

MINUTES

SEWRPC ADVISORY COMMITTEE ON REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE FOR THE GREATER MILWAUKEE WATERSHEDS

DATE: August 7, 2007

TIME: 1:30 p.m.

PLACE: City of Mequon City Hall
Upper Level Council Chambers
11333 N. Cedarburg Road
Mequon, Wisconsin

Committee Members Present

Daniel S. Schmidt, Chairman
Michael G. Hahn, Secretary

Martin A. Aquino
(for Jeffrey J. Mantes)
Michael J. Ballweg

John M. Bennett
Marsha B. Burzynski
(for James L. McNelly)
Elizabeth Hellman
(for Kristine M. Krause)
Andrew A. Holschbach

William A. Kappel
Steve Keith
James F. Lubner

J. Scott Mathie
(for Matthew Moroney)
Charles S. Melching

Cheryl Nenn
Jeffrey S. Nettesheim
Stephen Poloncsik
(for Peter G. Swenson)
Kevin L. Shafer

Staff Members and Guests

Joseph E. Boxhorn

Jill Hapner

William Krill
Ronald J. Printz

Nancy U. Schultz

SEWRPC Commissioner
Chief Environmental Engineer, Southeastern
Wisconsin Regional Planning Commission
Environmental Manager, Environmental Engineering,
City of Milwaukee
Crops and Soils Agent, University of Wisconsin-Extension,
Sheboygan County
City Engineer, City of Franklin
Regional Water Resources Planner, Wisconsin
Department of Natural Resources
Environmental Department, We Energies

Director, Ozaukee County Planning, Resources,
and Land Management Department
Director of Public Works, City of Wauwatosa
Acting Director of Environmental Services, Milwaukee County
Sea Grant Advisory Services Specialist,
University of Wisconsin Sea Grant Institute
Director of Government Affairs, Metropolitan Builders
Association of Greater Milwaukee
Associate Professor, Civil & Environmental
Engineering, Marquette University
Riverkeeper/Project Director, Friends of Milwaukee's Rivers
Director of Utilities, Village of Menomonee Falls
Senior Staff Engineer, U.S. Environmental Protection Agency

Executive Director, Milwaukee Metropolitan Sewerage District

Senior Planner, Southeastern Wisconsin Regional
Planning Commission

County Conservationist, Washington County
Land Conservation Department

Project Manager, HNTB Corporation

Principal Engineer, Southeastern Wisconsin Regional
Planning Commission

Principal Technologist, CH2M Hill

WELCOME AND INTRODUCTIONS

Mr. Schmidt thanked the Advisory Committee members for attending this meeting. He indicated that roll call would be accomplished with a sign-in sheet circulated by SEWRPC staff. He noted that the meeting would follow the revised meeting notice and agenda dated August 3, 2007.

APPROVAL OF MINUTES OF THE MEETING OF JUNE 13, 2007

Mr. Schmidt asked Mr. Hahn to review the highlights of the minutes of the June 13, 2007 meeting of the Committee.

Mr. Melching stated that he had inquired further into the inconsistencies in laboratory methods used for analyzing phosphorus concentrations and found that the problems he referred to during the June 13, 2007, Advisory Committee meeting were restricted to data from the U.S. Geological Survey (USGS).

[Secretary's Note: At the June 13 Committee meeting, Mr. Melching asked if such inconsistencies might also occur in the MMSD phosphorus data. Based on Mr. Melching's statement that the inconsistencies are limited to USGS data, no changes to the planning report are required.]

There being no additions or revisions, the minutes were approved, on a motion by Mr. Lubner, seconded by Mr. Kappel, and carried unanimously.

CONSIDERATION OF THE PRELIMINARY DRAFT OF CHAPTER XI, "PLAN IMPLEMENTATION," OF SEWRPC PLANNING REPORT NO. 50 (PR NO. 50), A REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE FOR THE GREATER MILWAUKEE WATERSHEDS

Mr. Schmidt asked Mr. Hahn to review the preliminary draft of the chapter.

Mr. Hahn stated that subsection of Chapter XI entitled *Institutional Frameworks for Implementation of the SEWRPC Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds* and Appendix XI-2 "Consideration of Alternatives to the Recommended Plan Implementation Structure," would not be considered at this meeting. He continued that, based on a suggestion from MMSD, the issues raised by this chapter will be discussed by the Oversight Committee for the SEWRPC regional water quality management plan update and the MMSD 2020 facilities plan, which includes members from MMSD, WDNR, HNTB, and the SEWRPC staff. He indicated that chapter revisions arising from that Oversight Committee meeting would be presented to the Advisory Committee at a later date.

Mr. Hahn began review of the chapter.

Mr. Hahn reviewed the **PRINCIPLES OF PLAN IMPLEMENTATION** section.

Mr. Lubner and Mr. Melching noted some typographical errors, editorial errors, and minor omissions in the preliminary draft chapter.

[Secretary's Note: Those errors or omissions were corrected.]

Mr. Hahn began review of the **PLAN IMPLEMENTATION ORGANIZATIONS** section. He pointed out that it is recommended that the Technical Advisory Committee and the Modeling Subcommittee be maintained, to be called upon as needed, in order to ensure continuity during implementation of the recommended plan. He noted that membership on these committees may change over time. He added that it is recommended that the Watershed

Officials Forum and the Citizens' Advisory Council be dissolved since continuing water quality management planning and implementation efforts will be conducted largely at the watershed or subwatershed level.

In reference to the subsection *Certification of Areawide Water Quality Management Plans*, on page 13, Ms. Burzynski commented that the Governor, not the Secretary of the Department of Natural Resources, certifies areawide water quality management plans to the U.S. Environmental Protection Agency.

[Secretary's Note: The first sentence of the second paragraph on page 13 was revised to read as follows (In this Secretary's Note and in subsequent Notes, revised and added text is indicated in bold letters for clarification purposes only. The report text will not be bold):

“The Department of Natural Resources has the responsibility of reviewing and approving areawide plans for water quality management and making recommendations to the Governor as to the certification of all or parts of each plan. The Governor has, pursuant to Federal planning guidelines, the responsibility of certifying to the USEPA areawide plans for water quality management.”]

Mr. Melching commented that the discussion on pages 14 and 15 does not identify the State agencies that provide cost-share funds for implementation of the agricultural performance standards in NR 151 and asked that this be clarified. Mr. Hahn replied that these are provided mostly through grants administered by the Wisconsin Department of Natural Resources (WDNR), but can also come from other State agencies. Ms. Burzynski added that she did not think that other government sources are precluded from providing money for this. She noted that the Great Lakes Protection Fund also has funds available for this. Ms. Nenn commented that there is also some confusion as to whether private organizations can provide cost-share funds. Mr. Hahn indicated that this topic would be expanded to address the committee comments.

[Secretary's Note: The following sentence was added after the second sentence of the third paragraph on page 14:

“The WDNR also makes cost share monies available for a number of activities including, dam removal, river protection, land and water conservation and stewardship activities, stormwater and runoff management, lake planning and protection, and aquatic invasive species control.”

The following sentence was added after the third sentence of the last paragraph on page 14:

“DATCP also makes cost share monies available for land and water resource management activities such as installation of agricultural best management practices.”

To clarify the role of the Wisconsin Department of Agriculture, Trade and Consumer Protection in providing grants for establishment of agricultural best management practices, the sixth through tenth sentences in the third full paragraph on page 61 were deleted and the following was inserted before the last sentence in that paragraph:

“The DATCP grant funding program for agricultural best management practices is described in ATCP 50, *Soil and Water Resource Management Program*.”

To clarify the conditions under which WDNR administers Targeted Runoff Management and Urban Nonpoint Source and Storm Water grants, the following footnote was added at the end of the first sentence in the fifth paragraph on page 61:

“Chapter NR 154, “Best Management Practices, Technical Standards and Cost-Share Conditions,” sets forth cost-share conditions for eligible urban and agricultural best management practices.”]

Ms. Burzynski requested that the discussion on page 15 of the Wisconsin Department of Commerce’s role in regulating erosion control be expanded.

[Secretary’s Note: The following sentence was added after the first full sentence on page 15:

“Department authority for construction site erosion control extends to issuing permits for single- and two-family residential building sites and commercial sites.”]

Ms. Burzynski noted that the River Revitalization Foundation which is referred to on page 16 is an urban land trust. Mr. Hahn replied that the reference to this organization would be moved to the paragraph on land trusts and conservancies.

[Secretary’s Note: The first sentence in the fifth full paragraph on page 16 was revised to read:

“Land trusts and conservancies, such as the Kenosha/Racine Land Trust, the Milwaukee Area Land Conservancy, Ozaukee-Washington Land Trust, **River Revitalization Foundation**, and the Waukesha Land Conservancy, purchase, or obtain conservation easements for, environmentally valuable lands through member contributions, land or easement donations, and grants obtained from other sources.”

The first sentence in the sixth paragraph on page 16 was revised to read:

“In addition, organizations such as the Milwaukee River Basin Partnership **and** the Root-Pike Watershed Initiative Network can have direct roles in plan implementation through considering the interrelationship between plan recommendations and their programs to improve water quality of streams and lakes in the study area.”]

Ms. Nenn requested that Riveredge Nature Center and the Schlitz Audubon Nature Center be added to the list of private organizations conducting water quality monitoring and educational programs listed on page 16.

