational programs within the City. The survey is an update of a needs assessment that was conducted in 1998. The survey consisted of a mail-back questionnaire sent to 3,000 randomly-selected households in the City, including both homeowners and renters, or about 20 percent of all households in the City. A total of 568, or about 19 percent, of the questionnaires mailed were returned by the closing date.

Overall, survey respondents expressed satisfaction with the City park system. About 87 percent replied that they were "Very Satisfied" or "Somewhat Satisfied" with parks and public spaces in the City of Brookfield, and about 76 percent replied that they were "Very Satisfied" or "Somewhat Satisfied" with the recreation programs offered by the City. Both showed a slight increase in satisfaction from the 1998 needs assessment. About 86 percent of survey respondents rated Parks, Recreation, and Forestry Department facilities, programs, and services as "Very Important" or "Somewhat Important" to their overall quality of life. Nearly 90 percent and 77 percent of survey respondents, respectively, replied that the main priorities for the City of Brookfield's Parks, Recreation, and Forestry Department should be to maintain or expand existing parks or recreational areas rather than develop recreational facilities on vacant or undeveloped parklands, and to spend more allocated/budgeted money towards developing recreational facilities rather than towards supervised recreational activities. Making neighborhoods more attractive were rated as "Very Important" or "Somewhat Important" by about 92 percent of survey respondents when considering the quality of life in neighborhoods. Protecting open space from development (about 90 percent), providing play areas for youth (about 87 percent), and preserving environmentally sensitive areas (about 86 percent) were also rated "Very Important" or "Somewhat Important" to quality of life standards in neighborhoods.

About 41 percent of survey respondents indicated they had visited a park more than 10 times in the previous 12 months, and nearly 58 percent of survey respondents had visited a park more than five times in the last 12 months. Wirth Park was visited most frequently by survey respondents, with 80 percent of respondents having visited the park.

Other highly-visited parks included Mitchell Park, visited by 72 percent; Wirth Park South, visited by 32 percent; and Beverly Hills Park and the Soccer Park, each visited by 17 percent of respondents. Nearly 60 percent of survey respondents indicated that the primary reason for visiting a park was for exercise or fitness, about 54 percent of respondents had visited to enjoy nature and the outdoors, and about one-half of respondents had visited to participate in non-organized, self-directed activities.

⁹The results of the survey are documented in a report titled, *City of Brookfield: Parks, Recreation, and Forestry Department: 2010 Community Opinion Survey, November 2010*. The report was prepared by the University of Wisconsin-Milwaukee Center for Urban Initiatives and Research, on behalf of the City of Brookfield Department of Parks, Recreation and Forestry.



City of Brookfield Curbed Streets

— Curb and Gutter Streets

This data is provided by the City of Brookfield for informational purposes only. The City does not warrant or guarantee the accuracy or reliability of this data. The recipient of this data assumes any risk of its use for any purpose.

RESOLUTION NO. 8893-15

By the Finance Committee

GOVERNMENT RESPONSIBILITY RESOLUTION
FOR RUNOFF MANAGEMENT GRANTS

WHEREAS, the City of Brookfield is interested in acquiring a Grant from the Wisconsin Department of Natural Resources for the purpose of implementing measures to control urban stormwater runoff pollution sources (as described in the application and pursuant to ss. 281.65 or 281.66, Wis. Stats., and chs. NR 151, 153 and 155); and

WHEREAS, a cost-sharing grant is required to carry out the project:

THEREFORE, BE IT RESOLVED, that the City of Brookfield HEREBY AUTHORIZES the Director of Public Works to act on behalf of the City of Brookfield to:

Submit and sign an application to the State of Wisconsin Department of Natural Resources for any financial aid that may be available;

Sign a grant agreement between the City of Brookfield and the Department of Natural Resources;

Submit reimbursement claims along with necessary supporting documentation;

Submit signed documents; and

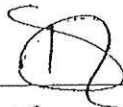
Take necessary action to undertake, direct and complete the approved project.

BE IT RESOLVED that the City of Brookfield shall comply with all state and federal laws, regulations and permit requirements pertaining to implementation of this project and to fulfillment of the grant document provisions.

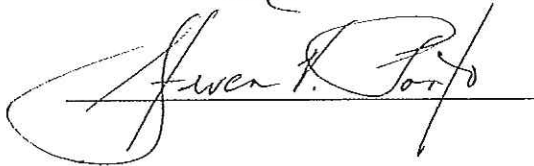
Adopted this 17th day of March, 2015

I hereby certify that the foregoing resolution was duly adopted by the Common Council of the City of Brookfield at a legal meeting on the 17th day of March, 2015.

Authorized Signature: _____



Title: City Clerk



Title: Mayor