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RECORD OF PUBLIC COMMENTS

A REGIONAL WATER SUPPL Y PLAN FOR SOUTHEASTERN WISCONSIN

COMMENTS RECEIVED FROM JANUARY 12, 2009 THROUGH MARCH 16, 2009

Prepared by the

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Revised October 2009

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TABLE OF CONTENTS

			PAGE
		COMMENTS	
APPENDIC	CES		
Appendix	A A-1	COMMENTS RECEIVED FROM JANUARY 12, 2009, THROUGH MARCH 16, 2009 REGARDING THE REGIONAL WATER SUPPLY PLAN LETTERS SETTING FORTH COMMENTS WHICH	
	A-2	RECEIVED LETTER RESPONSES FROM COMMISSION STAFFWRITTEN COMMENTS RECEIVED BY MAIL,	A-1
	A-3 A-4	E-MAIL, FAX OR ONLINE COMMENT FORM	A-42
Appendix	В	ATTENDANCE RECORDS OF PUBLIC INFORMATION MEETINGS HELD JANUARY 12, 2009 THROUGH FEBRUARY 2, 2009	B-1
Appendix	C	NEWSPAPER ARTICLES AND EDITORIALS CONCERNING THE REGIONAL WATER SUPPLY PLAN	C-1
Appendix	D	COMMISSION ANNOUNCEMENTS OF PUBLIC INFORMATION MEETINGS HELD IN JANUARY AND FEBRUARY 2009 AND SUMMARY MATERIALS DISTRIBUTED AT PUBLIC INFORMATION MEETINGS	D-1

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RECORD OF PUBLIC COMMENTS

A REGIONAL WATER SUPPLY PLAN FOR SOUTHEASTERN WISCONSIN

INTRODUCTION

This report presents the public comments received on a preliminary recommended regional water supply plan during the public information and comment period that began on January 12, 2009 and extended through March 16, 2009. Following a summary of the comments and of the Commission staff responses to the comments, the detailed comments are grouped and presented in a series of appendices:

- Written and oral comments received through March 16, 2009 (Appendix A).
- Attendance records of public information meetings held January 12, 2009 through February 2, 2009 (Appendix B).
- Newspaper articles and editorials concerning the regional water supply plan (Appendix C).
- Materials announcing the nine public information meetings and summary materials distributed at the meetings (Appendix D).

Background

A series of public informational meetings were held throughout southeastern Wisconsin over the period of January 12, 2009 through March 16, 2009. The purpose of these meetings was to brief residents of the Region on a preliminary recommended water supply plan for the seven-county Southeastern Wisconsin Region and to provide an opportunity for public reaction and comment on the proposed plan. Generally one meeting was conducted in each of the seven counties concerned, with three meetings being held in Milwaukee County. Two of the meetings in Milwaukee County were scheduled in minority and low-income areas of the County. In addition, at the request of the organizers, an informational program was held at the "Water-Wise Conference" held on March 7, 2009 in Waukesha County and conference attendees were given an opportunity to comment on the proposed plan.

A display advertisement regarding the public informational meetings was published in newspapers throughout the Region. Appendix D contains a copy of the announcement as published in the *Milwaukee Journal Sentinel* and posted on the Commission's website. Similar paid advertisements were also published in an additional 12 local newspapers published in southeastern Wisconsin. These ads listed the dates, times and places of the meetings relevant to residents of the county of listing, and in some cases, of adjoining counties as well (see Appendix D). Such notification of the general public supplemented the announcement of public informational meetings presented on page one of *the Regional Water Supply Plan Newsletter 3*, prepared under the Regional water supply

planning effort, which was direct-mailed first class to some 2,000 interested parties, including the chief elected officials and clerks of the 147 cities, villages, and towns within the Region, as well as all county board members and the Commission's list of central city, minority, and low-income groups and organizations.

The timeframe for all of the meetings was 5:00 p.m. to 7:00 p.m., although the closing time was expanded as needed to accommodate all of the questions and comments of interested attendees. Both *Newsletter 3* describing in detail the results of the comparative analyses of the alternative plans considered, including the preliminary recommended plan, and a one-page summary brochure were available and distributed as meeting handouts.

The format for all of the meetings was an "open house" offering display materials, available staff, and a presentation so that attendees could individually ask questions and obtain information, as well as comment on the proposed plan. The public was invited to attend any of the meetings found most convenient, with the open house feature allowing attendees to come and go as personal needs or interests dictated. In total, there were 159 attendees at the series of public information meetings, as listed in Appendix B.

Meeting Display Boards

A focal point for open house questions and answers at all of the meetings was a series of display boards presenting information on the following topics:

- General hydrogeology of Southeastern Wisconsin;
- Deep sandstone aquifer drawdown: pre-1864 to 2000;
- Areas proposed to be served by municipal and other community water supply systems in each county by the plan design year 2035;
- Water conservation measures envisioned under the alternative and preliminary recommended water supply plan;
- Estimated annual groundwater recharge in each county;
- Alternative water supply plans for southeastern Wisconsin;
 - Alternative Plan 1—Design Year 2035: Forecast Conditions Under Existing Trends and Committed Actions
 - Alternative Plan 2—Design Year 2035: Forecast Conditions with Limited Expansion of Lake Michigan Supply
 - Alternative Plan 3—Design Year 2035: Forecast Conditions with Limited Expansion of Lake Michigan Supply Accompanied by Groundwater Recharge Facilities
 - Alternative Plan 4—Design Year 2035: Forecast Conditions with Further Expansion of Lake Michigan Supply
- Conditions in the deep aquifer associated with alternative water supply plans;
- Aquifer simulation model nodes with more than 10 percent baseflow depletion or baseflow augmentation in streams and inland waters between 2005 and 2035 under conditions associated with alternative water supply plans: 2035;
- Composite water supply plan for southeastern Wisconsin: 2035;
 - Subalternative 1—Intermediate Expansion of Lake Michigan Supply with City of Waukesha Utilizing a Groundwater Source of Supply
 - Subalternative 2—Intermediate Expansion of Lake Michigan Supply with City of Waukesha Utilizing a Lake Michigan Source of Supply

- Groundwater and surface water conditions associated with subalternatives to the preliminary recommended plan: 2035;
 - Conditions in the deep aquifer
 - Aquifer simulation model nodes with more than 10 percent baseflow depletion or baseflow augmentation in streams and inland waters between 2005 and 2035
- Preliminary recommended regional water supply plan 2035: intermediate expansion of Lake Michigan supply; and
- Environmental justice and water supply planning.

These display boards were also placed on the Commission's website as a reference for meeting attendees and as an informational source for interested persons who did not attend a meeting.

Procedures for Commenting

Upon entering the open houses, and at several junctures during each meeting, attendees were encouraged by staff to record any comments elicited by the display boards or other interests, so that their thoughts could be considered by the Commission staff and the Commission Regional Water Supply Planning Advisory Committee.

Comments during the public informational meetings were recorded in two basic ways: 1) attendees completing a written comment form—or submitting comments in writing by any other means found convenient; and 2) via dictation to a court reporter from the firm Brown & Jones Reporting, Inc., in which case the comments from persons registering were transcribed from oral to written form. Sample forms used for the above purposes are contained in Appendix D.

Attendees were also advised that their comments could be submitted at any time following the meetings via the Commission's website, email, fax, or the U.S. Postal Service. Similarly, these comment opportunities were noted in the newspaper advertisements discussed above, and on the SEWRPC website at www.sewrpc.org/watersupplystudy. The deadline for submittal of comments was initially February 9, 2009. The deadline was extended to March 16, 2009, in response to a number of requests.

Group Presentation and Discussions

At 6:00 p.m. during the public informational meetings, a presentation was made by Commission study staff, focusing upon the planning process, alternative plans considered, and the preliminary recommended plan. The presentation was similar at all nine meetings, with some tailoring of content to the respective county locations. A summary of a typical presentation is contained in Appendix D. The meetings were conducted by a staff member of the University of Wisconsin-Extension.

In addition to the Commission staff presentation, the University of Wisconsin-Extension staff reminded all attendees of the study history and background, context of the public informational meetings, means of commenting, and disposition of comments with respect to subsequent staff, Advisory Committee, and Commission review.

Requests for clarification were entertained and responded to during and following the meeting presentations, while comments on the proposed plan were encouraged via submittal of an executed comment sheet, dictation to a court reporter, or any subsequent written means received by the established deadline. The substantial subjects of discussion which follow were generally not offered as nor accompanied by formal comments; however, both their tenor and content were given careful consideration in the preparation of a final recommended plan. That is also true of discussions Commission staff conducted individually with persons attending the open house meetings.

The following section provides a summary of the comments received and Commission staff responses.

SUMMARY OF COMMENTS

Attendance at the nine public information meetings and at the informational sessions held at the above referenced Water-Wise Conference totaled 181 persons. Comments on the plan were received from 160 persons, agencies, municipalities, utilities, and organizations; including written comments received at the meetings, comments dictated to the court reporter at the meetings, and comments received via U.S. mail, fax, e-mail, and the comments page of the Commission website. These comments were received in the form of 144 separate submissions. Some agencies, municipalities, utilities, or organizations made multiple submissions of comments. In addition, some submissions had multiple signatories.

Comments received from 17 signatories were not relevant to the regional water supply plan, but rather related to such matters as other planned infrastructure improvement proposals, such as highway and sewerage system improvements, and were judged as not requiring response. The comments from the remaining 143 persons, agencies, municipalities, utilities and organizations were related to suggested changes or additions to the plan, indicated general support for the plan, indicated support for specific aspects of the plan, or otherwise indicated specific concerns or issues regarding the plan and were considered to require careful consideration and response. These comments are summarized and responded to in the following text. In some instances, related comments are grouped together in the text and given a common response. The numbers following the comment indicate how many persons the comment was received from.

Comments in Support of the Preliminary Recommended Water Supply Plan or Specific Components of the Plan

Four comments were received that expressed general support for the preliminary recommended plan. Some comments also expressed qualified support for the plan. Among the written comments generally supporting the plan were letters from the City of Waukesha Water Utility and the Public Service Commission of Wisconsin. In addition, comments were received that expressed support for specific aspects of the plan including the recommended provision of a Lake Michigan water supply to straddling communities and the City of Waukesha water utility, preservation of groundwater recharge areas, the proposed siting procedure for high-capacity wells in the shallow aquifer, and the water conservation component of the plan.

General Comments in Opposition to the Plan

Forty-three comments expressed general opposition to the preliminary recommended plan. Of these, 25 comments expressed opposition to the preliminary recommended plan without specifying the components of the plan that the commentators opposed. In addition, the following comment was received that expressed general opposition to the plan on the basis of economic viability:

• **Comment:** The current recession makes the plan unaffordable (28 comments).

Response: This comment was made specifically with respect to the proposed provision of municipal water supply to an urban area of the Region currently served by private wells, the expressed concern being over the cost of conversion from private wells to a municipal water utility. The design year of the preliminary recommended plan is 2035. It is unlikely that the current recession will last until then. In addition, experience has shown, that financial assistance for public infrastructure development may be expected to be available in the form of State and Federal loans and grants, particularly during periods of economic recession. Thus, the current economic recession should not determine the structure of a long-term plan.

Moreover, the plan does not specifically recommend that the areas concerned convert from private wells to municipal water utility service relying on groundwater, but rather identifies these areas as having the potential, based upon their development density, to convert to service by a municipal water utility should water quality or quantity problems develop in these areas. If such problems do not surface, the areas concerned would continue to utilize individual private wells.

Comments Regarding the Planning Process and/or Factors Examined in the Water Supply Study

Twelve comments were received which related to the process used in developing the plan and/or the factors considered in the planning process.

- **Comment:** The water supply study and any adoption and implementation of a water supply plan should be suspended until water supply planning is coordinated with housing, transit, and highway development and with job creation public policies (One comment).
- **Comment:** The plan selected should recognize other issues that may be impacted by the water supply plan such as land use, transportation, and housing development (Three comments).

Response: The design year 2035 regional land use plan serves as the basis for the regional water supply plan, thus coordinating water supply planning with all of the other elements of the regional plan, such as transportation, sanitary sewerage, stormwater management, and park and open space development, which are also based upon the land use plan.

The Commission has always recognized the relationship that exists between land use planning and water supply planning, and indicated at the very beginning of the regional water supply planning effort that, should that planning effort identify any water resource constraints on the development pattern envisioned in the adopted regional land use plan, the Commission would initiate a process to amend the land use plan in an appropriate manner. The regional water supply planning effort has found that water supply is not a limiting factor within this Region with respect to the location of urban development located either east or west of the subcontinental divide. Indeed, the studies concerned have shown that the patterns and intensities of development envisioned in the regional land use plan—which represent a departure from development activity trends over the past 30 years and a return to a more centralized development pattern—could be supported by the available groundwater systems in the areas concerned, even if none of the proposed extensions of Lake Michigan water to areas located west of the subcontinental divide were to be implemented.

• Comment: Placing the support of existing land use patterns and support of planned land use patterns as an objective and giving it highest priority in the evaluation of alternative plans rewards bad land use planning (One comment).

Response: The ordering of water supply planning objectives in the evaluation of alternative plans in Chapter IX of the planning report documenting the regional water supply plan does not indicate a prioritization of the objectives. The five objectives were given equal weight in the evaluation. Clearly, any water supply plan must recognize the existing land use pattern. As noted above, the planned patterns of development envisioned in the regional land use plan represents good, not bad, land use planning. The regional land use plan envisions a more centralized land use pattern that can be economically provided with essential public services, including sanitary sewerage, water supply, and mass transit; that seeks to preserve the environmental corridors and isolated natural resource areas of the Region in natural, open uses; and that seeks to maintain the prime agricultural areas of the Region in agricultural use.

• **Comment:** A socioeconomic impact analysis should be included as a part of the plan (One comment).