[Secretary’s Note: The second sentence of the sixth full paragraph on page 16 was revised to read:

“Organizations such as the Urban Ecology Center, **Riveredge Nature Center, the Schlitz Audubon Nature Center**, and Friends of Milwaukee’s Rivers can support plan implementation through their water quality monitoring and educational programs.”]

Mr. Shafer asked that the portion of the first sentence of the third paragraph on page 17 after the word “approach” be deleted.

[Secretary’s Note: The first sentence of the third paragraph on page 17 was revised to read:

“These planning efforts, when taken together, represent an integrated water quality planning approach.”]

Mr. Hahn reviewed the section entitled **PLAN ADOPTION AND IMPLEMENTATION**.

Mr. Hahn noted that the words “adoption” and “endorsement” are used interchangeably in this section. He stated that, where appropriate, this would be changed to “endorsement” to avoid confusion.

[Secretary's Note: The last full paragraph on page 21 was revised to read:

“Endorsement or formal acknowledgement of the comprehensive watershed plan by local legislative bodies and the existing local, areawide, State, and Federal level agencies concerned is highly desirable to assure a common understanding among the several governmental levels and to enable their staffs to program the necessary implementation work. This acceptance or acknowledgment is, in some cases, required by the *Wisconsin Statutes* before certain planning actions can proceed; such a requirement holding in the case of city, village, and town plan commissions created pursuant to Section 62.23 and 61.35 of the *Wisconsin Statutes*. In addition, formal plan **endorsement** may also be required for State and Federal financial aid eligibility.¹ A model resolution for endorsement of the regional water quality management plan update for the greater Milwaukee watersheds is included in Appendix P. Endorsement of the recommended regional water quality management plan update by any unit or agency of government pertains only to the statutory duties and functions of the **endorsing** agencies and such **endorsement** does not and cannot in any way preempt or commit action by another unit or agency of government acting within its own area of functional and geographic jurisdiction.

¹*Plan **endorsement** would not be required to receive funds through ongoing USDA or other land conservation programs, since those programs are not directly related to planning activities, such as the regional water quality plan. However, the plan implementation activities will focus on identifying funding sources for the implementation actions, including land management practices. Thus, additional funding opportunities may become available during plan implementation.”*

The word “adopt” in the first through fifth bullet points under **Local-Level Agencies** on page 22 and in the first and second bullet points under **Areawide Agencies** on page 22 was changed to “endorse.”

The word “adoption” in the third bullet point under **Local-Level Agencies** on page 22 and in the first bullet point under **Areawide Agencies** on page 22 was changed to “endorsement.”]

Ms. Burzynski stated that the endorsement procedure followed by the WDNR does not require approval by the Natural Resources Board, and that the Department follows the approval procedures documented in Chapter NR 121 of the *Wisconsin Administrative Code*. She indicated that she would provide information on the process.

[Secretary's Note: The last sentence of the third full paragraph on page 21 was revised to read:

“In accordance with both Section 208 of the Federal Water Pollution Control Act as amended **and with Chapter NR 121 of the Wisconsin Administrative Code**, a certified copy will be transmitted to the WDNR with a request that the **Department approve** the plan as the official areawide water quality management plan for southeastern Wisconsin and recommend to the Governor that the plan be **certified** by him and transmitted to the USEPA for that agency's approval.”]

Mr. Hahn reviewed the sections entitled **SUBSEQUENT ADJUSTMENT OF THE PLAN, LAND USE PLAN ELEMENT IMPLEMENTATION**, and **SURFACE WATER QUALITY MANAGEMENT PLAN ELEMENT**.

He noted that Sheboygan County was listed twice in the subsection *Designation of Point Source Management Agencies* on page 26 and stated that this would be corrected.

[Secretary's Note: The ninth paragraph on page 26 was deleted and the seventh paragraph on page 26 was revised as follows and was moved after the Racine County paragraph on that page.

“In Sheboygan County, **six** management agencies have been designated. These include the Villages of Adell, Cascade, and Random Lake, the Town of Scott Sanitary District No. 1, the Town of Lyndon Lake Ellen Sanitary District, and the Onion River Sewerage Commission, each of which currently provides centralized sanitary sewer service. It is recommended that the Town of Scott Sanitary District be expanded to include oversight of private onsite wastewater treatment systems throughout the Town.”]

Mr. Hahn noted that the blanks in the first two sentences of the second paragraph on page 27, which represent designated management agency totals, will be added in the final draft.

[Secretary's Note: Similar blanks occur on pages 37 and 40. That information was added to the final draft, consistent with the corresponding designated management agency tables.]

Mr. Krill said that the subsection title on page 27 mentions “Abatement of Combined Sewer Overflows,” but the following text does not refer to CSOs.

[Secretary's Note: The subsection title on page 27 was revised to read as follows:

“Implementation Schedules—Public Wastewater Treatment Plants and Intercommunity Trunk Sewers”]

In reference to the subsection *2020 Facilities Plan for the Milwaukee Metropolitan Sewerage District*, Mr. Shafer noted that the chapter discusses the facilities plan in detail. He suggested deleting the last sentence of the first paragraph on page 29.

[Secretary's Note: The last sentence of the first paragraph on page 29 was deleted, but footnote 23 was retained.]

Ms. Nenn asked that this chapter include the plan recommendation on anticorrosion additives to municipal drinking water.

[Secretary's Note: The following subsection was added after the fourth paragraph on page 35:

“Industrial Noncontact Cooling Water Discharges

An additional point source issue identified under the regional water quality management plan update is that of phosphorus loads from some industrial noncontact cooling water discharges. Since the industries involved do not normally add phosphorus to their cooling waters, it is believed that the phosphorus is contained in the source water since some utilities add orthophosphate or polyphosphate as a corrosion control to prevent certain metals from leaching from the distribution system and building plumbing materials into the treated water. It is recommended that water utilities in the study area give further consideration to changing to an alternative technology that does not result in increased phosphorus loading.”]

Mr. Ballweg noted that the manure storage provisions discussed in the subsection entitled *Manure and Nutrient Management* on page 37 refer to all livestock operations and place no size limit below which the provisions

would not apply. He expressed concern about this and commented that the farm community will probably have the same concerns. He asked whether NR 243, “Animal Feeding Operations,” of the *Wisconsin Administrative Code* gives any guidance related to size. Mr. Holschbach commented that when SEWRPC staff met with land conservation staff from the Counties the general consensus was that more stringent manure management would be a good practice for all dairy operations and that numerical cutoffs were not discussed. He suggested that perhaps they should have been. Mr. Hahn noted that this recommendation is a part of the recommended plan as approved by the Committee. He stated that it would require the consensus of the Committee to revise or refine the recommendation. He stated that SEWRPC staff would review NR 243 to determine whether it contains any size limits.

[Secretary’s Note: SEWRPC staff reviewed NR 243, NR 151, and Chapter 281 of the *State Statutes*. No numerical limits were found in any of these regulations. Chapter 281.16(1)(c) of the *Statutes* defines a livestock operation as “a feedlot or other facility or a pasture where animals are fed, confined, maintained, or stabled.”

It was decided that it would be reasonable to limit the recommendation regarding the provision of six months of manure storage to livestock operations with 35 animal units or more, with animal units defined as set forth in Chapter NR 243.

The first sentence in the first paragraph of the *Manure and Nutrient Management* subsection on page 37 was revised as follows:

“In Chapter X of this report, it is recommended that all livestock operations in the study area **with 35 combined animal units or greater as defined in Chapter NR 243, “Animal Feeding Operations,” of the *Wisconsin Administrative Code*** provide six months of manure storage, enabling manure to be spread on fields twice annually during periods when the ground would not be frozen prior to spring planting and after summer and fall harvest.¹

¹*Section NR 243.05 sets forth two methods for calculating animal units: one method based on “combined animal units” and one based on “individual animal units.” In determining the number of animals for which the manure storage recommendation of the regional water quality management plan applies, it is recommended that the method be applied that yields the lowest number of animals for a given category. For example, based on that approach, 35 animal units are equivalent to 25 milking cows; 35 steers; 87 55-pound pigs; and 0 to 4,375 chickens, depending on the type and whether the manure is liquid or nonliquid.”*

Also, the first sentence in the second full paragraph on page 26 of Chapter X, “Recommended Water Quality Management Plan,” of PR No. 50 was revised as follows:

“Based on input from County Land Conservationists **and the Technical Advisory Committee for this water quality plan** and on the identified need to control fecal coliform bacteria from both urban and rural sources, it was decided to recommend that all livestock operations in the study area **with 35 combined animal units or greater as defined in Chapter NR 243, “Animal Feeding Operations,” of the *Wisconsin Administrative Code*** provide six months of manure storage, enabling manure to be spread on fields twice annually during periods when the ground would not be frozen prior to spring planting and after summer and fall harvest.”

A footnote identical to footnote 45 (that is to be added in Chapter XI as indicated above) was also added at the end of the revised sentence in the second full paragraph on page 26 of Chapter X.]

Mr. Bennett noted that seventh full paragraph on page 36 refers to the “Cities of Franklin” and asked whether this is a typographical error.

[Secretary’s Note: The reference was changed to the “City of Franklin.”]