Response: Given the expressed interest in the potential socioeconomic impacts of the regional water supply plan, this issue was discussed with the Commission Environmental Justice Task Force at its March 24, 2009, meeting. At that meeting, it was concluded that a socioeconomic impact analysis should and would be prepared for the regional water supply plan. Selection and adoption of a final regional water supply plan would be held in abeyance until completion of that analysis. The findings of the analysis have been summarized in the planning report documenting the regional water supply plan.

• **Comment:** The population growth estimates used for the plan are too high. (One comment)

Response: The population forecasts used to develop the regional water supply plan were the forecasts used to develop the design year 2035 regional land use plan and are set forth in SEWRPC Planning Report No. 48, *A Regional Land Use Plan for Southeastern Wisconsin: 2035*, June 2006, and in SEWRPC Technical Report No. 11, 4th Edition, *The Population of Southeastern Wisconsin*, July 2004.

For the purposes of developing population forecast and alternative projections, the Commission employed the cohort-survival technique—a technique regarded as the "gold standard" by demographers. The assumptions made regarding probable future birth, death, and migration rates were based upon careful consideration by an advisory committee of knowledgeable professionals of past and current trends and available indicators of probable future trends at the county, regional, State, and national levels and—with respect to migration rates—the strength of the national and regional economies and changes in the civilian labor force of the Region. It is important to note that if, with time, the population forecasts used to develop the recommended water supply plan should prove to be too high, then the useful life of the plan would exceed the design year of the plan—a not necessarily undesirable event.

The Commission does recognize that the preparation of population projections and forecasts involves uncertainties. Because of this, it is the Commission's practice to periodically review and revise its demographic and economic projections and forecasts. Past experience has shown that the Commission forecasts have consistently proven to be accurate at the regional level within about plus or minus 10 percent per decade. Such review indicates that the Commission population forecasts were, in 2007, within 1 percent of the actual population at the regional level, and within 1 percent or less at the county level.

• Comment: In the cost analyses, the cost savings from reduced use of salt for softening should be offset by the value of water softening plant loss experienced by residents abandoning their water softeners (One comment).

Response: The investment in onsite water treatment equipment, such as water softeners, constitutes a sunk cost, that is, it represents an expense that has already been incurred and cannot be recovered regardless of which plan alternative is chosen. Previously expended, unrecoverable monies such as this are not considered in any accepted method of economic analyses of alternative plans; nor would such sunk costs typically be considered as a negative factor for a homeowner who could reduce his or her monthly costs through abandonment of a water softener.

• **Comment:** The municipal utility water loss estimates assumed in the plan are too low; they should be about 33 percent of water pumped (One comment).

Response: The estimates of municipal utility water losses used in the planning process are based upon the unaccounted-for water reported by the municipal water utilities of the Southeastern Wisconsin Region in their annual reports which document water losses to the Public Service Commission of Wisconsin. While the percentage of water pumped that was unaccounted-for varied among the utilities concerned, the average percentage loss reported in 2000 was 11 percent. In subsequent years, the average was slightly less. As part of the water conservation component, the proposed plan recommends that municipal water utilities establish water system efficiency programs, including meter testing, leak detection and repair, water main maintenance and replacement, water system audits, and water production system refinement in order to reduce the percentage of unaccounted-for water in the operation of their transmission, storage, and distribution systems. These programs should assist in maintaining, or lowering, the currently experienced losses.

• **Comment:** The plan should identify secondary sources of water supply that could be used in the event of a terrorist attack (One comment).

Response: The need for secondary sources of supply was considered and addressed in the design of the alternative and proposed plans. As an integral part of the planning effort, the reliable capacities of the water utilities operating in the Region were assessed. For utilities utilizing groundwater as a source of supply, reliable capacity was defined as adequate capacity to supply the needed maximum daily pumpage with the largest capacity well out of service. For utilities utilizing surface water as a source of supply, reliable capacity was defined as the capacity remaining with the most critical unit of the production process out of service. In the design of the alternative and recommended plans, facilities were then added to each water supply system to provide a reliable capacity equal to the anticipated year 2035 maximum daily pumpage demand. The resulting systems then have a reliable capacity that provides significant protection for the continuity of supply in the event of a terrorist attack.

Interconnections among municipal systems using similar sources of water supply for the purpose of providing water in the event of an emergency exist in many instances and consideration of others is also recommended in the plan, and would provide secondary sources of water supply that could be used in the event of a terrorist attack. It should also be noted that all water supply utilities within the Region have been involved in security planning, with guidance provided by the U.S. Environmental Protection Agency, the Wisconsin Department of Natural Resources (WDNR), and water utility organizations. Such local level planning is considered the most effective means of preventing and mitigating acts of terrorism.

• **Comment:** The plan does not address environmental impacts on water-dependent natural resources. An analysis of such environmental impacts is needed if the alternatives may be reasonably expected to have an impact on fish and wildlife species; endangered or threatened species; or critical species habitat (Two comments).

Response: The planning effort specifically included an evaluation of the potential environmental impacts of the alternative and recommended plans. The objectives and associated standards upon which the alternative and preliminary recommended plans are based specifically addressed the need for environmental protection and the alternative plans were comparatively evaluated based upon those objectives and standards. Specific information on all of the alternative water supply plans was developed relating to the potential impacts to the quantity of the surface waters as expressed by changes in groundwater-derived baseflows. These impacts, and the attendant impacts on wildlife, were carefully considered in the comparative evaluation of the alternative plans and selection of the preliminary recommended plan. Moreover, the regional land use plan on which the water supply plan is based recommends the preservation in essentially open, natural uses of all the remaining environmental corridors and critical species habitat areas of the Region. Thus, the water supply plans by their very nature included an environmental assessment procedure applicable at the systems level of planning. Implementation of specific elements of the plan may or may not require an environmental assessment or an environmental impact statement. However, this is a determination that will need to be made on a case-by-case basis during the implementation phase.

Comments and Questions Regarding Potential Impacts of Specific Facilities or Actions

Six comments were received which were related to potential impacts of specific facilities or actions.

• **Comment:** Concern was expressed that new municipal wells constructed by the City of Hartford may adversely affect private wells currently used by Town of Hartford residents (One comment).

Response: Under the preliminary recommended regional water supply plan, there should be no need for the City of Hartford to develop any new wells through the plan design year 2035, beyond the well under construction in 2009. If the forecast conditions on which the recommended plan is based should change, and additional municipal wells be required in the area, the plan includes recommendations related to the siting of all new high-capacity wells, and for the analysis and monitoring of the impacts of such wells finished in the shallow aquifer.

• **Comment:** The Town of Salem provided information on an investigation for the siting of a potential well to serve a planned municipal building in the south-central portion of the Town. The investigation indicated that a deep aquifer well may be more practical, given the groundwater quality conditions in that area. The preliminary recommended water supply plan envisions shallow aquifer wells to serve any municipal water supply systems developed in the Town (One comment).

Response: If a need for public water supply systems to serve the portions of the Town of Salem area develops in the future, the proposed plan envisions the use of shallow aquifer wells as a potential source of supply. The proposed plan recommends the conduct of more-detailed, site-specific evaluations of well locations and attendant hydrogeologic conditions to determine the best aquifer as a source for each well to be developed. Such analyses would be carried out as part of plan implementation and may result in some wells in the area concerned being finished in the deep aquifer. While such a change would result in some increase in costs, the increase in the overall plan costs would not be significant. The text has been refined to indicate this possibility.

• **Comment:** Concern was expressed about the impacts of the HOD Landfill Superfund site in Antioch, Illinois, upon groundwater quality and proposed municipal wells in the Town of Salem (Two comments).

Response: According to the U.S. Environmental Protection Agency, remediation activities were completed at this site in 2001. As part of this remediation, leachate from the landfill continues to be collected for offsite treatment and disposal. This minimizes the risk of leachate leaking out of the landfill. The general direction of groundwater flow in the Antioch, Illinois, area is from west to east, making it unlikely that any contaminants from this site would be transported to locations in the Town of Salem area. In addition, as part of the proposed siting procedure for high-capacity wells, factors such as groundwater contamination would have to be examined and taken into account.

• **Comment:** The impacts of the proposed Thelan sand and gravel pit in the Twin Lakes and Town of Randall area upon the shallow aquifer should be examined and included in the study (Two comments).

Response: It is anticipated that the impacts of this sand and gravel mining operation on the shallow aquifer may be expected to be localized. If serious cause for local concern can be shown, the Village of Twin Lakes, in which the proposed sand and gravel operation is to be located, should require the operator of the proposed operation to perform the hydrogeological analyses required to determine the local impacts of the mine upon the shallow aquifer and to local surface waterbodies. The required analyses would be similar to those described in the preliminary recommended plan for siting new high-capacity wells. If these analyses were to indicate that significant local impacts to the shallow aquifer or to surface waterbodies may be expected to occur, appropriate mitigative measures could then be designed and implemented.

• **Comment:** Will the projected average 4.5 percent reduction in groundwater baseflow in Washington County lower water levels in Pike Lake (One comment)?

Response: The major inflows to Pike Lake consist of the inflow from the Rubicon River and direct precipitation onto the surface of the Lake. A water budget constructed for Pike Lake as a part of a lake management planning effort carried out by the Commission and the U.S. Geological Survey, estimated that inputs from groundwater baseflow represent about 7 percent of the inflow into Pike Lake. Because inputs of groundwater baseflow represent a small portion of the water budget of Pike Lake, it is likely that any impacts from baseflow reductions associated with the recommended water supply plan would be within the range of normal interannual variation. Furthermore, there are no new wells planned to be located in the immediate vicinity of Pike Lake.

Comments Regarding Provision of Lake Michigan Water to Communities Not Currently Utilizing Lake Michigan as a Source of Water Supply

Three comments were received which were related to the proposed provision of Lake Michigan water to specifically identified communities currently utilizing groundwater as a source of supply.

• **Comment:** The pipeline used to provide Lake Michigan water to the City of Waukesha should be a double pipeline (One comment).

Response: The issue of whether the supply pipeline required for the delivery of Lake Michigan water to the City of Waukesha should consist of one or two pipes should be determined in the next level of planning, i.e., preliminary engineering. It is unlikely, however, that a double pipeline would be required. In most places where a new Lake Michigan supply has been developed, only a single pipe transmission line has been used. Moreover, the existing Waukesha wells could be kept as a backup source of supply for use under emergency conditions.

• Comment: An alternative for providing the City of Cedarburg and the Village of Grafton with Lake Michigan water from the City of Port Washington via a pipeline through the Village of Saukville along CTH O should be considered (One comment).

¹SEWRPC Community Assistance Planning Report No. 273, A Lake Management Plan for Pike Lake Washington County, Wisconsin, *December* 2005.

Response: An additional option was examined under the planning effort for the provision of a Lake Michigan water supply to the City of Cedarburg and the Village of Grafton via the Village of Saukville. This option is shown on Map X-2 in the planning report documenting the regional water supply plan. Under this option, the City of Port Washington would, by a direct connection through the Village of Saukville along CTH O, provide Lake Michigan water to the City of Cedarburg Light and Water Commission and the Village of Grafton Water and Wastewater Commission. The costs associated with this option which are documented in Chapter X of the planning report documenting the regional water supply plan, and would be similar for the utilities concerned to the costs of the option included in the preliminary recommended plan—the construction of a new Lake Michigan water and treatment facility to serve the City of Cedarburg and Village of Grafton area. The option of providing water supply system would have a potential advantage of best meeting the planning standard relating to maximizing the use of existing water supply facilities. Either option would constitute an acceptable means of providing these communities with a Lake Michigan source of supply.

• **Comment:** The communities utilizing Lake Michigan as a source of water supply should include the City of West Bend and the Village of Newburg (One comment).

Response: Based upon the environmental analyses and cost comparisons conducted as part of the planning effort, it was concluded that providing the City of West Bend and the Village of Newburg with a Lake Michigan water supply would not be a necessary or cost-effective option. The City of West Bend has adequate well capacity to meet current needs, and only modest additional supply would need to be developed to meet anticipated year 2035 demand.

Comments Regarding Return Flow Options for the City of Waukesha Water Utility

Eleven comments were received which related to the design of the means and potential impacts of the means by which spent Lake Michigan water proposed to be provided to the City of Waukesha would be returned to the Lake.

• Comment: Any diversion of Lake Michigan water outside the Great Lakes watershed should require return flow (Three comments).

Response: The preliminary recommended plan proposes the provision of Lake Michigan water outside the Great Lakes watershed to three communities: the central and western portions of City of Muskego, the central portion of the City of New Berlin; and the City of Waukesha. The first two are communities that straddle the subcontinental divide, are located within the Milwaukee Metropolitan Sewerage District (MMSD) sanitary sewer service area and, therefore, have existing return flow to the Great Lakes watershed. For the City of Waukesha, the preliminary recommended plan does envision return flow of any diverted water to the Great Lakes watershed.

• Comment: The plan should include a specific return flow option as a part of the recommended provision of Lake Michigan water to the City of Waukesha; that option should consist of a direct discharge to Lake Michigan and not to a stream tributary to the Lake (Two comments).

Response: Four alternatives were considered with regard to the means of returning spent Lake Michigan water delivered to the City of Waukesha Water Utility. The conclusion of the analyses of these alternatives was that further more-detailed environmental assessment would be necessary in order to recommend a specific return flow option. While substantial analytical data were developed with respect to the potential impacts on stream flooding and Lake Michigan water quality, it was judged that the level of analysis required to determine the impacts on stream water quality and on stream channel erosion was beyond the scope of the regional water supply planning effort, and, moreover, would be duplicative of ongoing work activities being undertaken by the City of Waukesha. Thus, it was determined to maintain the recommendation to leave the selection of the specific form of the required return flow open pending the completion of the more-detailed environmental assessments that would be required during the plan implementation phase.

• Comment: Water returned to Lake Michigan should not create a water quality problem (Six comments).

Response: As part of the analysis of return flow options conducted under the planning effort, consideration was given to the impact of pollutant loadings on Lake Michigan; including consideration of the average concentrations of the major conventional pollutants in effluent discharged from the City of Waukesha wastewater treatment plant; and the ambient concentrations of those pollutants in Underwood Creek and the Menomonee River, streams considered for receipt of return flow. The average concentrations of ammonia-nitrogen, biochemical oxygen demand, total phosphorus, and total suspended solids in the treated effluent concerned were all found to be approximately equal to, or less than, the average ambient concentrations of these pollutants in the streams concerned. Average concentrations of chlorides in the treated effluent discharge by the City of Waukesha plant were found to be higher than the average ambient concentrations in these streams; however, the use of Lake Michigan water as a source of water supply by the City of Waukesha would result in a significant reduction in the hardness of the water provided by this utility and would, therefore, eliminate the need for water softening by the users, as is currently necessary. This should result in a reduction in the concentration of chlorides discharged by the Waukesha wastewater plant into receiving waters.

The State imposed effluent limitations that the City of Waukesha wastewater treatment plant is subject to are more stringent than those that plants discharging to Lake Michigan are subject to. For example, the weekly average concentration of total suspended solids discharged by the City of Waukesha wastewater treatment plant is not to exceed 10 milligrams per liter (mg/l). By contrast, the weekly average concentrations of total suspended solids discharged by the MMSD's Jones Island and Southshore wastewater treatment plants are not to exceed 45 mg/l. The Jones Island and Southshore treatment plants are subject to an additional effluent limitation under which the monthly average concentration of total suspended solids is not to exceed 30 mg/l. Similarly, depending on the month of the year, the weekly average concentration of biochemical oxygen demand discharged by the City of Waukesha wastewater treatment plant is not to exceed levels in the range of 8.2 to 10.0 mg/l. The weekly average concentrations of biochemical oxygen demand discharged by the MMSD's Jones Island and Southshore wastewater treatment plants are not to exceed 45 mg/l. The Jones Island and Southshore treatment plants are subject to an additional effluent limitation in which the monthly average concentration of biochemical oxygen demand is not to exceed 30 mg/l. Moreover, the actual concentrations of biochemical oxygen demand and suspended solids in the City of Waukesha wastewater treatment plant effluent are typically between 1.0 and 3.0 mg/l. In addition, the analyses recognized the potential impacts of the return flow on pollutant loadings to Lake Michigan. However, the increase in loadings was estimated to be insignificant—less than 1 percent—of the total loadings from the other sources of pollution—both point and nonpoint—from the Region. Consequently, review of the findings of the system-level analyses concluded that the return flow concerned should not have a significant adverse effect on Lake Michigan. However, as previously noted, additional environmental analyses of the return flow component is expected to be carried out under second-level local planning and engineering by the City of Waukesha should it move forward with a diversion application.

Comments Regarding Potential New Municipal Water Utilities

Sixty-nine comments were received which related to the proposed creation of new municipal water utilities to serve specifically identified areas of the Region.

• Comment: The new municipal water utilities proposed for the Village of Silver Lake, Village of Twin Lakes, Town of Randall, and Town of Salem in Kenosha County and the associated proposed municipal service areas and wells are unnecessary. In addition, some comments expressed opposition to creating new municipal water utilities without specifying a proposed utility (65 comments).

Response: The proposed plan calls for the provision of municipal water supply to certain areas of the Region that are currently served by private, onsite wells only if and when a need is demonstrated, and then at the option of the affected residents and local units of government concerned. Absent a demonstrated need and local initiative, residents and businesses of the areas would remain on individual wells.

Additional text has been added to the report to clarify and emphasize these points.

• **Comment:** Where practical, the plan should favor expanding the service areas of existing water utilities over the creation of new utilities in order to achieve economies of scale. This comment was made in a letter from the Public Service Commission of Wisconsin (One comment).

Response: Two auxiliary recommendations have been added to the recommended plan. The first identifies alternative means for providing public water supply to areas of existing and proposed urban development that transcend municipal boundaries and that are not currently served by municipal water supply facilities. The second identifies opportunities for integration among existing municipal utility systems. The revised text includes a preference for the expansion of existing utility systems rather than the creation of new utilities.

• Comment: Concern was expressed about water from any wells drilled in the Town of Salem being provided to other communities. Concern was also expressed about the Town of Salem being provided with water by the City of Kenosha Water Utility (One comment).

Response: The number of wells planned, and the quantity of water estimated to be required, by the proposed Town of Salem Water Utility under the preliminary recommended regional water supply plan are based upon population, employment, and land use demand forecasts set forth in the adopted design year 2035 regional land use plan. The proposed water supply plan does not envision the provision of water by the Town of Salem Water Utility, should such a utility be created, to any other communities. The proposed plan also does not envision the expansion of the Kenosha Water Utility service area to those areas indicated to be served by municipal systems relying on groundwater water supply shown on in Chapter IV of the planning report documenting the regional water supply plan. It should be noted that expansion of the City of Kenosha Water Utility service area into the Town of Salem would require approval under the Great Lakes-St. Lawrence River Basin Water Resources Compact. It is recognized, however, that should a Town of Salem Water Utility be created, it would be logical to consider interconnection to adjacent groundwater-supplied utilities for purposes of ensuring the provision of water in the event of emergencies.

• **Comment:** The proposed new municipal water utilities will spur development throughout Walworth County, because developers will build where the development can be connected to a municipal system (One comment).

Response: The plan actually envisions the restriction of new urban development to areas around the periphery of existing urban development. The plan identifies only three potential new municipal utility areas within Walworth County: the Potter Lake area in the Town of East Troy and the Town of Lyons Sanitary District No. 2 area, and the existing urban-density development in the Delavan Lake Sanitary District. The areas are all currently developed. In addition, the plan identifies limited areas immediately adjacent to existing municipal water supply service areas, which are currently served by private wells, as potential future municipal service areas. These areas currently contain urban-density development. In total the areas concerned encompass fewer than five square miles, or about 1 percent, of the County. The recommendations in the plan provide for the potential conversion of existing development from private to public water supply. However, the plan envisions such conversion only if and when there is a need demonstrated and then at the option of the affected residents and local units of government concerned. Absent a demonstrated need and local initiative, residents and businesses would remain on individual wells. The vast majority of Walworth County is envisioned to continue to rely on private wells.

• **Comment:** The report should contain a more prominent statement that the plan recommends that new municipal water utilities be formed only in the case of a demonstrated local need and if a local initiative is undertaken (One comment).

Response: Additional text has been added to the report to clarify and emphasize these points.

Comments Regarding Proposed Year 2035 Water Supply Service Areas

Seven comments were received which related to the proposed expansion of specifically identified water utility service areas.

• Comment: The proposed expanded municipal water supply service area for the Delavan Water and Sewerage Commission and the Williams Bay Municipal Water Utility in Walworth County and the associated proposed wells are unnecessary (Five comments).

Response: The plan calls for the provision of municipal water supply to certain areas that are currently served by private, onsite wells only if and when a need is demonstrated and then at the option of the affected residents and local units of government concerned. Absent a demonstrated need and local initiative, residents and businesses of the areas would remain on individual wells.

Additional text has been added to the report to clarify and emphasize these points.

• **Comment:** The plan should address the need to limit the potential future expansion of the City of Waukesha (One comment).

Response: As part of an application for a diversion of water from Lake Michigan under the Great Lakes Compact, the community applying for the diversion will have to submit an estimate of the proposed volume of water to be diverted and a map showing its proposed water supply service area. The water supply service area approved as part of any diversion request would limit provision of Lake Michigan water to that service area. No expansion beyond the Waukesha Water Utility service area as delineated in Chapter IV of the planning report documenting the regional water supply plan is envisioned under the preliminary recommended regional water supply plan.

• Comment: Since the Village of Richfield has incorporated, the inclusion of a portion of the unincorporated area in the Village of Germantown Water Utility planned year 2035 service area, as shown in Chapter IV of the planning report documenting the regional water supply plan, should be reconsidered (One comment).

Response: While Map IV-14 of the planning report shows the area that is referred to in the comment as being in the recommended year 2035 service area of the Village of Germantown Water Utility, the legend to the map does indicate that this area could be served by a new utility. Several options are available for providing municipal water service to this area and similar areas where the proposed expansion of an existing utility's service area would transcend municipal boundaries. In the case of Richfield, one option would be to form a village utility district which would then contract with the existing utility for the purchase of water to distribute within its service area. A second option would be to form a village utility district which would develop its own sources of water supply. Another option would be to contract for retail service from an existing utility. Although any of these forms of organization appear viable under the preliminary recommended plan, as noted in a previous comment, the State Public Service Commission encourages the regionalization of water supply systems in order to achieve economies of scale, and has found that expanding existing utility service area boundaries is more favorable for rate payers and less costly for utilities than the creation of new utilities. Additional text has been added to the report to clarify this point.

Comments Regarding the Recommended Water Conservation Program Component of the Plan

Three comments were received which related to the proposed water conservation element of the preliminary recommended plan.

• **Comment:** The plan should provide more specifics regarding the recommended water conservation programs (Two comments).

Response: The proposed plan recommends that the scope and content of the water conservation programs be determined on a utility-specific basis, reflecting the type and sustainability of the source of supply and existing infrastructure conditions. Details regarding the kinds of measures recommended for these programs are set forth in Chapter IX of the planning report documenting the regional water supply plan; while recommended levels of water conservation for individual utilities are set forth in Appendix J of the planning report. The types of measures to be considered and the levels of conservation to be achieved are based upon the information provided in SEWRPC Technical Report No. 43, *State-of-the-Art Water Supply Practices*, July 2007. The recommended measures are intended to constitute a guide to be used by

local utilities in developing utility-specific programs. Implementation of these programs will require selection of measures and refining of program details in subsequent planning conducted by the individual utilities.

The water conservation programs developed by the water utilities will have to be designed to meet the requirements of the Wisconsin Department of Natural Resources rulemaking process. This rulemaking process is being carried out to meet the requirements of the Great Lakes-St. Lawrence River Basin Water Resources Compact and Wisconsin Act 227, related groundwater protection legislation, and the September 2006 Report to the Governor on Water Conservation. The Wisconsin Act 227 requires that the WDNR establish statewide water conservation and efficiency goals and objectives and to establish rules specifying the requirements for water conservation and efficiency for applicants for new or increased diversions. The WDNR is intending to initiate the water conservation rulemaking process during the second half of 2009, with completion expected in late 2010. The Public Service Commission of Wisconsin also considers any proposed water conservation measures during its review of water utility budgets and rates.

• **Comment:** Water conservation education is important (One comment).

Response: As noted above, the proposed plan recommends that the scope and content of the water conservation programs be determined on a utility-specific basis, reflecting the type and sustainability of the source of supply and existing infrastructure conditions. Details regarding the kinds of measures recommended for these programs are set forth in Chapter IX of the planning report documenting regional water supply plan; while recommended levels of water conservation for individual utilities are set forth in an appendix to the planning report. Public information and education programming is specifically identified as an element of each recommended level of water conservation program. As noted above, the Public Service Commission of Wisconsin and the Wisconsin Department of Natural Resources have important roles in establishing water conservation programs.

Comments Regarding the Placement of High Capacity Wells

Two comments were received regarding the need to regulate the placement and to monitor the performance of high capacity wells.

- **Comment:** Groundwater monitoring needs to be conducted in the area where a high-capacity well is proposed before the well is drilled and commissioned (One comment).
- **Comment:** An evaluation regarding the impacts of proposed high-capacity wells on surface waters and private wells should be required (One comment).

Response: The plan includes provisions related to the siting of all new high-capacity wells and for the analysis and monitoring of impacts of such wells in the shallow aquifer. These provisions specify the measures that should be taken in the early stages of locating sites for high-capacity wells in the shallow aquifer to develop the necessary understanding of the hydrogeological system associated with each candidate site and its surrounding area and to assess the likelihood of impacts of proposed wells upon nearby existing wells and surface waterbodies. These components also provide for monitoring of water levels in the vicinity of new high-capacity wells in the shallow aquifer, both prior to and during the test well phase of placement and during operation of the well. The recommendations for well monitoring have been expanded to include baseline monitoring of private individual wells anticipated to be maintained in the vicinity of a new large-capacity well.

Comments Suggesting Additional Recommendations to be Considered for Inclusion in the Plan

Five comments were received suggesting specific changes or additions to the preliminary recommended plan.

• **Comment:** Additional recommended activities to reduce the reliance within Ozaukee County on shallow groundwater withdrawals are needed in the plan (One comment).

Response: Under the preliminary recommended plan, groundwater withdrawals in Ozaukee County would substantially decrease. For example, the amount of water withdrawn by municipal water utilities

would, between 2000 and 2035, decrease from about 4.3 million gallons per day to about 0.9 million gallons per day. The remaining withdrawals being attributed to the utilities serving the Villages of Belgium and Fredonia and a portion of the Village of Newburg. Total withdrawals would decrease from about 9.0 million gallons per day to about 4.0 million gallons per day including private individual onsite wells and other self-supplied systems. This represents the greatest forecast decrease in withdrawals of any county in the seven-county Region. Under the conditions associated with the preliminary recommended plan, streams and watercourses in Ozaukee County would experience an average augmentation in baseflow of about 15 percent. The regional water supply plan also includes recommendations related to the siting of all new high-capacity wells and for the analysis and monitoring of impacts of such wells in the shallow aquifer. In the event that potential impacts to surface waterbodies are determined to be likely during this siting process, the plan recommends adoption of mitigative measures, such as relocation of proposed high-capacity wells and enhancement of groundwater recharge.

Comment: Additional shallow aquifer recharge facilities should be incorporated into long-term stormwater management planning (One comment).