Mr. Hahn noted that on page 39 of the chapter there is a recommendation that the WDNR actively explore opportunities for creating project areas similar to the North Branch Milwaukee River Wildlife and Farming Heritage Area for other land areas recommended for prairie and wetland restoration under this plan. Ms Burzynski stated that there may be other project areas or streambank and riparian management areas in the Milwaukee River Basin. She indicated that she would check into this and forward the information.

[Secretary’s Note: The following footnote was added after “North Branch Area” in the first sentence of the first full paragraph on page 39:

“Additional existing WDNR streambank and riparian management areas in the Milwaukee River watershed include the Cedar Creek Streambank Protection Project, the North Branch Milwaukee River Streambank Protection Project, and the Cedarburg Habitat Preservation Project.”]

Mr. Hahn noted that the subsection *Expanded Oversight and Maintenance of Private Onsite Wastewater Treatment Systems (POWTS)* contains a two-part recommendation. He continued that it was recommended that counties continue to regulate POWTS but that designated towns or other units of government give consideration to establishing town utility districts to complement and supplement county activities. Mr. Holschbach asked what more these town districts could do in counties like Ozaukee County that have active programs. Mr. Hahn replied that some counties might not need the town districts and might consider and reject this option. He indicated that a footnote would be added to this effect.

[Secretary’s Note: The following footnote was added after the first partial sentence on page 40 and at the end of the rightmost column heading in Table XI-3:

“In some counties, existing county programs may be providing the additional oversight of POWTS recommended for town utility districts to perform. In these instances, it may not be necessary to form town utility district for the sole purpose of providing supplemental oversight of POWTS.”]

Mr. Melching commented that the second sentence in the second paragraph on page 41 is redundant and suggested that it be deleted.

[Secretary’s Note: Upon further consideration, the Commission staff determined that the second sentence was not redundant. The first sentence in the paragraph relates to the occurrence of human-specific pathogens entering stormwater systems through illicit connections. The second sentence is related to the issue of bacteria and pathogens in stormwater runoff, not from illicit connections.]

Mr. Lubner noted that Project WET stands for Water Education for Teachers. He added that this program is now coordinated by the WDNR.

[Secretary’s Note: The third sentence of the first full paragraph on page 47 was revised to read:

“Project WET, or Water Education **for Teachers is run through the WDNR. The Adopt-A-Lake program is run through the UWEX.**”]

In reference to the subsection *Exotic Invasive Species*, Mr. Lubner stated that it is uncertain whether the “Attack Packs” program will continue. He suggested striking the references and replacing it with “outreach programs.”

[Secretary’s Note: The second sentence of the sixth full paragraph on page 48 was revised to read:

“The WDNR should continue responsibility for such programs through its Watercraft Inspection and Clean Boats, Clean Waters Programs, and the University of Wisconsin-Sea Grant Institute, University of Wisconsin-Extension, and the Wisconsin Association of Lakes should continue to sponsor aquatic invasive species educational materials, workshops, and outreach **programs.**”]

Mr. Lubner asked which section within the National Oceanographic and Atmospheric Administration is being referred to in the third full paragraph on page 50. Mr. Boxhorn replied that it refers to the Great Lakes Environmental Research Laboratory. Mr. Hahn said that this would be added to the paragraph.

[Secretary’s Note: The third full paragraph on page 50 was revised to read:

“The WDNR and the National Oceanographic and Atmospheric Administration **Great Lakes Environmental Research Laboratory** should continue to monitor and document the occurrence and spread of exotic and invasive species in streams, inland lakes, and Lake Michigan.”]

Mr. Hahn reviewed the section **FINANCIAL AND TECHNICAL ASSISTANCE**.

Mr. Hahn noted that references to Tables XI-9 and XI-10 would be added to the subsection *U.S. Department of Agriculture* on page 54.

[Secretary’s Note: The following sentence was added after the second sentence of the fourth paragraph on page 54:

“The characteristics of these USDA financial assistance programs are summarized in Table XI-9. Conservation practices eligible for funding under various USDA programs are listed in Table XI-10.”]

Mr. Melching suggested that the references to “post-flooding” and “post-disaster” conditions in the third paragraph on page 56 be changed to “pre-flooding” and “pre-disaster.”

[Secretary’s Note: The first sentence of the third paragraph on page 56 was revised to read:

“This program is designed to help agricultural producers restore land conditions to **pre-flooding** or **pre-disaster** conditions.”]

Mr. Melching noted that the subsection *Direct Federal Line-Item Grant* on page 63 states that the long-range financing plan for the MMSD 2020 Facility Plan assumes continuation of this sort of funding for MMSD construction projects. He asked whether there are things that will not be done if these grants are not available. Mr. Shafer stated that this was not the case and asked that this program be characterized as one of the funding sources.

[Secretary’s Note: The last sentence of the second paragraph on page 63 was revised to read:

“**Direct** Federal line-item grants for MMSD construction projects **constitute another funding source for plan implementation.**”]

Mr. Hahn reviewed the section entitled **CONTINUING AREAWIDE WATER QUALITY MANAGEMENT PLANNING PROGRAM.**

He noted that this section contains a recommendation that the Commission seek direct State funding for continuing areawide water quality management planning through the WDNR. Ms. Burzynski commented that most of the money that the WDNR has available for this is Federal funding and not State funds. She also said that, while the Capitol Area Regional Planning Commission has applied for designation as an areawide water quality planning agency, it has not yet been designated. Mr. Hahn indicated that the reference to it as a designated agency on page 67 would be deleted. Mr. Shafer requested that the reference to the expanded program envisioned under the implementation recommendation in the second to last sentence of the last paragraph on page 67 be removed.

[Secretary's Note: The preceding comments were addressed by eliminating the third paragraph of the **Financial Support for Continuing Planning Effort** subsection on pages 68 and 69 and by revising the second and fourth paragraphs of that subsection as follows. Those revisions are also included in the revised preliminary drafts of excerpts from Chapter XI that are to be reviewed at the September 20, 2007, meeting of the Technical Advisory Committee.

“In order to meet this Federal planning requirement, the Commission considered a number of ways in which to fund a continuing water quality management planning effort for the greater Milwaukee watersheds. Those funding mechanisms considered include local property taxes, local sales taxes, user fees as established through surcharges on sewerage system bills and on private onsite wastewater treatment system permits, and direct **Federal and State funding**. **Federal funding administered by the State has been available** for certain plan amendment and revision activities over the years since adoption of the initial areawide water quality management plan; however, **no additional State funding is currently available and the total amount of funding has not been sufficient to fully cover the cost of** continuing plan-related activities nor to enable major plan reevaluations to be made at a sufficient level of frequency. In recent years the level of **Federal funding**, which had remained constant, has declined **and no State funding has been provided to make up any shortfalls**. After careful consideration of the various sources of nonfederal funding support that are available, the Commission believes that the main approach to **funding continuing water quality planning should be to supplement the existing Federal funding by seeking** direct State funding through the WDNR. This belief is based upon considerations of equity, the statewide nature and importance of the planning effort, and ease of administration.

In light of the fact that recent trends in Wisconsin have sought to relieve local property taxes and not add to such taxes, for all practical purposes the property tax is effectively eliminated from consideration as a funding source for new and/or expanded water quality planning programs. The existing statewide structure for income, sales, and other taxes is already well established and can be used to secure funds on a statewide basis to conduct continuing areawide water quality management planning efforts. Accordingly, it is recommended that the WDNR **ask the State Legislature to establish** direct State funding of all continuing areawide water quality management planning efforts in the State, **with that funding supplementing** funds obtained by the State from the USEPA. The amount to be secured for each designated planning agency should be based upon an agreed-upon overall work program prepared and approved annually, and should be related to the budget cycle currently followed by the State **and Federal governments**. **It is recommended that the overall level of effort of the ongoing SEWRPC water quality planning program be increased to enable the Commission to continue to effectively exercise its role as the designated water quality planning agency for Southeastern Wisconsin, including the possibility of preparing plan updates for other watersheds in the Region.** Based on

recent SEWRPC budgets for water quality planning, **large portions** of which have come from the seven-county property tax levy and service contracts, **it is recommended that the total amount budgeted for water quality planning be increased to \$1.2 million, that the cost of funding that planning work be split evenly with half being provided by the Regional Planning Commission and half coming from State/Federal funding, and that the amount be adjusted over time to reflect increasing costs and/or responsibilities.** As noted previously, certain specific, local programs may be funded through other means such as taxation, special assessments, sewerage service charges, issuance of revenue and/or general obligation bonds, and Federal, State, and private grant programs.”]

Mr. Holschbach asked whether farmers would be required to obtain permits under a watershed permitting approach. Mr. Hahn replied that this was not the intent of the plan. He explained that the permits applied to point sources and farms are not considered point sources under the Federal Clean Water Act.

Mr. Holschbach commented that there is considerable nonpoint source pollution in rural areas, but funding for best management practice installation is limited. He continued that without funding or rural regulation, little will be accomplished. Mr. Hahn said that because it is not a point pollution source agricultural runoff pollution is not directly regulated under the Clean Water Act and the intent of the plan is not to require permits for such sources. Ms. Burzynski noted the possible connection between agricultural nonpoint sources and total maximum daily loads.