Response: Map IX-1 of the planning report documenting the regional water supply plan shows the location of the sites for recharge facilities that were used in the application of the aquifer simulation model to help analyze the effects of the recharge facilities. The determination of the actual number of facilities, their capacities, their locations, and their appropriate design will need to be determined on a case-by-case basis during subsequent local planning and plan implementation efforts. The water supply plan recommends that these facilities be constructed where evaluations conducted in conjunction with the siting of high-capacity wells in the shallow aquifer indicate probable reductions in baseflows of streams or of water levels in lakes or wetlands due to installation and operations of the wells. In addition, the plan recommends preservation of existing recharge areas and the implementation of stormwater management practices designed to maintain recharge will help to maintain recharge to the shallow aquifer.

• **Comment:** The final plan should include a recommendation to study and formulate a road salt management plan to deal with increases in concentrations of chloride in shallow wells (One comment).

Response: The recent update of the regional water quality management plan for the greater Milwaukee area watersheds included several recommendations regarding reductions of chloride contributions to surface waters.² These included recommendations that municipalities and counties within the planning area consider alternatives to current ice and snow control programs that would result in a reduction in the amount of chlorides introduced into the environment. For the purpose of groundwater quality protection, these recommendations will be incorporated into the regional water supply plan as an auxiliary recommendation.

• **Comment:** The final plan should include a recommendation to formulate a management plan for the protection of the quality of water in shallow wells during major rainfall events (One comment).

Response: Design standards governing the placement of wells are intended to protect the water quality of shallow wells in the event of flooding accompanying a major rainfall event. The current state-of-the-art design practices for wells should ensure the quality of water in new shallow wells in the event of flooding or stormwater impoundment accompanying a major rainfall event. These practices include watertight construction and terminating wells at elevations above the flood elevation.

• **Comment:** The remaining open space in Waukesha County, especially the high-recharge and very high-recharge areas, should be preserved for groundwater recharge (One comment).

²SEWRPC Planning Report No. 50, A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds, *December* 2007.

Response: The plan includes a groundwater recharge area protection component directed at preserving existing groundwater recharge areas classified as having a high or very high recharge potential. This component may be expected to be largely achieved through the implementation of the adopted design year 2035 regional land use plan, since that plan recommends preservation of the environmental corridors, isolated natural resource areas, and prime and other agricultural areas of the Region that facilitate recharge. About 74 percent of the high rated and the very high rated recharge areas may be expected to be preserved by inclusion in the environmental corridors, isolated natural resource areas, and prime and other agricultural areas identified for preservation in the adopted land use. Careful design of new urban development and the use of selected stormwater management practices is also recommended to increase the level of preservation of the highly rated and very highly rated recharge areas.

Comments and Questions Regarding Implementation of the Plan

Eight comments were received regarding plan implementation.

- **Comment:** What are the exact locations of the wells planned or proposed for Kenosha County and how were these locations determined (Two comments)?
- **Comment:** Maps should be included that show the proposed staging of the plan recommendations in five-to 10-year increments (One comment).

Response: The level of detail requested in this comment is beyond the scope of systems-level planning. The planning process used to prepare the regional water supply plan constitutes the first phase—the systems planning phase—of what is a three-phase public works development process. Second-level local planning and preliminary engineering constitutes the second phase in this sequential process, with final design constituting the third phase. The systems planning phase concentrates on the definition of the problems to be addressed and on the development and evaluation of alternative measures for resolution of these problems on an areawide basis. Systems planning is intended to permit the selection, from among available alternatives, of the most effective means to resolve the identified problems, in accordance with agreed upon objectives and supporting standards. In this initial planning phase, each alternative plan element is developed to sufficient detail to permit a sound, consistent comparison of the technical practicality and economic feasibility of each alternative and a proper evaluation of its potential environmental impacts. The identified areawide plan elements are carried into greater detail and depth in the next phase—second-level planning and preliminary engineering. The specific location of wells and the staging of water supply facility development will depend upon more detailed local planning and engineering.

• **Comment:** What if the elected officials of a municipality choose not to adopt and implement the recommended plan (One comment)?

Response: The recommended regional water supply plan, like all of the Commission's plans, will be an entirely advisory plan. Under adoption, it will be certified to the constituent Counties and to the municipal units of government within the Region, and to concerned State and Federal agencies, for consideration, adoption, and implementation. The Commission has no authority to require the adoption or implementation of its plans. Should a municipality or utility choose not to follow the plan recommendations, the impact of such decisions will have to be evaluated by the Commission in subsequent plan updates or amendments.

• **Comment:** Future developers should be required to pay for and implement recommendations of the plan (One comment).

Response: For some elements of the plan, this may be an option to be considered by the local units of government concerned during plan implementation. It is a common practice for municipalities within the Region to require developers to pay for, or to construct, some elements of the water supply infrastructure required to serve newly developing areas.

• **Comment:** The plan recommends that City of Hartford Utilities place greater reliance on the shallow aquifer as a source of water supply. The utility's last deep aquifer well was shut down in 2006 and is planned to be abandoned in 2009 at which time the utility plans to have a new large capacity shallow aquifer well and elevated storage tank operational (One comment).

Response: Appropriate changes to the alternative and the recommended plan chapters of this report were made in response to this comment. The revised text now documents the recent City of Hartford water supply facility development and the abandonment of its existing deep aquifer well.

• Comment: SEWRPC should establish benchmarks which communities should meet with respect to water conservation, housing, and transportation. If the communities do not meet these benchmarks, SEWRPC should not assist them in planning water system expansion, new wells, water treatment plants, or in other efforts (One comment).

Response: Upon completion of the regional water supply plan, the Commission's role in water supply planning will be limited to supporting implementation efforts by the local units of government involved. The Commission will have no direct role in those plan implementation actions. The powers and duties of regional planning commissions are set forth in Chapter 66.0309 of the *Wisconsin Statutes*, and the work of such commissions is clearly entirely advisory to plan implementation agencies. Withholding its services to constituent counties and municipalities to coerce compliance with its plans would be inconsistent with the Commission's advisory role in governmental practices and procedures.

• Comment: The Village Board of the Village of Germantown adopted a resolution indicating that, at this time, it declined to adopt any plan that would commit the Village of Germantown water utility to connect to Lake Michigan as a source of supply (One comment.)

Response: It is anticipated that implementation of a Lake Michigan water supply for the Village of Germantown would most likely occur late in the plan implementation period. The plan recommends conversion to a Lake Michigan water supply for most of the communities located east of the subcontinental divide traversing the Region, albeit late in the planning period for the following reasons: 1) the favorable environmental impacts attendant to the recovery of the deep aquifer; 2) the reduction in chloride discharges to surface waters; 3) the favorable impacts on stream flows; 4) the ability to preserve the groundwater sources for other uses, such as agricultural; and 5) the opportunity to use available excess production capacity at the Milwaukee Water Works. In any case, the regional water supply plan is an advisory plan, and its adoption cannot commit a local unit of government to any action recommended in the plan.

Questions Regarding the Need for the Plan

One comment was received regarding the need for the plan and the scope of the planning effort.

• Comment: Who asked for the study and where can the scope of work be found (One comment)?

Response: The regional water supply planning program was undertaken by the Commission in response to formal requests received from Kenosha, Racine, and Waukesha Counties, and from the City of Waukesha, the Villages of Hartland and Wales, and the Town of Genesee. The scope of work for the regional water supply planning program is described in the document entitled *Regional Water Supply Planning Program Prospectus*, published by the Commission in September 2002. Importantly, Wisconsin's groundwater management law—Wisconsin 2003 Act 310—requires the preparation of a water supply plan for southeastern Wisconsin. The regional plan documented herein is intended to fulfill that requirement.

Comments Regarding the Presentation of Information in the Draft Planning Report

One comment was received regarding the presentation of the proposed plan in the final planning report.

• **Comment:** The overlays of urban development should be removed from the recharge potential maps shown at the public information meetings. Infiltration will continue to occur in low- and medium-density residential areas (One comment).

Response: The maps were altered as suggested to show the recharge potential in areas of urban development.

Comments and Questions Regarding the Public Information Meetings

Three comments were received regarding notifications for the public informational meetings.

• **Comment:** Every landowner should have been notified of the public information meetings by mail or phone call (Two comments).

Response: The public information meetings were announced through a newsletter describing the preliminary recommended plan which was sent to about 2,000 interested parties, including elected and appointed officials of all the county and municipal governments within the Region. The hearings were also advertised in 13 newspapers which serve the Region. Notification of such meetings to individual landowners in a 2,700-square-mile Region of over 2.0 million residents cannot reasonably be expected at the areawide, systems level of planning, the cost entailed being beyond the limited funding provided for the planning effort.

• **Comment:** Were local government officials given information about the plan prior to involving their electors in public comment (One comment)?

Response: Over the course of the planning program, interested parties—including county and municipal elected and appointed officials—were kept apprised of the progress and results of the planning program through a series of three newsletters, and in many cases, personal briefings. Each newsletter was sent to about 2,000 interested parties, including representatives of all the county and municipal units of government within the Region. The Commission staff has also made 124 informational presentations to groups on the plan, including groups of county and municipal officials.

Comments Included in Letters Received on the Preliminary Recommended Water Supply Plan Which Were Judged to Require Formal Letter Responses

Seven letters commenting on the preliminary recommended plan were received from the City of Milwaukee, interested organizations, and two faculty members of the University of Wisconsin. These comment letters were multifaceted and raised a number of issues which were judged so important as to warrant letter response. Copies of the comment letters and the responses are included in Appendix A-1.

A number of comments received related to the adopted regional land use plan—the primary foundational element of the regional water supply plan. In response to those comments, it was noted that the adopted regional land use plan was not based upon projections of population, employment, and existing land use development trends, as assumed in the comments. Rather, the plan is based upon a set of carefully crafted regional development objectives which seek to reverse historic trends. The population of Milwaukee County declined by almost 113,000 persons over the approximately 30-year period from 1970 to 2003. Despite that trend, the regional land use plan envisions an increase in Milwaukee County population of almost 66,000 persons over the next 30 years. Similarly, employment levels in Milwaukee County declined by about 20,000 jobs from 1990 to 2003. The regional land use plan envisions an increase of over 39,000 jobs in Milwaukee County from 2003 to 2035. This reversal of the decline in population and employment levels in the central county of the Region are, in the plan, attended by major reductions in the historic growth levels of the outlying counties. For example, from 1970 to 2003 the population of Waukesha County increased by about 140,000 persons. The regional plan, however, envisions that from 2003 to 2035 Waukesha County's population would increase by about 76,000 persons. The plan envisions similar reductions in the historic growth levels of the other collar counties. The regional land use plan, then, seeks to recentralize development within the Region on the Kenosha, Racine, and Milwaukee urbanized areas as much as possible, encouraging redevelopment and new development to occur at higher densities in neighborhoods located in areas that either are already served by, or can readily be served by sanitary sewerage, public water supply, mass transit, and police and fire protection.

In a related response, it was also indicated that many factors must be taken into account in the development of an advisory land use plan that attempts to influence the land use pattern of a large region. In addition to the availability of water supply, such factors include provision of transportation, sanitary sewerage, stormwater management and flood control, and park and open space facilities; the maintenance of a productive agricultural base; protection of air and water quality conditions; and protection of environmentally sensitive areas found throughout the regional landscape.

The Commission has long subscribed to principles which recognize that natural resource base factors should influence the placement and intensity of urban development. This is why, for example, the Commission land use plan seeks to protect the floodlands, wetlands, woodlands, and other environmentally sensitive lands found within and beyond the Commission-identified environmental corridors. This is also why the Commission land use plan seeks to protect the most productive agricultural soils of the Region. Groundwater and surface water resources used for water supply are also important considerations in land use planning, and recognition of this importance was one of the fundamental reasons why the Commission has long sought to prepare a regional water supply plan. The Commission has always recognized the relationship that exists between land use planning and water supply planning, and indicated at the very beginning of the water supply study effort that, should that planning effort identify any water resource constraints on the development pattern envisioned in the adopted regional land use plan, the Commission would initiate a process to amend the land use plan in an appropriate manner. This issue was specifically discussed in a collegial manner during two of the Regional Water Supply Plan Advisory Committee meetings. The cyclical approach of basing the regional water supply plan on the regional land use plan and considering the need to amend the regional land use plan if a sustainability issue was demonstrated, was agreed upon.

What has become clear in the regional water supply study is that water supply is not a limiting factor within this Region with respect to the location of urban development either east or west of the subcontinental divide. Rather, the analyses conducted in the regional water supply study indicate that the patterns and intensities of development envisioned in the regional land use plan, which represent a departure from development activity trends over the past 30 years, and a return to a more centralized development pattern, can be supported in a sustainable manner under the recommended water supply plan. Accordingly, there is no basis for a change in the regional land use plan based upon water supply considerations.

It was also noted that State law requires counties and municipalities to adopt "smart growth" plans if the counties or municipalities are to exercise zoning, land subdivision control, or official map regulation. Within southeastern Wisconsin, as of March 1, 2009, three of the seven counties adopted such plans and three are in the process of completing such plans. These county plans essentially incorporate the adopted regional land use plan. In addition to the county plans, 138 of the 146 municipalities within the Region have prepared, or are in the process of preparing, such "smart growth" plans. Again, with some exceptions, these local plans substantially incorporate the regional land use plan.

The comment letters and written responses also covered topics related directly to the preliminary regional water supply plan. These comments and responses are contained in Appendix A-1.

Based upon the comments received and the responses thereto, the following actions regarding modifications to the preliminary regional water supply plan were made.

- The recommended water supply plan includes a specific recommendation for application of a high-capacity well siting procedure that incorporates hydrologic analyses, performance monitoring, and mitigation steps for siting of high-capacity wells. Chapter XI, "Plan Implementation," includes a recommendation for incorporating such procedures into State regulations.
- Chapter XI, "Plan Implementation," includes a recommendation that the environmental corridors delineated on the adopted regional land use plan be expanded to include selected additional lands categorized as having high or very high recharge characteristics.
- The recommended water supply plan and plan implementation recommendations includes a specific recommendation for the conduct of additional planning, engineering, legal, and environmental analyses to meet the requirements of the Great Lakes-St. Lawrence River Basin Water Resources Compact when a diversion of Lake Michigan water is involved in a plan implementation action. The conduct of the analyses will be recommended as an essential part of the second-level local planning and preliminary engineering and diversion permit application plan implementation activities.
- The importance of the well siting procedure, water conservation, and groundwater recharge measures has been highlighted for areas of the Region expected to rely on shallow aquifer water supplies.

Appendix A

COMMENTS RECEIVED FROM JANUARY 12, 2009 THROUGH MARCH 16, 2009 REGARDING THE PRELIMINARY REGIONAL WATER SUPPLY PLAN

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Appendix A-1

LETTERS SETTING FORTH COMMENTS WHICH RECEIVED LETTER RESPONSES FROM COMMISSION STAFF





March 9, 2009

Bolton Hall P.O. Box 413 Milwankee, WI 53201-0413 414 229-4811 phone 414 229-3860 fax

Mr. Robert Biebel Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, Wisconsin 53187-1607

> Re: SEWRPC's Preliminary Regional Water Supply Plan for Southeastern Wisconsin

Dear Mr. Biebel:

I appreciate the opportunity to comment on the SEWRPC Water Supply Plan. I am the Chair of the Economics Department at the University of Wisconsin – Milwaukee. I have taught economics at UWM for 37 years and have conducted research in the area of the economics of pricing for much of my professional life. Articles of mine have appeared in such journals as the American Economic Review and the Journal of Economic Theory.

Certainly water supply is one of the key concerns to our region, influencing how and where we live. Therefore, as an economist I took particular interest in how economics is being employed to create incentives that are compatible with the goal of sustainable environment and economic prosperity and in particular how SEWRPC recognizes the key role of pricing incentives in determining the rate of water usage and the location of water-using economic activity. Unfortunately, this study seems to follow the pattern of previous studies whose implementation permitted if not encouraged alarming depletions of aquifer water as well as the loss or non-sustainability of valuable ecosystem function.

I believe that the SEWRPC plan (http://www.sewrpc.org/watersupplystudy/) raises many economic warning flags. Here is a sampler. First, water is scheduled to be priced on a cost-recovery basis while standard economic principles of efficiency require that price equal the long-run marginal costs of future supplies.

Second, the water-supply plan spans the period to 2035, and relies on an associated SEWRPC land-use plan that includes development of large tracts of land in

the counties adjacent to Milwaukee County. There seems to be no inclusion of the role of pricing in determining land use policies and water usage. The land-use plan simply predicts where land will be developed and then the water-supply plan matches the predicted need. It appears to me that the predictions are merely based on past development patters, good or bad, and merely project these past trends torward.

Third, because the planned supply area straddles the sub-continental divide it impacts on international water treaties. Under the Great Lakes Compact, water cannot be diverted from Lake Michigan to suburbs west of the divide (which at the Milwaukee latitude lies ten miles west of the lake) unless an equal amount of water is returned to the Lake Michigan basin, i.e., shifted back from the west to east of the divide. There does not seem to be special economic analysis of this diversion even though water from east of the divide will have a different cost structure than water from west of the divide. In particular, the returned water will contain contaminants that current technology cannot easily remove.

Fourth, different municipalities in Southeastern Wisconsin share sources of surface and aquifer water. So far, only minor conflicts have arisen due to common pool problems, but more serious problems will likely arise during the plan period and beyond, encouraging inefficiently rapid use of water, and adding to the diversion problem. There seems to be scant anticipation of such future problems often referred to as the "Tragedy of the Commons." By ignoring such commons problems, we set ourselves up for more skirmishes such as those involving communities in western Waukesha along the Oconomowoe River or the storm water flooding issues in the town of Summit. Both of these were reported in the Journal Sentinel and serve as warnings of future problems if we merely accommodate past land-use trends.

Fifth, the plan treats water as an isolated public utility and not as one of several public utilities that support land-use development. Since inefficient pricing of any of these utilities can encourage inefficient land-use, surely taken together they form a powerful set of incentives for inefficient land-use and, in turn, water-use decisions. In all pricing designs, the user should face the long-run marginal costs of using water or any service of utilities. The difficulty in imposing pricing, of course, is that some uses of water are essential for life itself and its basic requirements while other uses are more optional and some much more optional. While low-income people should not be saddled with use-deterring prices for their essential uses, the demand for water should be constrained by marginal cost pricing on the rest of us to reduce less essential uses of water.

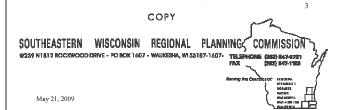
Economists recommend "non-linear pricing" for circumstances such as these. With non-linear pricing, often called "increasing block pricing (IBP)," the price for the first quantum of daily water use, say forty gallons for personal hygiene, cooking, sanitary waste disposal, would be at a low price and higher quantities would be at higher prices. Economists point out four advantages when they prescribe IBP pricing to regulate water refers, while water is essential, not all uses of water are essential. Second, essential uses tend to be low volume while more optional uses are typically high volume uses.

Third, although the essential uses of water are very unresponsive to price changes, i.e., demand is very inelastic, more optional uses are much more responsive to price changes, i.e., more elastic. Fourth, because IBP is a price system and not a command and control regulation, IBP leaves the rate of usage up to the user and not a direct government intrusion into decision-making.

My colleagues in the water related sciences have an alarming number of complicated-sounding discoveries and warnings about current and future problems in the ground and surface waters. They also say that the urgency and severity of all of these problems and warnings would be reduced if we could reduce the quantity of water usage. I recommend a serious study of such pricing designs as part of a revision of the water supply plan. Because of the economic slowdown, and because Waukesha in particular has plenty of water for the time being, there is considerable time to improve this water supply study, drawing upon the expertise of economists experienced in water supply conomics and land use planning. We should call in experts from around the country to analyze these issues as well as raise important additional concerns such as erosion of municipal tax bases, and needless economic inefficiency. As an ancillary benefit, implementation will require sophisticated metering devices of the kind that local advanced manufacturers can produce. Moreover, if our region becomes a model for water regulation through pricing, the market for such pricing designs and the equipment needed to implement those designs will have a world-wide market.

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William I. Holahan Professor and Chair Department of Economics University of Wisconsin - Milwaukee holaham@uwm.edu



Dr. William L. Holahan Professor and Chair Department of Economics University of Wisconsin-Milwaukee Bolton Hall 868 P.O. Box 413 Milwaukee, WI 53201-0413

Dear Dr. Holahan:

This is to acknowledge receipt of your March 9, 2009, letter providing comments on the preliminary regional water supply plan which was submitted for public review and comment during the period extending from January 2 through March 16 of 2009. The following summarizes our responses to your comments structured in accordance with the comments in your letter.

Comment: This study seems to follow the pattern of previous studies whose implementation permitted if not encouraged alarming depletions of aquifer water as well as the loss or non-sustainability of valuable ecosystem function.

Response: There have been no previous regional water supply studies. The current situation with regard to groundwater aquifers and ecosystem function has developed in the absence of such a plan. The preliminary regional water supply recommendations are directed toward establishing a sustainable water supply system for the Region, and to reversing the decline of water levels in the deep sandstone aquifer.

Comment: Water is scheduled to be priced on a cost-recovery basis while standard economic principles of efficiency require that price equal the long-run marginal costs of future sumplies.

Water supply pricing is governed by the Public Service Commission of Wisconsin which oversees the local water utilities. This governmental structure must be recognized in any regional planning effort. Newer-the-less, the economic analyses of the alternative plans considered were based upon the marginal cost of the new facilities needed to provide the needed water supplies. Determination of the method of cost recovery to be utilized in any plan implementation efforts requires a fiscal impact analysis that will be developed by the utilities and units of government involved in concert with the Public Service Commission

: The water-supply plan spans the period to 2035, and relies on an associated SEWRPC land-use plan that includes development of large tracts of land in the counties adjacent to Mihwaukee County. There seems to be no inclusion of the role of pricing in determining land use policies and water usage. The land-use plan simply predicts where land will be

Dr. William L. Holahan May 21, 2009 Page 2

developed and then the water-supply plan matches the predicted need. It appears to me that the predictions are merely based on past development patter[n]s, good or bad, and merely project these past trends forward.

The regional land use plan is not based upon an extrapolation of historic population, employment, and land use development trends. Rather, the plan is based upon a set of carefully crafted regional development objectives which seek to reverse the historic trend as demonstrated in Attachment 1 to this letter which presents historic trends and planned as demonstrated in Attachment 1 to this letter which presents historic trends and planned growth in population, households, and employment in the seven counties of the Region. The population of Milwaukee County declined by almost 113,000 persons over the approximately 30-year period from 1970 to 2003. Despite that trend, the regional land use plan envisions an increase in Milwaukee County population of almost 66,000 persons over the next 30 years. Similarly, employment levels in Milwaukee County declined by about 20,000 jobs from 1990 to 2003. Despite that trend, the regional land use plan envisions an increase of over 39,000 jobs in Milwaukee County from 2003 to 2035. The Commission has in the past been criticized for the use of planned population and employment levels in its planning efforts that ignore historic trends. This reversal of the decline in population and employment levels in the central county of the Region in the regional land use plan is attended by major reductions in the historic growth rates of the outlying counties. For example, from 1970 to 2003 the population of Waukesha County increased by about 140,000 persons. The regional land use plan, however, envisions that from 2003 to 2035 Waukesha County's population would increase by about 76,000 persons. The regional land use plan, however, envisions that from 2003 to 2035 Waukesha County, then, to the maximum extent practicable, seeks to recentralize development envisions similar changes in the grown trends of the other control regional land use plan, then, to the maximum extent practicable, seeks to recentralize development within the Region, encouraging redevelopment and new development to occur at higher densities in defined neighborhood units located in areas that either are already served by, or can readily be served by centralized sanitary sewerage, public water supply, mass transit, and police and fire protection

You also note that there appears to be no inclusion in the role of pricing in determining land use policies and water usage. While the availability of water is an important factor to be considered in land use plans, developing a land use plan based upon the pricing of water would be inconsistent with sound land use planning principles and practices. Many factors must be taken into account in the development of an advisory land use plan that attempts to must be taken into account in the development of an advisory iand use plan that attempts to influence the land use patient of a large region. In addition to the availability of water supply, such factors include provision of transportation facilities and services; the provision of sanitary sewerage, stormwater management and flood control; the need for park and open space; the maintenance of a productive agricultural base; the protection of air and water quality; and the protection of environmentally sensitive areas found throughout the

The Commission has long subscribed to principles which recognize that natural resource base factors should be a major influence in the placement and intensity of urban development. This is why, for example, the regional land use plan seeks to protect the floodlands, wetlands, woodlands, and other environmentally sensitive areas found within the Commission-delineated environmental corridors. The regional land use plan recommends preservation of about 23 percent of the Region in these environmental

Dr. William L. Holahan

corridors, as shown in Attachment 2 to this letter. This is also why the regional land use plan seeks to protect the most productive agricultural soils. The regional land use plan recommends that the region's most productive agricultural soils, or prime agricultural lands, be preserved, accounting for about 35 percent of the land area of the Region, also as shown in Attachment 2. Groundwater and surface water resources used for water supply are also important considerations in land use planning and recognition of this importance was one of the fundamental reasons why the Commission has long sought to prepare a regional water plants. The Commission has long sought to prepare a regional one of the fundamental reasons why the Commission has long sought to prepare a regional water supply plan. The Commission has always recognized the relationship that exists between land use planning and water supply planning, and indicated at the very beginning of the water supply study effort that, should that planning effort identify any water resource constraints on the development pattern envisioned in the adopted regional land use plan, the Commission would initiate a process to amend the land use plan in an appropriate manner.

What has become clear in the regional water supply study is that water supply is not a what has become ear in the regional water supply saudy is taid water supply is the limiting factor within this Region with respect to the location of urban development either east or west of the subcontinental divide. Indeed, the study has clearly shown that the relatively modest increment of urban development envisioned in the regional land use plan west of the divide can be accommodated by the available groundwater supplies, with the shifting in recent years of a number of communities from the deep to the shallow aquifer snitting in recent years of a number of communities from the deep to the snanow adulter and with the recommended shift in the plan of another four water utilities from the deep to the shallow aquifer. Moreover, even the City of Waukesha, as well as all the other communities proposed in the plan to shift from groundwater to Lake Michigan water, could continue to be served by groundwater – with increased reliance on the shallow aquifer—without resorting to Lake Michigan as a source of supply. Accordingly, there is no basis for a change in the regional land use plan based upon water supply considerations.

Two additional points need to be made concerning this matter. The first is that the regional Iwo adouttonal points need to be imade concerning this matter. The first is trait for regional land use plan was prepared over the period 2004 to 2006 with the full and active participation of an Advisory Committee of professional planners, municipal managers, and representatives of State and Federal agencies, that directed the planning. That Advisory Committee included the City of Milwaukee Planning Director and the Dean of the University of Wisconsin-Milwaukee School of Architecture and Urban Planning. All aspects of the plan and of the employment, population, and household forecasts underlying that plan were presented to, discussed by, and ultimately unanimously approved by that Advisory Committee. Advisory Committee.

Secondly, we would note that State law requires counties and municipalities to adopt "smart growth" plans if the county or municipality is to exercise zoning, land subdivision control, or official map regulation. Within southeastern Wisconsin, three of the seven counties have now adopted such plans and three are in the process of completing such plans. These country plans essentially incorporate the adopted regional land use plan. In addition to the country plans, 138 of the 146 municipalities within the Region have prepared, or are in the process of preparing, such "smart growth" plans. Again, with limited exceptions, these local plans substantially incorporate the regional land use plan. The exceptions involve proposed development which go beyond the regional land use plan.

Dr. William L. Holahan May 21, 2009 Page 4

> Finally, the preliminary regional land use plan does include a recommendation for water conservation programs to be developed throughout the Region. These programs would be utility-specific, depending upon such factors as water supply source and infrastructure utility-specific, depending upon such factors as water supply source and infrastructure needs. In some cases, these programs would include water conservation rate structures. These recommendations were developed following an extensive review of policies and practices and inputs from the Commission water supply planning Advisory Committee, which includes knowledgeable water utility managers; reputable scientists, including members of the staffs of the University of Wisconsin-Madison and of the University of Wisconsin-Milwaukee; and representatives of businesses, agriculture, and environmental interests.