[Secretary’s Note: The following paragraph was added after the third paragraph on page 53:

“Funding to implement the recommendations of this plan may be obtained through many of the grant and loan programs listed in this report subsection and the accompanying appendices. In addition, trading of water quality credits may be useful in providing financial incentives for implementing controls on agricultural runoff. However, to fully meet the substantial costs associated with attaining the plan objectives, it is recommended that the State Legislature significantly increase levels of cost-share funding for key WDNR grant programs, particularly the Targeted Runoff Management (TRM) Grant Program and the Urban Nonpoint Source Water Pollution Abatement and Storm Water Management Grant Program, and also for DATCP programs to implement agricultural best management practices. Increased funding for the TRM and DATCP programs would accelerate the ability to implement the agricultural nonpoint source pollution control standards as set forth in Chapter NR 151 of the *Wisconsin Administrative Code*, as well as to implement recommended projects that call for additional levels of pollution control in lieu of or beyond the NR 151 standards. More funding for the urban program would assist municipalities in meeting NR 151 standards and WPDES stormwater discharge permit requirements and in implementing plan recommendations that call for measures beyond those requirements. In order to achieve levels of agricultural nonpoint source pollution control commensurate with the recommendations of this plan, the Legislature would either have to provide the recommended substantial increases in TRM fund and ATCP grants, or it would have to revise Chapters NR 151 and ATCP 50 to require implementation of agricultural controls regardless of the availability of grant funds. Because implementation of plan recommendations could place a large financial burden on smaller, family farming operations, increasing State cost-share funding is considered to be preferable to the alternative of making compliance with the NR 151 and ATCP 50 standards mandatory even if cost share funds are not available.”]

Ms. Burzynski commented that this chapter does not have a recommendation for targeting resources to critical areas for achieving water use objectives. She suggested using the model results to direct funding priorities. Mr.

Hahn responded that some geographic targeting was done; however, he noted that bacteria cannot be targeted in that sense. He continued that targeting was present in the priorities given in Tables XI-2 through XI-7. He noted that targeting was accomplished by emphasizing nonpoint source controls over point source controls. Mr. Shafer suggested adding discussion of targeting of pollution sources to the summary.

[Secretary's Note: An expanded **SUMMARY** section will be developed, and the issue of targeting resources will be covered in that section.]

Ms. Nenn asked how to go from the scale in the plan to one that assists groups like the one she represents with guidance on where to target their efforts. Mr. Hahn replied that the pilot watershed idea would accomplish this and he noted that the draft chapter mentioned that the Menomonee River had been put forth as a possible pilot watershed for which to pursue a watershed-based permit. Mr. Shafer then requested that the reference on page 19 to the Menomonee River watershed as a pilot watershed be removed.

[Secretary's Note: The second sentence of the first full paragraph on page 19 was revised to read:

“Initial discussions have been held among stakeholder groups and the possibility has been raised of using **a single** watershed as a pilot application for the watershed-based permitting approach.”]

A motion to approve preliminary draft Chapter XI, “Plan Implementation,” of SEWRPC Planning Report No. 50, *A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds*, as amended, was made by Mr. Lubner, seconded by Mr. Melching, and carried with ayes by all Committee members voting and with Mr. Shafer abstaining.

**CONSIDERATION OF THE PRELIMINARY DRAFT OF CHAPTER XII,
“SUMMARY AND CONCLUSIONS,” OF SEWRPC TECHNICAL REPORT
NO. 39 (TR NO. 39), WATER QUALITY CONDITIONS AND SOURCES OF
POLLUTION IN THE GREATER MILWAUKEE WATERSHEDS**

Mr. Schmidt asked Mr. Boxhorn to review the preliminary draft of the chapter.

Mr. Boxhorn began review of the chapter. He noted that, in general, the preliminary draft chapter constitutes a summary of the chapters of SEWRPC Technical Report No. 39 that were previously reviewed by the Committee and is a condensation of Chapters III and IV of Planning Report No. 50 that were also previously reviewed by the Committee. He indicated that the preliminary draft chapter also contains some material that was not previously reviewed by the Committee.

Mr. Lubner and Mr. Melching noted some typographical errors, editorial errors, and minor omissions in the preliminary draft chapter.

[Secretary's Note: Those errors or omissions were corrected.]

Mr. Kappel asked whether the 0.1 mg/l standard for total phosphorus referred to in the first sentence of the last paragraph on page 3 represented a recommendation of this plan. Mr. Boxhorn replied that was recommended in the original regional water quality management plan. Mr. Kappel and Mr. Melching asked that this be clarified in the text.

[Secretary's Note: The references to the recommended 0.1 mg/l standard for total phosphorus in the preliminary draft chapter were revised to indicate that this was a recommendation from the original regional water quality management plan. Those revisions were made in the last paragraph on page 3, the third full paragraph on page 5, the first full paragraph on page 7,

the sixth paragraph on page 8, the last paragraph on page 9, the last partial paragraph on page 11, and the second full paragraph on page 25.]

Mr. Melching commented that the discussion of pharmaceuticals and personal care products in the Menomonee River watershed on page 5 was unclear. He asked why only one compound was discussed. Mr. Boxhorn responded that this was the only compound for which data were available. He stated that this section would be reworded.

[Secretary's Note: The last sentence on page 5 was revised to read:

“The Menomonee River and some tributary streams were sampled for the antibacterial agent triclosan. It was not detected in any samples. No other data on pharmaceuticals and personal care products were available from the Menomonee River watershed.”]

Referring to the first sentence in the last paragraph on page 15, Mr. Lubner suggested that “perform important functions in the ecological system” should be the first item listed.

[Secretary's Note: The first sentence in the last paragraph on page 15 was revised to read:

“Aquatic and terrestrial wildlife communities perform important functions in the ecological system, have educational and aesthetic values, and are the basis for certain recreational activities.”]

Ms. Nenn commented that there was a discrepancy between the statement in the first paragraph on page 16 of there being an apparent net gain in species in the Menomonee River watershed and the numbers cited in the fourth paragraph on page 16. Mr. Boxhorn explained that this was not a discrepancy. He indicated that while a total of 46 species were detected in this watershed over the course of the last century, they were not all present at any single time, with some species being present in only samples from before 1975 and other species being present in only recent samples. Ms. Burzynski asked that this be clarified in the text.

[Secretary's Note: The fourth paragraph on page 16 was revised to read:

“Historically, an intermediate number of fish species was detected in the Menomonee River watershed, with a total of 46 species having been reported as being present in samples collected over the last century. During the period 1998-2004, 31 species were reported in this watershed. This is the highest number of species detected in this watershed during any sampling period and represents an increase over the number of species detected during 1994-1997.”]

Ms. Nenn commented that the fifth paragraph on page 31 was confusing. Mr. Hahn stated that it would be clarified.

[Secretary's Note: The first sentence of the second to last paragraph on page 31 was deleted and replaced with the following three sentences:

“In general, the Milwaukee River watershed contains a poor to fair quality fishery; however, some areas within the watershed contain higher quality fisheries. These higher quality areas are mostly located within six of the 20 subwatersheds, those being the Upper Milwaukee River, West Branch Milwaukee River, East Branch Milwaukee River, Middle Milwaukee River, Upper Lower Milwaukee River, and Lower Milwaukee River watersheds. Within those subwatersheds, areas of good to excellent fishery conditions have been identified.”]

The second sentence of the second to last paragraph on page 31 was revised as follows:

“On a watershed basis, the fish community contains a high abundance of both warmwater and coldwater species of fishes, seems trophically balanced in the highest quality areas, contains a good percentage of top carnivores (except for those species stocked), and is not dominated by tolerant fishes.”]

A motion to approve preliminary draft Chapter XII, “Summary and Conclusions,” of SEWRPC TR No. 39, *Water Quality Conditions and Sources of Pollution in the Greater Milwaukee Watersheds*, as amended, was made by Mr. Kappel, seconded by Mr. Shafer, and carried unanimously by the Committee.

ADDITIONAL CONSIDERATION OF THE PRELIMINARY DRAFT OF CHAPTER XI, “PLAN IMPLEMENTATION,” OF SEWRPC PLANNING REPORT NO. 50 (PR NO. 50), A REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE FOR THE GREATER MILWAUKEE WATERSHEDS

Mr. Schmidt noted that Mr. Hahn asked to briefly review Appendix Q, “Costs for Components of the Recommended Regional Water Quality Management Plan Update by Community.” Mr. Hahn began by acknowledging the key role of Mr. Troy Deibert of HNTB in preparing the cost information set forth in Appendix Q.

Mr. Hahn noted that Appendix Q currently included public and private sector costs, but they were not differentiated. He said that the Commission staff intended to split out the private sector costs and to include them as a study area total by plan element. He also noted that some costs may be redistributed from one designated management agency to another.

He mentioned that Mr. Thomas Bunker provided comments by telephone, including a suggestion that Appendix Q be eliminated from the report entirely. Mr. Bunker expressed concerns that municipalities would not “buy in” to the plan if costs are presented by community and that would be unlikely to endorse the plan if Appendix Q remains in the plan report.

[Secretary’s Note: Mr. Bunker’s comments on this issue and others are presented and addressed in a later section of these minutes which presents comments received outside the meeting]

Mr. Melching noted that in some cases the assignment of costs to designated management agencies in Appendix Q resulted in some very small costs by agency. Mr. Hahn replied that the costs would be reviewed and such small costs would be eliminated.