Comment: Because the planned supply area straddles the sub-continental divide it impacts on international vater treaties. Under the Great Lakes Compact, water cannot be diverted from Lake Michigan to suburbs west of the divide (which at the Milwaukee latitude lies ten miles west of the lake) unless an equal amount of water is returned to the Lake Michigan basin, i.e., shifted back from the west to east of the divide. There does not seem to be vasin, i.e., snipea wax from the west to east of the airde. I here we'll stoom to be special economic analysis of this diversion even though water from east of the divide will have a different cost structure than water from west of the divide. In particular, the returned water will contain contaminants that current technology cannot easily remove.

All of the utilities which are recommended to be provided with a Lake Michigan supply All of the utilities which are recommended to be provided with a Lake Michigan supply under the preliminary recommended plan currently have a return flow to Lake Michigan, except for one—the City of Waukesha Water Utility water service area. The analyses of alternative plans specifically considered the cost and environmental impacts associated with the return flow to Lake Michigan. The preliminary recommended plan contains specific information on the cost of such return flow, as well as considerable information on pollutant concentrations and loadings, conceptual management plan for high-flow periods problem avoidance, and impacts on water quantity, as well as calling for more-detailed environmental assessment analysis. Such analyses are recommended to be completed under more-detailed excond-level planning to be carried out by the City of Wankesha and others. The information provided in the regional plan is considered to be adequate for the systemslevel regional planning program.

Different municipalities in Southeastern Wisconsin share sources of surface and aquifer water. So far, only minor conflicts have arisen due to common pool problems, but more serious problems will likely arise during the plan period and beyond, encouraging inefficiently rapid use of water, and adding to the diversion problem. There seems to be scant anticipation of such future problems often referred to as the "Tragedy of the Commons." By ignoring such commons problems, we set ourselves up for more skirmishes such as those involving communities in western Waukesha a long the Ocomomovo River or the storm water flooding issues in the town of Summit. Both of these were reported in the Journal Sentinel and serve as warnings of future problems if we merely accommodate past land-use trends. land-use trends.

As you indicate, there are stormwater management issues in western Waukesha County, and these are being addressed in separate studies. There are, however, no major water supply problems in that area of the Region. Furthermore, as previously noted, the

Dr. William L. Holahan Page 5

preliminary regional water supply plan provides for a sustainable water supply. Also, as previously noted, the regional land use plan and preliminary regional water supply plan are not based upon an extrapolation of past land use trends. Rather, these plans propose to reverse past trends and to recentralize urban development in the Region. The preliminary regional water supply plan includes a number of recommendations for communities in western Waukesha County. These include the following:

- Conduct of a siting procedure for all proposed high-capacity wells; the procedure being designed to identify and mitigate any potential negative impacts associated with new well construction on surface waters and any existing water supply systems;
- The application of conservation measures generally at an intermediate program level;
- Use of specific sources of supply which are sustainable;
- Recovery of the deep aquifer which affects nearly the entire Region through a ination of water conservation, conversions to Lake Michigan supplies, and used reliance on shallow aquifer supplies;
- Use of enhanced infiltration facilities, and application of development practices and stormwater management measures designed to enhance groundwater recharge focused on areas where the development of wells may have potential negative impacts on groundwater levels or surface water baseflows;
- Preservation in essentially natural, open uses of areas of the Region identified as having high and very high potential recharge characteristics; and
- Chloride management, improved management of emerging and unregulated contaminants, and further consideration for cooperative development and integration of public water supply facilities.

The plan treats water as an isolated public utility and not as one of several public utilities that support land-use development. Since inefficient pricing of any of these utilities can encourage inefficient land use, surely taken together they form a powerful set of incentives for inefficient land-use and, in turn, water-use decisions. In all pricing designs, the user should face the long-run marginal costs of using water or any service of utilities. The difficulty in imposing pricing, of course, is that some uses of water are essential for life tails and it is basic requirements while other uses are more optional and some much more optional. While low-income people should not be saddled with use-deterring prices for their essential uses, the demand for water should be constrained by marginal cost pricing on the rest of us to reduce less essential uses of water.

Response:

The regional water supply plan is one element of a comprehensive regional plan that includes consideration and integration of all urban service systems, including sanitary sewerage, stormwater management and flood control, and transportation. Moreover, the regional land use plan is designed to provide for the efficient delivery of these urban services. As previously indicated, the cost-effective analyses of the alternative plans included in the regional water supply planning program were based upon the marginal cost Dr. William L. Holahan May 21, 2009 Page 6

> for new facilities needed. The cost recovery systems utilized in Wisconsin are the purview of the local utilities and the Public Service Commission of Wisconsin. We would also note that the low-income population in the Region may benefit if the recommended regional water supply plan is adopted and implemented, in that the customer base for the utilities serving the Kenosha, Milwaukee, and Racine areas would be broadened with no infrastructure cost liability. This will reduce costs to the residents of the core area of the major central cities involved.

Recommendation for the use of "non-linear pricing" for water which is noted to be "increasing block pricing."

As previously noted, the pricing structure for water supply is under the purview of the local water utilities and the Public Service Commission of Wisconsin. Such pricing structure typically is based upon a number of factors, including the composition of the customer base, including the needs of the industrial component of that base; water supply facility capital costs and debt service; and operating costs. The type of rate structure used must be determined on a utility-specific basis.

Statement that water problems would be reduced by reduced water usage and recommendation for further study of "pricing designs.

As previously noted, the regional water supply plan does recommended a utility-specific set of water conservation measures for the utilities, as well as recommendations for private well owners. For some of the utilities this includes consideration of water conservation rate

We trust this responds to your comments.

Sincerely,

Kenneth R. Yunker, P.E.

KRY/RPB/pk/lgh #144039 V1 - RWSP HOLAHAN LTR

Attachment 1 HISTORIC AND PLANNED CHANGE IN POPULATION IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historia 1995-2003	Planned 2003-2035
engsha	36,300	26.000	55,900
Www.ee .	(112,900)	(18:000)	65,800
Ozaukne	30,000	11,700	16,600
Bacino	20,300	16,100	22,500
Walworth	32,200	20,600	44,400
Washington	58,100	26.600	35,400
Waukstha	139,900	66,500	75,600
Regional Total	203,900	149,500	316,200

HISTORIC AND PLANNED CHANGE IN HOUSEHOLDS IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historic 1990-2003	Planned 2003-2035
Kenosha	23,400	11,900	24,000
Milwacken	42,400	8,000	46,500
Ozaukee	17,700	6,800	7,500
Rucine	23,100	9.200	11,100
Walworth	18,200	9.100	17,700
Washington	29,200	13.600	16,200
Waukesha	80,400	36,300	31,800
Regional Total	234,400	94,900	154,800

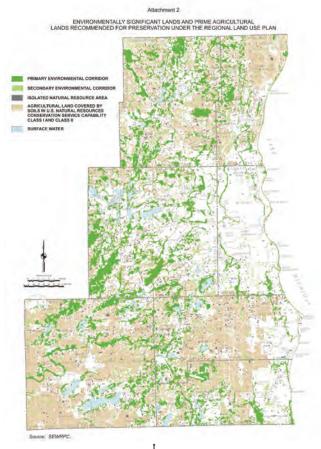
Source: SEWRPC.

HISTORIC AND PLANNED CHANGE IN EMPLOYMENT IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historic1990-2003	Planned 2003-2035
Kenoska	27,400	17,300	19,000
Miwaukee	64,600	(20,000)	39,100
Ozaukeg	27,900	13,900	13,100
Flacine	25,400	400	16,500
Watworth	25,900	12,400	17,100
Washington	37,500	15,700	17,100
Waukesha	185,400	76,700	67,300
Regional Total	394,100	116 400	189,300

Source: SEWRPC

Doc #144785



Tom Barrett Mayor, City of Milwaukee

MAR 1 6 2009

March 12, 2009

Mr. Robert Biebel Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive Waukesha, Wisconsin 53187-1607

Dear Mr. Biebel:

The City of Milwaukee appreciates the opportunity to comment on the Preliminary Regional Water Supply Plan for Southeastern Wisconsin. As you know, Carrie Lewis, Superintendent of the Milwaukee Water Works has represented the City on the Regional Water Supply Planning Advisory Committee and many of our comments reiterate Ms. Lewis' comments during the study period.

The City of Milwaukee supports many of the regional Water Supply Plan objectives outlined in Chapter V. However, the City of Milwaukee disagrees with the use of projected population growth and land use from the Southeastern Wisconsin Regional Planning Commission's (SEWRPC's) Land Use Plan as the basis for estimating future water supply needs. The City of Milwaukee continues to urge SEWRPC to consider a water supply plan that is based upon our understanding of existing groundwater and surface water resources including the constraints on those resources. The availability and quality of water resources should help local governments determine where future growth should occur and should drive land use planning rather than the reverse. The Water Supply Plan should not be based on a premise that water resource limitations be ignored because a particular area is identified as a growth area in the Regional Land Use Plan.

Even if the City agreed that land use and population are good proxies in establishing future water supply needs, we disagree with the assumption that existing land use trends will continue without adjustment for changes in land use policies, changes in population growth trends and changes in economic investments. The study assumes that historic

Office of the Mayor • City Hall • 200 East Wells Street • Milwaukee, Wisconsin 53202 (414) 286-2200 • fax (414) 286-3191 • mayor@milwaukee.gov

growth patterns from the 1980s and 1990s will continue. No alternative growth scenarios were included in the water supply study. It would be helpful to include a no-growth projection in addition to the projected continuation of past population trends and land use patterns. The City of Milwaukee recommends that the Water Supply Plan not be finalized without designing and evaluating alternatives based on water resource limitations. The Water Supply Plan should also reflect several population and land use scenarios to better bracket future water supply needs.

The Plan evaluates four major alternatives. Each alternative is evaluated based on ground and surface water impacts, capital and operating costs and other environmental impacts. The Plan does not fully address hybrid approaches to meeting Waukesha and other communities' water supply needs. For example, the Plan should consider whether there are situations where blending surface water and ground water resources coupled with water conservation may be the best alternative to meeting future water need

Alternatives for providing additional water to Waukesha appear to rank fairly closely and the Plan does acknowledge that additional evaluation is needed to help identify the best approach. Because Waukesha is not facing a water crisis, the City of Milwaukee recommends a more complete analysis of alternatives, including hybrids of some of the alternatives already included in the Plan.

Much of the Regional Water Supply Plan is devoted to analyzing the capital and operating costs of the four alternative scenarios. The Plan does provide standard engineering costs to compare various options to each other. However the full cost of providing water is woefully underestimated. While the Plan does a good job of standardizing regional information, it does not fully reflect the full cost of improve to Milwaukee's system that would be necessary to supply water to the additional communities. Estimating these costs will require a better understanding of Milwaukee's existing water system. The current Plan understates the full costs associated with serving suburban communities with Milwaukee Water Works water.

The Plan also does not consider the full environmental costs associated with alternatives that divert water from Lake Michigan. The Great Lakes Water Resource Compact prohibits diversions with few exceptions. In the case of these exceptions, the jurisdiction diverting Lake Michigan water must demonstrate that water will be returned to Lake Michigan. Although this language may have anticipated returning flow through a sewage treatment facility discharging directly to the lake, it is apparent that one option for the City of Waukesha is to return flow as treated wastewater through a local river or stream. This study does not fully evaluate the environmental impact of using existing water bodies to return flow to Lake Michigan. There may be costs associated with impacts to both instream water quality and quantity.

The Water Supply Plan provides a good assessment of existing drinking water issues for southeast Wisconsin. It demonstrates that although there are isolated areas of groundwater contamination and drawdowns of some groundwater resources, overall, there is no water supply crisis in southeastern Wisconsin. As such, there is time to fully

analyze water supply alternatives with the addition of new technical resources (new models, different paradigms) and new public policy (e.g., the Great Lakes Water Resources Compact). Specifically, the Compact requires us to be much more thorough in any analysis of alternatives based on using water from Lake Michigan outside the basin. There are specific standards in the Compact and additional standards are likely as the Department of Natural Resources moves forward to adopt administrative rules clarifying the intent of the Compact. Because of this, the Plan should not be used as justification for diversion applications since the work was conducted prior to adoption of the Compact and development of state administrative rules. Additional legal findings must be made by any applicant wishing to divert Lake Michigan water. The costs associated with additional investments in infrastructure that may be needed to ensure that return flow requirements are met and water quality is not compromised must also be assessed in any diversion application and should be fully considered in evaluating the costs of any of the water supply alternatives.

The City of Milwaukee appreciates the hard work done by SEWRPC, its consultants and the Planning Advisory Committee. However, because the Plan clearly demonstrates that there is no water supply crisis in southeastern Wisconsin, we recommend that additional analysis be conducted to reflect existing source water limitations, new modeling capabilities and alternative land use and population scenarios. We also recommend that the adoption of the Water Supply Plan be postponed until the full requirements of the Great Lakes Water Resources Compact can be factored in to alternative scenarios. This includes waiting until the Department of Natural Resources issues administrative rules to administer the Compact.

Sincerely,

be Da Tom Barrett Mayor

Michael I Murphy Alderman – 10th District

COPY

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE - PO BOX 1607 - WAUKESHA, WI 53187-1607-

TELEPHONE (262) 547-6721 FAX (262) 547-1103

May 13, 2009

Mr. Thomas Barrett Mayor City of Milwaukee 200 E. Wells Street Milwaukee, WI 53202 Mr. Michael J. Murphy Alderman, District 10 City of Milwaukee 200 E. Wells Stree

Dear Mayor Barrett and Alderman Murphy:

This is to acknowledge receipt of, and respond to, your letter of March 12, 2009, which provides comments on the preliminary regional water supply plan which was submitted for public review and comment during the period extending from January 2 to March 16 of 2009. The Commission very much appreciates, and has carefully considered, your comments and offers the following responses thereto. We believe that what follows should demonstrate to you that both the regional land use plan and the preliminary regional water supply plan are plans which, as realistically as possible, seek to maintain the City of Milwaukee as the vital center of the seven-county Region. Indeed, it is to that end that the Commission's plans have for over 4d years account to abate whan decentralization—offers because a when Commission's plans have for over 40 years sought to abate urban decentralization—often known as urban

For convenience, we have reproduced your comments prior to setting forth our responses.

Comment: The City of Milwaukee supports many of the regional Water Supply Plan objectives outlined in Chapter V. However, the City of Milwaukee disagrees with the use of projected population growth and land use from the Southeastern Wisconsin Regional Planning Commission's (SEWRPC's) Land Use Plan as the basis for estimating future water supply needs. The City of Milwaukee continues to urge SEWRPC to consider a water supply plan that is based upon our understanding of existing groundwater and surface water resources including the constraints on those resources. The availability and quality of water resources should help local governments determine where future growth should occur and should drive land use planning rather than the reverse. The Water Supply Plan should not be based on a promise that water resource intuitions be inprored because a particular area. be based on a premise that water resource limitations be ignored because a particular area is identified as a growth area in the Regional Land Use Plan.

Response:

The regional land use plan is not based upon projections of population, employment, a existing land use development trends. Rather, the plan is based upon a set of carefully existing fand use development objectives which seek to reverse historic trends, as demonstrated in Attachment 1 to this letter, which presents historic trends and planned growth in population, households, and employment in the seven counties of the Region. The population of Milwaukee County declined by almost 113,000 persons over the approximately 30-year period from 1970 to 2003. Despite that trend, the regional land use plan envisions an increase in Milwaukee County population of almost 66,000 persons over the next 30 years. Similarly, employment levels in Milwaukee County declined by about 20,000 jobs from 1990 to 2003. The regional land use plan envisions an increase of over

Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009 Page 2

> 39,000 jobs in Milwaukee County from 2003 to 2035. This reversal of the decline in population and employment levels in the central county of the Region would be attended by major reductions in the historic growth levels of the outlying counties. For example, from 1970 to 2003 the population of Waukesha County increased by about 140,000 persons. The regional plan, however, envisions that from 2003 to 2035 Waukesha County's population would increase by about 76,000 persons. The plan envisions similar changes in the growth trends of the other collar counties. The regional land use plan, then, seeks to recentralize development within the Regions as much as possible encouraging reduced contents. development within the Region as much as possible, encouraging redevelopment and new development to occur at higher densities in neighborhoods located in areas that either are already served by, or can readily be served by, sanitary sewerage, public water supply, mass transit, and police and fire protection.

Many factors must be taken into account in the development of an advisory land use plan relative factors include the land use pattern of a large region. In addition to the availability of water supply that you cite, such factors include provision of transportation facilities and services, sanitary sewerage, stormwater management and flood control, park and open space considerations, the maintenance of a productive agricultural base, air and water quality considerations, and protection of environmentally sensitive areas found throughout the regional landscape.

The Commission has long subscribed to principles which recognize that natural resource base factors should influence the placement and intensity of urban development. This is why, for example, the Commission land use plan seeks to protect the floodlands, wetlands, woodlands, and other environmentally sensitive lands, most of which are found within the Commission-identified environmental corridors. The Commission's regional land use plan recommends preservation of about 23 percent of the Region in these environmental corridors, as shown in Attachment 2 to this letter. This is also why the Commission land use plan seeks to protect the most productive aericultural soils. The recional land use plan use plan seeks to protect the most productive agricultural soils. The regional land use plan tase pain seess of product the most productive agricultural soils, or prime agricultural lands, be preserved, which account for about 35 percent of the land area of the Region, also as shown in Attachment 2. Groundwater and surface water resources used for water supply as snown in Attachment 2. Groundwater and surface water resources used for water suppl are also important considerations in land use planning and recognition of this importance was one of the fundamental reasons why the Commission has long sought to prepare a regional water supply plan. The Commission has always recognized the relationship that exists between land use planning and water supply planning, and indicated at the very beginning of the water supply study effort that, should that planning effort identify any water resource constraints on the development pattern envisioned in the adopted regional land use plan, the Commission would initiate a process to amend the land use plan in an appropriate manner.

What has become clear in the regional water supply study is that water supply is not a limiting factor within this Region with respect to the location of urban development eit east or west of the subcontinental divide. Indeed, the study has clearly shown that the relatively modest increment of urban development envisioned in the regional land use plan west of the divide can be accommodated by the available groundwater supplies, with the shifting in recent years of a number of communities from the deep to the shallow aquifer,

Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009 Page 3

and with the recommended shift in the plan of another four water utilities from the deep to the shallow aquifer. Moreover, even the City of Waukesha, as well as all the other communities proposed in the plan to shift from groundwater to Lake Michigan water, could continue to be served by groundwater—with increased reliance on the shallow aquifer—without resorting to Lake Michigan as a source of supply. Accordingly, there is no basis for a change in the regional land use plan based upon water supply considerations.

Two additional points need to be made concerning this matter. The first is that the regional land use plan was prepared over the period 2004 to 2006 with the full and active participation of the City of Milwaukee staff, including the City Planning Director, who served on the Commission Advisory Committee that directed preparation of the plan. All aspects of the plan and of the employment, population, and household forecasts underlying that plan were presented to, discussed by, and ultimately unanimously approved by that Advisory Committee. Under the Commission's cyclical approach to regional planning, the land use plan will again be reconsidered early in the next decade. land use plan will again be reconsidered early in the next decade

Finally, we would note that State law requires counties and municipalities to adopt "smart growth" plans if the county or municipality is to exercise zoning, land subdivision control, or official map regulation. Within southeastern Wisconsin, three of the seven counties have or official map regulation. Within southeastern wisconsin, ture of the seven counter have now adopted such plans and three are in the process of completing such plans. These county plans essentially incorporate the adopted regional land use plan. In addition to the county plans, 138 of the 146 municipalities within the Region have prepared, or are in the process of preparing, such "smart growth" plans. With some exceptions, these local plans substantially incorporate the regional land use plan. The few exceptions involved proposed development which goes beyond the regional land use plan.

Comment: Even if the City agreed that land use and population are good proxies in establishing future water supply needs, we disagree with the assumption that existing land use trends will continue without adjustment for changes in land use policies, changes in population growth trends and changes in economic investments. The study assumes that historic growth patterns from the 1980s and 1990s will continue. No alternative growth scenarios were included in the water supply study. It would be helpful to include a no-growth projection in addition to the projected continuation of past population trends and land use patterns. The City of Milwaukee recommends that the Water Supply Plan not be finalized without designing and evaluating alternatives based on water resource limitations. The Water Supply Plan should also reflect several population and land use scenarios to better bracket future water supply needs.

Response:

As noted above, the Commission will undertake a reconsideration of the regional land use As noted above, the Commission will undertake a reconsideration of the regional and use plan shortly after the 2010 U.S. Census is completed. That work will include new population and economic studies that will take account relevant observable and quantifiable trends. Furthermore, any significant changes in State land use policies that may be set forth between now and then by the State Legislature, e.g., State policies that seek to reduce carbon emissions, will also be taken into account, as will the above-referenced set of new county and local "smart growth" comprehensive plans. We look forward to this forthcoming work effort and to the City of Milwaukee's active participation therein.

Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009

> We should note that "alternative futures" were considered in the preparation of the adopted we should note that a derinative funders were considered in the peparation of the adoptive regional land use plan. These alternative futures included high, intermediate, and low employment and population projections, and attendant county distributions. Historically, these alternative futures also considered differing regional land use patterns, including corridor, satellite city, and uncontrollable sprawl alternative plans, as well as the recentralization land use plan adopted. As noted earlier in this letter, the regional land use plan does not assume historic growth patterns will continue, but rather recommends abatement of those trends. This envisioned recentralization is the basis for the proposed water supply plan and applies to the Cities of Kenosha, Racine, and Waukesha, as well as to Milwaukee.

> You also indicate it would be helpful to consider a no-growth projection. While a no growth scenario is unlikely for the Southeastern Wisconsin Region, such a scenario is growin stenario is unitary to the cool southeastern section regions active activation is approximated by the 2005 water supply conditions described in the planning report, including the extent, condition, and performance of the existing water supply systems serving the Region, as well as the related source water quantity and quality. The existing serving the Region, as we has the reacted source work quality and quarry. The casing conditions situation was carefully considered along with planned 2035 conditions in establishing the problems and issues to be addressed by the alternative and recommended plans. To a large extent, those problems and issues would continue to exist under a nogrowth scenario. They include excessive drawdown of the deep aquifer, radium standard exceedences, excessive chloride concentrations in the surface waters, and lack of municipal water systems in some existing urban areas with attendant fire protection and water qualities assurance needs. Given these factors, the existing conditions situation adequately approximates a no-growth scenario. That scenario does not meet the agreed-upon water supply development objectives, and the attendant problems would require the improvement envisioned in the preliminary recommended water supply plan, or in the alternative, increased reliance on the shallow groundwater aquifer.

Comment: The Plan evaluates four major alternatives. Each alternative is evaluated based on ground and surface water impacts, capital and operating costs and other environmental impacts. The Plan does not fully address hybrid approaches to meeting Waukesha and other communities' water supply needs. For example, the Plan should consider whether there are situations where blending surface water and ground water resources coupled with water conservation may be the best alternative to meeting

Response: For areas east and west of the subcontinental divide where a Lake Michigan supply is recommended to replace groundwater supplies, the planning process did evaluate three alternatives: 1) enhanced water conservation with reliance on existing deep aquifer sources of supply; 2) enhanced water conservation with reliance on blended shallow aquifer and deep aquifer sources of supply; and 3) enhanced water conservation with Lake Michigan as the source of supply. Evaluation of these alternatives indicated that the City of Waukesha service area could be sustained using either blended shallow and deep aquifer groundwater supplies or Lake Michigan supplies. The Lake Michigan supply alternative was selected for inclusion in the preliminary recommended plan for the following reasons: 1) the favorable environmental impacts attendant to the recovery Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009

> of the deep aquifer; 2) the reduction in chloride discharges to surface waters; 3) the favorable impacts on stream flows and inland lake levels; 4) the ability to preserve the groundwater sources for other uses, such as agricultural; and 5) the opportunity to use available excess production capacity at the Milwaukee Water Works with its attendant fiscal benefits to Milwaukee ratepayers.

In the conduct of the regional water supply study, the Commission staff initially did give consideration to evaluating an alternative, particularly with respect to Waukesha, that would involve the blending of Lake Michigan surface water and groundwater resources to meet that utility's future needs. Our reasons for not including such an alternative relate to the following factors: 1) the operational complexities involved in a water utility that delivers water from two different sources where the delivering water utility is not the same as the producing water utility, including the potential for unseemly situations of establishing responsibility should contamination of the delivered water supply take place; 2) the continued adverse environmental impacts associated with heavy reliance on point-of-delivery water softening equipment which could not be eliminated in a blending alternative; 3) the likelihood that any infrastructure cost savings associated with reducing the pumping and delivery of Lake Michigan water would be offset by the costs involved in maintaining groundwater supply infrastructure; 4) the elimination of substantial operational cost savings owing to the continued use of water softening equipment at the place of water delivery; and 5) the need for special consideration and control of selected delivered water quality constituents. While the Commission has not to date included such a plan alternative in the study for these reasons, we would be prepared to do so should you, upon further reflection, indicate to us your desire that such an alternative be prepared and documented.

Comment: Alternatives for providing additional water to Waukesha appear to rank fairly closely and the Plan does acknowledge that additional evaluation is needed to help identify the best approach. Because Waukesha is not facing a water crisis, the City of Milwaukee recommends a more complete analysis of alternatives, including hybrids of some of the alternatives already included in the Plan.

Response: A range of alternative areawide plans was prepared and evaluated. We believe that this range is adequate to identify a recommended systems-level plan. As you point out, the preliminary recommended plan does acknowledge that, if the provision of Lake Michigan water to the City of Waukesha service area is adopted and plan implementation efforts get underway, additional, more detailed evaluations regarding the means of return flow will be needed. Because of the level of detail required, such evaluations are properly the subject of preliminary engineering. The preliminary engineering and additional evaluations would be the responsibility of the City of Waukesha should it choose to proceed with that step

In this respect, it is important to recognize the essential nature of the typical public works development process and the distinction between the regional level systems

Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009

> planning, local level preliminary engineering, and local level final design and construction phases. The planning process used to prepare the regional water supply plan constitutes the first, or areawide systems planning, phase of this three-phase public works development process. The areawide systems planning phase concentrates on the definition of the problems which need to be addressed and on the development and evaluation of alternative measures for resolution of these problems in an environmentally sound, cost-effective manner. In this first phase, each alternative plan element is developed in sufficient detail to permit a sound, comparative evaluation of the plans, and the selection of an initially preferred plan.

> The second phase of the three-phase public works development process, preliminary engineering or local second level planning, is carried out subsequent to the adoption of an areawide systems plan by the implementing units and agencies of government concerned. Under this phase, improvements recommended in the system plan are carried into greater depth and detail. Examples would include preliminary engineering of needed new water supply facilities. The preliminary engineering phase of the project also should involve the development of specific information which may be needed to support an environmental assessment and, in some cases, an environmental impact

> Upon acceptance of the findings and recommendations of the preliminary engineering phase by the governmental units and agencies affected, the third or final design phase of the public works development process is initiated. This work should also be carried out by the implementing units and agencies of government concerned and involves the preparation of contract drawings and specifications and final cost estimates.