Referring to page 15 of Appendix Q, Mr. Kappel said that, while the Cities of Wauwatosa and West Allis had no combined sewers, a cost was assigned to those communities under Recommended Urban Nonpoint Pollution Control Measures Item 5, “Disconnect residential roof drains from sanitary and combined sewers and infiltrate roof runoff.”

[Secretary’s Note: Because this item includes disconnection of roof drains that are connected to separate sanitary sewers as well as redirection to pervious surfaces of downspouts discharging to impervious surfaces, it is appropriate to have costs assigned to communities that do not have combined sewers.]

OLD BUSINESS

Mr. Hahn reminded the Committee that it had approved the preliminary draft subsection, *Cost-Effectiveness Analysis of Wastewater Treatment Options for the City of South Milwaukee*, of Chapter X, “Recommended

Water Quality Management Plan,” of SEWRPC Planning Report No. 50, *A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds*, subject to the approval of the subsection by the City of South Milwaukee. He noted that the City has been contacted, but that approval has not yet been received. He stated that SEWRPC staff would follow up on this.

NEW BUSINESS

Ms. Nenn asked whether members of the Advisory Committee can be present at meetings of the Oversight Committee. She indicated that she might be interested in attending. Mr. Shafer noted that Advisory Committee members had not attended in the past, but could.

DETERMINATION OF NEXT MEETING DATE AND LOCATION

The next meeting of the Advisory Committee was scheduled for Thursday, September 20, 2007, from 1:30 to 3:30 p.m. at the Mequon City Hall in the upper Council Chambers, if the Council Chambers are available. **[FOLLOWING THE MEETING, THE MEQUON COUNCIL CHAMBERS WERE RESERVED FOR THE MEETING ON SEPTEMBER 20.]** A meeting of the Advisory Committee was also scheduled for Wednesday, October 31, 2007, from 1:30 to 3:30 p.m. at the Mequon City Hall in the upper Council Chambers.

ADJOURNMENT

The August 7, 2007, meeting of the Advisory Committee on the regional water quality management plan update was adjourned at 3:20 p.m. on a motion by Mr. Shafer, seconded by Mr. Holschbach and carried unanimously by the Committee.

The following sections of the minutes address comments on the plan that were received before or after the August 7, 2007, meeting and additions made by the SEWRPC staff to address past Advisory Committee comments, recent developments affecting the plan, and issues identified by the SEWRPC staff as additional water quality modeling results became available.

COMMENTS ON PRELIMINARY DRAFT CHAPTER XI, “PLAN IMPLEMENTATION,” OF SEWRPC PR NO. 50 AS PROVIDED BY MS. JILL HAPNER, COUNTY CONSERVATIONIST, WASHINGTON COUNTY PLANNING AND PARKS DEPARTMENT

Consistent with Mr. Ballweg’s comments at the August 7, 2007, Advisory Committee meeting, Ms. Hapner expressed reservations concerning the recommendation that all livestock operations provide six months of manure storage to enable manure to be spread twice annually, noting that some smaller operations would not require manure storage and manual spreading, while other operations would require more than six months capacity. She commented that a greater concern is that operators have enough suitable land on which to spread the manure produced during their operations. She suggested consideration of a more general statement regarding individual use of best management practices for nutrient management.

[Secretary’s Note: A response to the issues raised by the Committee on this topic is given above in the section on the review of the preliminary draft chapter.]

Ms. Hapner suggested including the Southeastern Wisconsin Cooperative Invasive Species Management Area among the agencies and organizations listed in the subsection *Exotic Invasive Species* on page 48.

[Secretary’s Note: The following sentence was added to the end of the sixth full paragraph on page 48:

“The Southeastern Wisconsin Cooperative Invasive Species Management Area may also be able to provide assistance in coordinating activities to reduce the spread of invasive species to inland waters.”]

Ms. Hapner commented that the Conservation Reserve Program (CRP) was enacted to take all highly erodible lands out of agricultural production, not just highly erodible riparian areas.

[Secretary’s Note: The first sentence on page 55 was revised to read:

“The Conservation Reserve Program was enacted to protect lands which are sensitive to erosion and to take **all highly erodible land, including** land along riparian corridors, out of agricultural production and place the land into long-term vegetative cover for a period of 10 to 15 years.”]

COMMENTS ON PRELIMINARY DRAFT CHAPTER XI, “PLAN IMPLEMENTATION,” OF SEWRPC PR NO. 50 AS PROVIDED BY MR. THOMAS J. BUNKER, RACINE WATER AND WASTEWATER UTILITY

Mr. Bunker suggested deleting Appendix Q. He expressed concerns that municipalities would not “buy in” to the plan if costs are presented by community and that would be unlikely to endorse the plan if Appendix Q remains in the plan report.

[Secretary’s Note: Because the information contained in the appendix was regarded as being useful to the communities, the appendix was retained. To address some of Mr. Bunker’s concerns, the following footnote was added to the title of the table in Appendix Q and the subsequent footnotes were renumbered:

“^aThese costs were developed at a systems planning level, and they are provided to indicate to each municipality or unit of government the possible public sector cost to implement the recommended plan. The costs have a range of accuracy of +50 percent to -30 percent. Second level planning, such as facilities and stormwater management planning, would be needed to develop refined costs specific to each municipality or unit of government. The presentation of these costs does not obligate the municipality to make the indicated expenditures.”]

COMMENTS ON APPENDIX XI-1, “INCENTIVES FOR ADDRESSING AGRICULTURAL NONPOINT POLLUTION SOURCES IN THE CONTEXT OF A WATERSHED-BASED PERMIT,” OF PRELIMINARY DRAFT CHAPTER XI OF SEWRPC PR NO. 50 AS PROVIDED BY MR. PERRY LINDQUIST OF THE LAND RESOURCES DIVISION OF THE WAUKESHA COUNTY DEPARTMENT OF PARKS AND LAND USE

Mr. Lindquist commented that based on his thirty years of experience with watershed projects, “cost-sharing is NOT an ‘incentive’ for someone to do something that they don’t want to do.” He also said that he hoped that the report recognizes that regulation, or the possibility of regulation, may be needed in such cases.

[Secretary’s Note: The SEWRPC staff agrees that in some instances incentives may not be sufficient to implement measures that are not viewed favorably by the person or organization who would establish a given practice. However, we believe that incentives could be an important component of an implementation plan that also incorporates regulatory aspects. We believe that the regional water quality management plan update strikes a reasonable balance between regulatory- and incentive-driven approaches.]

COMMENTS ON PRELIMINARY DRAFT CHAPTER XII, “SUMMARY AND CONCLUSIONS,” OF SEWRPC TR NO. 39 AS PROVIDED BY MR. THOMAS J. BUNKER, RACINE WATER AND WASTEWATER UTILITY

In reference to dissolved oxygen concentrations in the Root River, Mr. Bunker noted that there are times that there is no flow in the Root River.

[Secretary’s Note: Examination of the flow duration curve for the USGS gauge on the Root River at Racine (Figure IX-48 in SEWRPC TR No. 39) by SEWRPC staff shows that 99 percent of the time, discharge in the Root River at Racine was at or above 2.36 cubic feet per second. SEWRPC staff also examined the average daily discharge records for this gauge for the period August 23, 1963 to September 30, 2004 and found that there was only one period during which discharge dropped below 1.0 cubic feet per second. This occurred from July 8, 1988 to July 15, 1988. On all other dates, measurable flow was recorded. In general, no significant dissolved oxygen problems were identified in the lower reach of the Root River in the vicinity of the City of Racine.]

Mr. Bunker suggested removing the reference to phosphorus additives used as anticorrosion agents on page 7. He noted that the Racine Water and Wastewater Utility adds 0.7 parts per million orthophosphate to municipal water.

[Secretary’s Note: SEWRPC staff has decided to retain the reference as this provides a possible explanation for the increase in annual average concentrations of total phosphorus observed in some of the watersheds. There are relatively few point sources discharging noncontact cooling water to the Root River in or upstream of the City of Racine. It should be noted that the City of Milwaukee water utility, which is a significant source of noncontact cooling water, added between 1.5 and 2.2 parts per million orthophosphate to the municipal water supply in 2004, a representative year.]

Mr. Bunker noted some typographical errors.

[Secretary’s Note: Those errors were corrected.]

Mr. Bunker suggested clarifying the relationship of phosphorus loads from rivers to the resurgence of *Cladophora* in the nearshore area.

[Secretary’s Note: The last sentence of the fourth paragraph on page 19 was revised to read:

“The causes of the *Cladophora* resurgence in the Great Lakes are not known for certain, but probably include changes in **phosphorus loadings from the rivers discharging into the Great Lakes and changes in** water clarity and phosphorus availability related to the presence of zebra mussels and quagga mussels in the nearshore area.”]

Mr. Bunker noted that the Racine Water and Wastewater Utility generally measures higher counts of fecal coliform bacteria at sites upstream from the Horlick Dam than at sites downstream from this dam. Because of this, he asked that the data on distribution of fecal loads shown in Figure XII-3 for the Root River be double checked. Mr. Bunker also asked that clarification be added as to what is represented in Figure XII-3

[Secretary’s Note: The year 2000 distribution of pollutant loadings by source in Figure XII-3 were estimated through use of the water quality simulation model. Review of the model output shows that the respective percentages of fecal coliform bacteria loadings throughout the Root River watershed accounted for by SSO, WWTPs, urban nonpoint sources, and rural nonpoint sources in 2000 were less than 0.2 percent, less than 0.1 percent, 78.2 percent, and

21.6 percent, respectively. In the Root River watershed, contributions of fecal coliform bacteria from urban nonpoint sources tend to be considerably higher than contributions from rural nonpoint sources in several upstream subwatersheds, such as the Middle Root River, Upper Root River, East Branch Root River, and Whitnall Park Creek subwatersheds. Stream channel pollutant loads may be different because of processes that retain or remove pollutants or change their form during transport over the land surface or within the stream system. The following was added after the first sentence of the last paragraph on page 33:

“The graphs show comparisons of the percentages of total pollutant load contributed by various classes of sources. These percentages reflect estimates of point and nonpoint source loads delivered to the modeled stream reaches, after accounting for any trapping factors that would retain pollutants on the surface of the land. These include loads from groundwater. It is important to note that the stream channel pollutant loads may be expected to be different from the actual transport from the watershed, because physical, chemical, and biological processes may retain or remove pollutants or change their form during transport over the land surface or within the stream system.”

The title of Figure XII-3 was changed to:

“CHANGES IN **DISTRIBUTION OF POLLUTANT LOADINGS** IN THE GREATER MILWAUKEE WATERSHEDS: 1975-2000”]

COMMENTS ON PRELIMINARY DRAFT CHAPTER XII, “SUMMARY AND CONCLUSIONS,” OF SEWRPC TR NO. 39 AS PROVIDED BY MR. WILLIAM G. WAWRZYN AND MS. MARSHA BURZYNSKI, WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Mr. Wawrzyn noted that the discussion of achievement of water use objectives compares water quality to the regulatory standards supporting the water use objectives currently promulgated in Chapter NR 104 of the *Wisconsin Administrative Code*. He indicated that WDNR staff has recommended revisions to some of the water use objectives in NR 104 for certain stream reaches in the study area. He suggests that it would make sense for the plan to recommend revisions to NR 104 for these stream reaches.

[Secretary’s Note: WDNR staff recommendations for changes in water use objectives are included in the auxiliary water use objectives listed in Table IV-1 in Chapter IV of SEWRPC TR No. 39 and Table VII-11 in Chapter VII of SEWRPC PR No. 50. An examination of whether these stream reaches can achieve the auxiliary water use objectives and appropriate recommendations will be included in Chapter X of PR No. 50 and is documented in an insert to Chapter X of PR no. 50 that will be presented for Advisory Committee review at the September 20, 2007, meeting.]

Mr. Wawrzyn noted that studies have shown that in urban watersheds, diverse fish and aquatic life communities disappear in when levels of connected imperviousness reach about 12 to 20 percent. He asked whether it would be reasonable to recommend that urban stormwater pollutant loadings on a subwatershed basis be reduce to levels shown by modeling to be equivalent to those generated from the land surface at levels of 15 percent imperviousness. Ms. Burzynski asked whether the modeling for the extreme measures approach addresses this.

[Secretary’s Note: SEWRPC Technical Report No. 39 (TR No. 39), Water Quality Conditions and Sources of Pollution in the Greater Milwaukee Watersheds, specifically addresses the issue of imperviousness in a watershed and the impacts of imperviousness on biological communities. That report also addresses the potential impacts of agricultural land use on

biological communities. The individual watershed chapters in TR No. 39 include evaluations of connected imperviousness conditions for each watershed in the study area.

The regional water quality management plan update recommended plan calls for several measures that would help to directly mitigate the effects of existing and future imperviousness on the streams and lakes of the study area. These include disconnection of roof drains connected to impervious areas, installation of rain barrels and rain gardens, implementation of infiltration facilities according to the Chapter NR 151 urban runoff standards, and consideration of following the groundwater recharge and groundwater sustainability recommendations of the regional water supply plan. Additionally, because the impervious thresholds for stream degradation also serve as indicators of other environmental stressors associated with unmitigated development, the many pollution control recommendations also serve to mitigate the negative water quality effects of development that can be associated with, but not necessarily solely caused by, imperviousness.

The extreme measures condition for pollution control that was modeled under the water quality plan update (see Chapter X of PR No. 50) addresses some of the sources of stream degradation for which imperviousness would be an indicator, but it does not specifically address additional measures to directly mitigate the effects of increased imperviousness.

The modeling approach to representation of water quality improvements, beginning with the “big picture” scenarios and continuing through development of alternative plans and the recommended plan was a comprehensive attempt to logically identify those water quality-related measures that would most effectively, and cost-effectively, improve water quality. As noted above, many of the recommended measures directed towards urban lands would serve to directly or indirectly mitigate the effects of imperviousness on the streams of the study area.

It would be an interesting exercise to see what controls would be required to attain a level of urban nonpoint source pollution equivalent to that generated from the land surface at levels of 15 percent imperviousness, but it would not be reasonable to make such a recommendation in the absence of considerable additional study and it is not clear that application of that criteria would be the most effective way to achieve the plan’s water quality improvement objectives.]

ADDITIONAL COMMENTS ON PRELIMINARY DRAFT CHAPTER III, “EXISTING AND HISTORIC SURFACE WATER AND GROUNDWATER CONDITIONS,” OF SEWRPC PR NO. 50 AS PROVIDED BY MR. CHARLES S. MELCHING

Mr. Melching noted typographical errors, editorial errors, and minor omissions in the preliminary draft chapter.

[Secretary’s Note: Those errors or omissions were corrected.]

Mr. Melching asked that the relationship between temperature and solubility of oxygen in water be added to the factors that can affect dissolved oxygen concentrations discussed on pages 33 and 34.

[Secretary’s Note: The following bullet point was added after the first bullet point on page 34:

- “Fourth, the solubility of oxygen in water is dependent upon water temperature. As temperature increases, oxygen becomes less soluble. Thus, increases in water temperature in the estuary will tend to lower the concentration of dissolved oxygen.

The second bullet point on page 34 was revised to read:

- “**Fifth**, dissolved oxygen concentrations in water can be affected by numerous other factors including the presence of aquatic plants, sunlight, and the amount of and type of sediment.”]

Mr. Melching noted that the decreases in ammonia concentrations and increases in nitrate concentrations aren't occurring independently and may reflect microbial activity. He asked that this be added to the bullet points on page 40.

[Secretary's Note: The following bullet point was added after the fifth bullet point on page 40:

- “The simultaneous increase in nitrate concentrations and decrease in ammonia concentrations may reflect an increase in the rate of microbial conversion of ammonia to nitrate in the estuary, outer harbor, and nearshore area.”]

Mr. Melching commented that it does not make sense that the minimum value reported for dissolved phosphorus concentration in the Milwaukee Harbor estuary on page 41 was higher than the minimum value reported for total phosphorus concentration, given that dissolved phosphorus is a component of total phosphorus.

[Secretary's Note: Mr. Melching is correct that dissolved phosphorus is a component of total phosphorus. While samples for both total phosphorus and dissolved phosphorus in this data set were generally collected simultaneously, on some sampling dates samples of only one or the other of these was collected. Because of this, the data sets for dissolved phosphorus concentrations and total phosphorus concentrations have a certain amount of independence from one another. The following footnote was added after the first full paragraph on page 41:

“It is important to note that the data sets for dissolved phosphorus concentrations and total phosphorus concentrations do not entirely represent simultaneous sampling. While samples for both total phosphorus and dissolved phosphorus in this data set were generally collected at about the same time, on some sampling dates samples of only one or the other of these was collected. Because of this, the data sets for dissolved phosphorus concentrations and total phosphorus concentrations have a certain amount of independence from one another. This degree of independence may be reflected in the summary statistics (e.g., the minimum total phosphorus concentration during the period of record is less than the minimum dissolved phosphorus concentration although dissolved phosphorus is a component of total phosphorus).”]

Mr. Melching asked that the range of zinc concentrations in the outer harbor on page 45 be double checked, as the maximum reported was lower than the maximum reported for the estuary.

[Secretary's Note: SEWRPC staff reviewed the data and found that the range reported for zinc concentrations from samples collected in the outer harbor was correct.]

Mr. Melching asked that the range of atrazine concentrations detected in Milwaukee River tributaries reported on page 53 be double checked.

[Secretary's Note: SEWRPC staff reviewed the data and found an error. The fourth sentence of the second full paragraph on page 53 was revised to read:

“Concentrations of atrazine in these streams ranged between **0.007** $\mu\text{g/l}$ and $0.043 \mu\text{g/l}$, with a mean of $0.23 \mu\text{g/l}$.”]

Mr. Melching asked that the size of the portion of the study area reported on page 73 to be in primary environmental corridor be double checked.

[Secretary’s Note: SEWRPC staff reviewed the data and found the reported number to be correct.]

Mr. Melching asked whether a map of impaired stream reaches could be added to that chapter.

[Secretary’s Note: The attached Map III-8A showing impaired stream reaches throughout the study area was added to the chapter. The last sentence of the fifth full paragraph on page 79 was revised as follows:

“**Map III-8A graphically depicts and** Table III-13 lists stream reaches in the greater Milwaukee watersheds that are classified as being impaired waters in the most recently approved list.”

Also, in Chapters V through X of SEWRPC TR No. 39, individual watershed maps indicating impaired waters and appropriate text references to Maps V-14, VI-18, VII-24, VIII-19, IX-20, and X-22 were added. Finally, the first sentence in the **Impaired Waters** subsection on page 27 of preliminary draft Chapter XII of SEWRPC TR No. 39 was revised as follows to include a reference to the individual watershed maps indicating impaired waters.

“**As shown on Maps V-14, VI-18, VII-24, VIII-19 , IX-20, and X-22 in this report,** a number of sections of streams and other waterbodies in the greater Milwaukee watersheds are listed as impaired pursuant to Section 303(d) of the Clean Water Act.”]

Mr. Melching asked that the percentages listed in Table III-16 for metals in water for stations along the mainstem of the Root River be double checked.

[Secretary’s Note: SEWRPC staff reviewed the table and made the following revisions:

For the metals in water entry in the Root River above Cleveland Avenue row, the entry was changed to “**E-44 (25)**,”

For the metals in water entry in the Root River between the intersection of W. National Avenue and Oklahoma and Cleveland Avenue row, the entry was changed to “**E-46 (24)**,”

For the metals in water entry in the Root River between the intersection of W. Coldspring Road W. National Avenue and Oklahoma row, the entry was changed to “**E-44 (25)**,”

For the metals in water entry in the Root River between County Line Road and W. Ryan Road row, the entry was changed to “**E-50 (20)**.”]

[Secretary’s Note: Where the above changes also affect information presented in Technical Report No. 39, that report was revised.]

SEWRPC STAFF UPDATES TO CHAPTER VI, “LEGAL STRUCTURES AFFECTING THE REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE,” OF SEWRPC PR NO. 50

The incorporation of the Town of Caledonia as a Village resulted in several changes to the utility district structure within the new Village. In addition, when the implementation chapter was drafted, additional information came to light regarding utility and sanitary districts in the study area.

[Secretary's Note: The first sentence in the second full paragraph on page 28 of Chapter VI was revised to read as follows:

“The Caledonia **East and West Utility Districts**, Mt. Pleasant Sewer Utility District No. 1, and Town of Yorkville Utility District No. 1 are the only utility districts which provide sanitary sewer service within the regional water quality management plan update study area.¹

¹*Following incorporation of the Town of Caledonia as the Village of Caledonia, the former Caddy Vista Sanitary District and Caledonia Utility District No. 1 were combined into the Caledonia West Utility District and the former Crestview Sanitary District and the former North Park Sanitary District, including the Village of Wind Point, were combined into the Caledonia East Utility District.”*

The first full paragraph on page 29 of Chapter VI was revised as follows:

“There are five sanitary districts in the regional water quality management plan study area. These are **the Waubeka Area Sanitary District in Ozaukee County, the Lake Ellen Sanitary District and** Town of Scott Sanitary District No. 1 in Sheboygan County, and the Wallace Lake Sanitary District and Silver Lake Sanitary District, both in Washington County. As noted above in the Utility Districts subsection of this report, upon incorporation of Caledonia as a Village, the Caddy Vista Sanitary District was dissolved and brought under the jurisdiction of **the Caledonia West Utility District**. The Crestview Sanitary District and the North Park Sanitary District, **including the Village of Wind Point, were combined into the Caledonia East Utility District.”**]

SEWRPC STAFF REVISIONS TO CHAPTER X, “RECOMMENDED WATER QUALITY MANAGEMENT PLAN,” OF SEWRPC PR NO. 50

This section of the minutes addresses unresolved issues raised at previous Technical Advisory Committee meetings and additional issues that arose during plan preparation following Committee review of Chapter X.

The preliminary draft of Chapter X that was previously reviewed by the Advisory Committee called for the initiation of wastewater treatment plant facilities planning when average daily flows to a plant reached 80 percent of plant capacity. That criterion was attributed to Chapter NR 208, “Compliance Maintenance,” of the *Wisconsin Administrative Code*. Ms. Burzynski questioned the 80 percent criterion.

[Secretary's Note: SEWRPC staff reviewed Chapter NR 208 and found that Section 208.05(3) calls for a two-point per month compliance maintenance annual report point assignment for a plant that exceeds 90 percent of its maximum month design flow, expressed as a daily average, but the Chapter does not specifically state a threshold flow beyond which facilities planning must be initiated. The 80 percent criterion is a reasonable one and it will be applied for the evaluation of possible future facilities planning needs under the regional water quality management plan update.

The second sentence of first full paragraph on page 10 of Chapter X was deleted and replaced with the following:

“The regional water quality management plan update evaluates facilities planning needs based on a criterion that facilities planning should be initiated when the average daily flow to a wastewater treatment plant reaches 80 percent of the plant design capacity.”]

Based on updated data related to certain wastewater treatment plants that have been obtained since the initial preliminary draft of Chapter X was issued, revisions were made to the estimates of future hydraulic loads to wastewater treatment plants and to the evaluation of the need for future facilities planning.

[Secretary’s Note: The last sentence of the first paragraph and the second and third paragraphs on page 10 of Chapter X were revised as follows and a paragraph was added after the third paragraph. Table IX-6 was revised and is attached as Exhibit B.

“As shown in Table IX-6 in Chapter IX of this report, it is estimated that by the year 2020, assuming existing wastewater treatment plant design capacities:

- Sewage flows to the Village of Grafton plant would be nearing 80 percent of the plant design capacity,
- Sewage flows to the Village of Kewaskum and Village of Newburg plants would have exceeded the 80 percent threshold and would be approaching, or equaling, the plant design capacities, and
- Sewage flows to the **City of Cedarburg and** Village of Jackson plants would have exceeded plant design capacities.

The Village of Kewaskum **has recently** prepared a facilities plan for upgrades to its wastewater treatment system.¹ **Depending on the rate of growth of population and the rate of expansion of commercial and industrial land, the Village may have to undertake additional facilities planning prior to 2020.**

While average annual sewage flows to the wastewater treatment plants for the Villages of Newburg and Jackson have not yet reached the 80 percent threshold, because they are projected to exceed the threshold sometime between now and 2020, it is recommended that those municipalities monitor development and population levels in their sewer service areas and that they prepare facilities plans prior to 2020 in order to provide adequate treatment capacity to meet future needs.

Based on the information in Table IX-6, it is estimated that facilities planning for the City of Cedarburg may be warranted **prior to 2020**² and **facilities planning for** the Village of Grafton may be warranted in about the year 2020. The City and the Village have **given preliminary consideration to** constructing a new regional wastewater treatment plant at such future time that expansion of the existing treatment capacity for those communities is

¹*Ruekert & Mielke, Inc, WTF Facility Plan-Village of Kewaskum Washington County, Wisconsin, January 2007.*

²*In 2000, the City retained a consultant to study the hydraulic capacity of the existing wastewater treatment plant. That study indicated that the plant capacity may be considerably greater than 2.75 mgd. Before undertaking future facilities planning, the City would pursue officially rerating the plant to reflect the higher capacity.*

warranted. It is recommended that, when facilities planning is **first initiated for either of the municipalities**, that the plan include cost-effectiveness analyses to evaluate upgrading the individual treatment plants versus construction of a new regional wastewater treatment plant to serve both communities.

A wastewater treatment facilities plan was recently prepared by the Village of Fredonia.³ The plan was prepared to address plant hydraulic capacity and sludge storage issues. The plan report notes that monthly average wet weather flows have ranged from 80 to 90 percent of design capacity, maximum daily flows and peak hourly flows have approached the plant capacity, and the sludge storage tank is being loaded up to 90 percent of its capacity. The facilities plan does not call for the Fredonia plant to treat wastewater from the Waubeka area because that area has not yet been provided with a sanitary sewerage system and there are no imminent plans to do so. The regional water quality management plan update recommends eventual connection of the Waubeka area to the Fredonia wastewater treatment plant; however, in the absence of a sanitary sewerage system to serve Waubeka, it is considered to be consistent with the regional plan for Fredonia to exclude the Waubeka area from its planning area at this time.

³*McMahon Associates, Wastewater Treatment Facility Plan, prepared for the Village of Fredonia, June 2007.*”

The first full paragraph on page 25 of Chapter IX, “Development of Alternative Plans: Description and Evaluation,” was revised as follows:

“For communities outside of the MMSD service area, the preliminary recommended plan assumes that they will continue to assess their wastewater conveyance and treatment systems so as to provide the capacity necessary to allow for future development as it occurs while adhering to the conditions of their operating permits. As shown in Table IX-6, it is estimated that the public wastewater treatment plants **for the City of Cedarburg¹ and the Villages of Jackson and Newburg may exceed their current hydraulic capacities under planned year 2020 conditions, and that the plants for the Villages of Grafton and Kewaskum may be nearing their existing capacities by 2020.**² The plan also includes a recommendation for increased efforts by all communities to identify and eliminate cross-connections and other illicit discharges of wastewater to streams and storm sewers.

¹*The City retained a consultant to study the hydraulic capacity of the existing wastewater treatment plant. That study indicated that the plant capacity may be considerably greater than its current rating. Before undertaking future facilities planning, the City would pursue officially rerating the plant to reflect the higher capacity.*

²*The final recommended plan, which is presented in Chapter X of this report, 1) includes consideration of wastewater treatment plant facilities planning that was **recently completed** for the Village of Kewaskum at the time that the regional water quality management plan update was being conducted, 2) addresses **the issue of constructing** a new regional wastewater treatment plant at such future time that expansion of the existing treatment capacity **is warranted for either the City of Cedarburg and the Village of Grafton**, and 3) includes recommendations regarding whether the City of South Milwaukee wastewater treatment plant should be upgraded to meet anticipated year 2020 conditions, or whether the City sewerage system should be connected to the MMSD system.”]*

[Secretary's Note: For consistency with the final MMSD 2020 facilities plan, the second bulleted item on page 15 of Chapter X was revised as follows

- ***“Hydraulic Analysis of the Jones Island Wastewater Treatment Plant***
The MMSD facilities plan recommends a hydraulic **capacity analysis of the Jones Island plant. An existing MMSD project included in the 2007 Annual Budget (J01008, Upgrade Primary Clarifier Mechanisms) addresses upgrading the primary clarifiers to ensure full and adequate hydraulic capacity. The 2020 facilities plan recommends that the scope of that project be expanded to include investigation of all hydraulic issues in the preliminary/primary portion of the treatment system or that a new project be developed to investigate those issues.”**]

[Secretary's Note: For consistency with the final MMSD 2020 facilities plan, the second sentence of the third-last bulleted item on page 15 of Chapter X was deleted. The deleted sentence read as follows:

“Assessing the need for these drying and dewatering rehabilitation projects is an essential component of the final recommended biosolids plan which is to be developed as described in a subsequent subsection of this chapter.”]

Based on an initial review by SEWRPC staff of preliminary recommended plan water quality model results for the streams of the study area and Lake Michigan, it was decided to target enhanced urban illicit discharge control and/or innovative methods to identify and control possible pathogen sources in stormwater runoff from urban areas in the subwatersheds indicated on Map X-12. Upon further consideration, that decision was changed to call for such programs and controls in all urban areas in the study area. That decision was based on review of the recommended plan water quality data which indicate that the criterion for substantial compliance with water quality standards (compliance 85 percent or more of the time) would not be met in locations downstream from the excluded areas shown on Map X-12.

[Secretary's Note: The first full paragraph on page 33 of Chapter X was revised to read as follows:

“Based on review of recommended plan water quality model results for the streams of the study area and Lake Michigan, it was decided to recommend enhanced urban illicit discharge control and/or innovative methods to identify and control possible pathogen sources in stormwater runoff from **all** urban areas in the **study area**. To address the threats to human health and degradation of water quality resulting from human-specific pathogens and viruses entering stormwater systems, it is recommended that each municipality in the **study area** implement a program consisting of:”

Also, in order to clarify the representation of controls on urban fecal coliform bacteria in the water quality models for the recommended plan and the extreme measures condition, the following footnote was inserted at the end of the second paragraph on page 34 of Chapter X, after the “Recommended Plan” and “Extreme Measures’ Condition” column headings in Tables M-1 through M-6 in Appendix M of PR No. 50, and after the “Recommended Plan” and “Extreme Measures Condition” row headings in Tables L-1 through L-6 in Appendix L of PR No. 50:

“Within the water quality models for the recommended plan and extreme measures condition, the detection and elimination of illicit discharges to storm sewer systems and control of urban sourced pathogens, including those in stormwater runoff, are represented using stormwater disinfection units. Such units were initially considered as a recommended approach to treatment of runoff, but were eliminated from further consideration based on

comments from the Technical Advisory Committee. However, the use of such units is considered to be appropriate as a surrogate representation of the varied and as yet undetermined means that would be applied to detect and eliminate illicit discharges and to control pathogens in urban stormwater runoff. Those units explicitly address the control of bacteria in stormwater runoff, and, based on the way that bacteria loads are represented in the calibrated model, they also implicitly provide some control of bacteria that may reach streams through illicit connections that contribute to baseflow.”]

The recommendations of Chapter X regarding control of chlorides used as deicers relate primarily to public programs; however, application on private property, especially chlorides spread in parking lots, may be a significant source of chloride in runoff.

[Secretary’s Note: To address this, the following sentence was added at the end of the first full paragraph on page 35 of Chapter X:

“It is recommended that education programs be implemented to provide information about 1) alternative ice and snow control measures in public and private parking lots and 2) optimal application rates in such areas.”]

SEWRPC STAFF REVISIONS TO CHAPTER IX “DEVELOPMENT OF ALTERNATIVE PLANS: DESCRIPTION AND EVALUATION,” OF SEWRPC PR NO. 50

This section of the minutes presents one revision for consistency with Chapter 9 (Table 9-68) of the MMSD 2020 facilities plan report. That revision changes specific information regarding numbers and volumes of combined sewer overflows and sanitary sewer overflows under the future baseline condition and a revised operating option with no inline storage system volume reserved for sanitary sewer flows, but the conclusion of the comparison is unchanged.

[Secretary’s Note: The last sentence of the second paragraph on page 23 was revised as follows:

“However, in comparison to the future baseline condition representing current MMSD operating procedures, model results indicate that the revised operating option that would not distinguish between separate and combined sewer flows to the ISS would reduce the average annual number of tunnel-related CSOs and SSOs combined (from **3.5** to **2**), reduce the average annual number of CSOs by **two** (from **3** to **1**), increase the average annual number of tunnel-related SSOs by **0.5** (from 0.5 to **1**), and would decrease the total annual average overflow volume by about **12** percent, from **930** million gallons to **720** million gallons.”]

Respectfully Submitted,

Michael G. Hahn
Secretary

Exhibit B

Table IX-6

SELECTED CHARACTERISTICS OF PUBLIC WASTEWATER TREATMENT PLANTS IN THE REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE STUDY AREA OUTSIDE THE MMSD PLANNING AREA^a

Facility	2000 Estimated Area Served (square miles)	2000 Estimated Population Served	2000 Unsewered Population ^b	Date of Latest Major Modification	Receiving Water	Design Average Hydraulic Loading (mgd)	Average Annual Hydraulic Loading (mgd) ^c	Planned 2020		Ratio of Estimated 2020 Average Annual Hydraulic Loading to Design Loading
								Estimated Population Served ^d	Estimated Average Annual Hydraulic Loading (mgd)	
City of Cedarburg	3.3	11,400	1,980	1988	Cedar Creek	2.75 ^e	2.24 ^f	14,700	2.88	1.05
City of West Bend	8.5	30,400	1,360	1980	Milwaukee River	9.00	3.42	39,100	4.51	0.50
Village of Campbellsport....	1.1	1,900	--	1989	Milwaukee River	0.47	0.22	2,100 ^g	0.25	0.52
Village of Cascade.....	0.8	700	--	1976	North Branch Milwaukee River	0.17	0.06	700 ^g	0.06	0.38
Village of Fredonia.....	0.6	2,000	20	1983	Milwaukee River	0.60	0.24 ^f	2,500	0.38	0.63
Village of Grafton.....	2.6	11,000	840	1983	Milwaukee River	2.15	1.27	14,400	1.69	0.79
Village of Jackson.....	1.6	5,000	480	1997	Cedar Creek	1.25	0.81	8,000	1.29	1.04
Village of Kewaskum	1.0	3,300	140	1972	Milwaukee River	0.67 ^h	0.51	5,200	0.63	0.94
Village of Newburg	0.4	1,200	300	1997	Milwaukee River	0.18	0.11	1,700	0.18	1.00
Village of Random Lake.....	1.7	1,600	--	1979	Silver Creek	0.45	0.21	1,800 ^g	0.24	0.52
Village of Saukville	1.4	4,100	520	2002	Milwaukee River	1.60	0.82	5,200	1.04	0.65
Village of Union Grove.....	0.8	5,300	110	2003	West Branch Root River Canal	2.00	0.72	5,900	0.83	0.41
Town of Scott.....	0.4	200	--	1985	Groundwater	0.03	0.02	200	0.02	0.67
Town of Yorkville	0.4	200	--	1983	Tributary to Hoods Creek	0.15	0.07	400	0.11	0.72

PRELIMINARY DRAFT

^aThe City of South Milwaukee wastewater treatment plant is assessed in more detail in Chapter X of this report.

^bExisting year 2000 unsewered population within sewer service areas that is proposed to be sewered under plan conditions.

^cFor year 2003, unless indicated otherwise.

^dBased upon interpolation between the year 2000 population and the 2035 recommended plan level as set forth in the regional land use plan for Southeastern Wisconsin, unless noted differently.

^eIn 2000, the City retained a consultant to study the hydraulic capacity of the existing wastewater treatment plant. That study indicated that the plant capacity may be considerably greater than its current rating. Before undertaking future facilities planning, the City would pursue officially re-rating the plant to reflect the higher capacity.

^fFor year 2006.

^gBased upon Wisconsin Department of Administration estimate for each civil division.

^hBased upon January 2007, WTF Facility Plan—Village of Kewaskum, Washington County, Wisconsin, Ruckert & Mielke, Inc.

Source: Wisconsin Department of Natural Resources and SEWRPC.