This process may be iterative and the findings at the second and third phases may lead to reevaluation and revision of the system plan. For example, during the preliminary engineering phase, a new alternative—based on additional information—may be developed, costs of the initially preferred alternative may be found to be excessive, or developed, costs of the initially preferred alternative may be found to be excessive, or environmental impacts may prove to be unacceptable. In such cases, a reevaluation and potential amendment of the system-level plan is undertaken. With respect to the regional water supply plans, this could be the case should a component of that plan not prove implementable following the additional evaluation and legal processes involved in the second level of detailed planning. This does not mean, however, that completion of the systems level of planning should be held in abeyance until the results of the more detailed planning, engineering, and environmental studies are known.

Comment: Much of the Regional Water Supply Plan is devoted to analyzing the capital and operating costs of the four alternative scenarios. The Plan does provide standard engineering costs to compare various options to each other. However the full cost of providing water is woefully underestimated. While the Plan does a good job of standardizing regional information, it does not fully reflect the full cost of improvements to Milwaukee's system that would be necessary to supply water to the

Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009 Page 7

> dditional communities. Estimating these costs will require a better understanding of Milwaukee's existing water system. The current Plan understates the full costs iated with serving suburban communities with Milwaukee Water Works water

Response:

As the alternative and preliminary recommended plans were being developed, the staff of the Milwaukee Water Works was asked to review and comment on estimates of the transmission costs entailed in providing Lake Michigan water to the City of Waukesha service area located west of the subcontinental divide, and to certain other communities located east of or straddling the divide. The Milwaukee Water Works staff was unable at that time to provide more detailed cost estimates. Therefore, a specific contingency at that time to provide more detailed cost estimates. Therefore, a specific contingency allowance was added to the plan estimates to cover any unforeseen costs. For the preliminary recommended plan, the costs to implement the connections to the Milwaukee Water Works, including improvements to the system within the City of Milwaukee, were estimated to be \$34.2 million, including a contingency allowance of about \$8.5 million. Your letter implies that there may now be new, detailed pertinent cost information available from the Milwaukee Water Works. If this information were made available to the Commission, it would be incorporated into development of a final recommended plan. The actual costs entailed will, in any case, have to be more precisely and accurately estimated by the City of Milwaukee staff on a case-by-case asis during preliminary engineering, should the communities concerned approach the City for this purpose.

Comment: The Plan also does not consider the full environmental costs associated with alternatives that divert water from Lake Michigan. The Great Lakes Water Resource Compact prohibits diversions with few exceptions. In the case of these exceptions, the jurisdiction diverting Lake Michigan water must demonstrate that water will be returned to Lake Michigan. Although this language may have anticipated returning flow through a sewage treatment facility discharging directly to the lake, it is apparent that one option for the City of Watkesha is to return flow as treated wastewater through a local river or stream. This study does not fully evaluate the environmental interest of the control of the City of the Michigan. These new healt is now that the control of the City of the Michigan. These new healt is now that the control of the City of the Michigan. These new healt is now that the control of the City of the Michigan. These new healt is now that the control of the City of the City of the Michigan. impact of using existing water bodies to return flow to Lake Michigan. There may be sts associated with impacts to both instream water quality and quant

Response:

The regional water supply plan does recognize the need for more detailed evaluations of the potential environmental impacts associated with the City of Waukesha return flow involving Underwood Creek, the Menomonee River, and the Root River assuming that the return flow is to be discharged to one of these streams. The Commission Advisory Committee unanimously recommended that the required more-detailed environmental assessment be made as part of the necessary preliminary engineering. The plan, however, also includes an alternative that would return the spent water directly to Lake Michigan via a pipeline, thus avoiding the need to discharge to any of the streams concerned. In this regard, we note that the Milwaukee Metropolitan Sewerage District and the City of Waukesha have begun discussions concerning the potential environmental impacts of the return flow on Underwood Creek in more detail

Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009

> than could be done at the systems level of planning. This is a good example of the than could be done at the systems level of planning. This is a good example of the progressive phased nature of the public works development process previously cited. Moreover, should the preliminary engineering and detailed environmental studies result in a determination by the City of Waukesha not to move forward with a formal diversion application, or should a proffered diversion application by the City of Waukesha ultimately be found wanting with respect to any aspect of the Great Lakes Water Resources Compact and fail to receive the required approvals, then such results will be reflected in a future update of the regional water supply system plan, in accordance with the cyclical nature of the public works development process.

The Water Supply Plan provides a good assessment of existing drinking water issues for southeast Wisconsin. It demonstrates that although there are isolated areas of groundwater contamination and drawdowns of some groundwater esonateu areas of there is no water supply crisis in southeastern Wisconsin. As such, there is time to fully analyze water supply alternatives with the addition of new technical resources (new models, different paradigms) and new public policy (e.g., the Great Lakes Water Resources Compact). Specifically, the Compact requires us to be much more thorough in any analysis of alternatives based on using water from Lake Michigan outside the basin. There are specific standards in the Compact and additional standards are likely as the Department of Natural Resources moves forward to adopt administrative rules clarifying the intent of the Compact. Because of this, the Plan should not be used as justification for diversion applications since the work was conducted prior to adoption of the Compact and development of state administrative rules. Additional legal findings must be made by any applicant wishing to divert Lake Michigan water. The costs associated with additional investments in infrastructure that may be needed to ensure that return flow requirements are met and water quality is not compromised must also be assessed in any diversion application and should be fully considered in evaluating the costs of any of the water supply alternatives.

Response: All of the alternative regional water supply plans were specifically developed to meet the spirit and intent of the Great Lakes Water Resources Compact and 2007 Wisconsin Act 227. The regional plan, however, was never intended to be sufficient in terms of meeting the letter of the requirements of either the Compact or Act 227. Rather, as noted above, it was always envisioned that more detailed engineering, legal, and environmental studies would be required in this respect, studies that appropriately are the responsibility not of SEWRPC, but rather of the implementing units and agencies government concerned. Hence, the regional water supply system plan should not be held out by anyone as complete and full justification for a proposed diversion.

> There are only three new diversions proposed in the preliminary recommended plan. One of these—for the central portion of the City of New Berlin—remains in active consideration at this time and, as we understand it, enjoys the support of the City of Milwaukee. A second diversion—the City of Waukesha—is much more complex in nature and is clearly deserving of a significant amount of additional engineering and

Mr. Thomas Barrett Mr. Michael J. Murphy May 13, 2009 Page 9

> environmental assessment. While the regional water supply planning effort found that the proposed water diversion would be viable, taking into account the benefits and costs, broadly defined, both to the environment and to the sending and receiving populations concerned, there is no guarantee that the letter of the Compact and Act 227 can and will be met. Indeed, there is an intentional bias in those laws that disfavors such diversions even if it can be demonstrated that the benefits—both environmental and fiscal—exceed the costs. The only way to ascertain if that is the case will be for the City of Waukesha to proceed with a diversion application. The third proposed diversion in the preliminary regional plan involves that portion of the City of Muskego served by the Milwaukee Metropolitan Sewerage District. Given that Muskego is a straddling community like New Berlin and further given that return flow infrastructure is already in place, it may well be possible to readily implement that recommendation should the City of Muskego ultimately determine to pursue such a course of action.

Comment: The City of Milwaukee appreciates the hard work done by SEWRPC, its consultants and the Planning Advisory Committee. However, because the Plan clearly demonstrates that there is no water supply crisis in southeastern Wisconsin, we recommend that additional analysis be conducted to reflect existing source water limitations, new modeling capabilities and alternative land use and population scenarios. We also recommend that the adoption of the Water Supply Plan be postponed until the full requirements of the Great Lakes Water Resources Compact can be factored in to alternative scenarios. This includes waiting until the Department of Natural Resources issues administrative rules to administer the Compact.

The mathematical simulation models developed for the planning effort by the U.S. Geological Survey are state-of-the-art models. The Geological Survey staff has indicated to the Commission staff that no new modeling capabilities currently exist that could be brought to bear. As previously noted, there are no existing water supply limitations that would require a change in the adopted regional land use plan.

Moreover, the employment and population forecasts on which the adopted regional land use plan and the preliminary recommended water supply plan are based, we believe, largely, if not entirely, consistent with your implied preferences. The alternative and initially preferred plans are generally consistent with the intent of the alternative and initially preferred plans are generally consistent with the initial of the Great Lakes-St. Lawrence River Water Resources Compact, and they recognize that more-detailed environmental and legal information and interpretations will have to be assembled and submitted by any applicant for a diversion. We believe that the information currently available is adequate as a basis for the adoption of a system-level regional water supply plan. The Commission has a contractual obligation to its constituent counties that provided the funding for the work to complete the plan as near to the originally specified completion date as possible. Further delay in the completion and adoption of a recommended plan would serve no useful purpose.

In summary, the Commission believes that the regional land use plan and preliminary regional water supply plan offer the following benefits for the City of Milwaukee:

Mr. Thomas Barret Mr. Michael J. Murphy May 13, 2009 Page 10

- The regional land use plan, on which the water supply plan is based, envisions a reversal of historic and recent trends in levels of employment, population, and land use development which favor the recentralization of urban development in Milwaukee County and the City
- The development envisioned in the regional land use plan west of the subcontinental divide can be supported by the available sources of supply—through a shift from the deep to the shallow groundwater aquifer—without provision of any Lake Michigan supply. Indeed, upwards of one-half million more persons could be supported in the Milwaukee collar counties than envisioned in the regional plan. The land use pattern envisioned in the plan is clearly not dependent upon the expansion of Lake Michigan supplies. Thus, the expansion of the Lake Michigan supplies, or the lack thereof, will have no significant effect on land use development ratterns. development patterns
- There are no new models which could be used to refine the state-of-the-art groundwater-surface water modeling carried out as part of the regional water supply planning program.
- A hybrid alternative providing for water conservation and blending of Lake Michigan and groundwater supplies for the City of Waukesha service area could be prepared and evaluated should you so desire upon reflection after receiving this letter. With or without such an alternative, the Commission intends to move forward to complete the regional water supply

We trust the foregoing adequately responds to your comments. We hope you will agree that the regional plans considered herein are in the best interest of the City of Milwaukee. The Commission and Commission staff would be pleased to meet with you to discuss the issues raised if you think that would be useful

Sincerely,

Kenneth R. Yunker, P.E.

KRY/pk/mlh #143640 V3 - RWSP BARRETT/MURPHY LTR

Attachment 1

HISTORIC AND PLANNED CHANGE IN POPULATION
IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historic 1990-2003	Planned 2003-2035
Kenosha	36,300	26,000	55,900
Milwaukee	(112,900)	(18,000)	65,800
Ozaukee	30,000	11,700	16,600
Racine	20,300	16,100	22,500
Walworth	32,200	20,600	44,400
Washington	58,100	26,600	35,400
Waukesha	139,900	66,500	75,600
Regional Total	203,900	149,500	316,200

Source: SEWRPC.

HISTORIC AND PLANNED CHANGE IN HOUSEHOLDS IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historic 1990-2003	Planned 2003-2035
Kenosha	23,400	11,900	24,000
Milwaukee	42,400	8,000	46,500
Dzaukee	17,700	6,800	7,500
Racine	23,100	9,200	11,100
Valworth	18,200	9,100	17,700
Vashington	29,200	13,600	16,200
Vaukesha	80,400	36,300	31,800
Regional Total	234,400	94,900	154,800

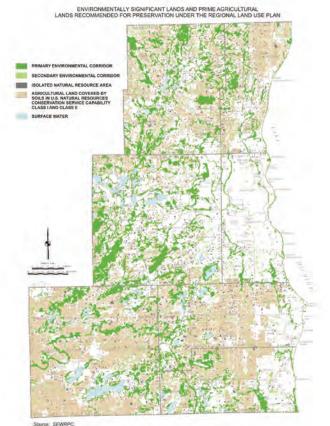
Source: SEWRPC.

HISTORIC AND PLANNED CHANGE IN EMPLOYMENT IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historic1990-2003	Planned 2003-2035
Kenosha	27,400	17,300	19,000
Milwaukee	64,600	(20,000)	39,100
Ozaukee	27,900	13,900	13,100
Racine	25,400	400	16,600
Walworth	25,900	12,400	17,100
Washington	37,500	15,700	17,100
Waukesha	185,400	76,700	67,300
Regional Total	394,100	116,400	189,300

Source: SEWRPC.

Attachment 2







Lapham Hall PO Box 413 Mihoukee, WI 53201-0413 414 229-4561 Ahm

March 12, 2009

Mr. Robert Biebel Southeastern Wisconsin Regional Planning Commission W239 N 1812 Rockwood Drive P.O. Box 1607 Waukesha, WI 53187

Re: Comments on the Regional Water Supply Plan

Dear Bob.

I'd like to formalize my comments on the regional water supply plan. You have heard most of these before at the meetings of the Technical Advisory Committee or in our various communications.

First, let me state that the Preferred Plan has been a huge undertaking. You and your staff are to be commended to coordinating and managing the whole process. Overall, it is a very good plan which contains many strengths. Most importantly, it proposes steps to provide sustainable water supplies for most communities east of the subcontinental divide, as well as for an number of straddling communities. In addition, the hydrologic impacts produced by those steps are largely acceptable.

I do have a few remaining concerns, however. The Preferred Plan leaves a couple of gaps in an otherwise very complete analysis.

- It does not address the environmental or hydrologic impacts of the returned treated wastewater that would occur under Option2 if that were adopted. Nor does it include the costs of these impacts in the relative costs of Option 2. I'm very concerned that has left up in the air who will pay for any undesired impacts.
- 2. In addition, it doesn't explore the viability of the internal suggestion that new municipal wells in the shallow aquifer be preferentially located along waterways receiving treated effluent. This is an option that potentially is more sustainable than Option 1 but less expensive than Option 2.

Finally, as I've pointed out a number of times, the Preferred Plan doesn't really suggest any form of management of water supplies west of the subcontinental divide (except for those straddling communities that might be supplied with lake water and possibly Waukesha). The result is that there will be ever increasing competition between numicipalities and private well users in the western parts of our region. And any further growth in that part of the region will necessarily lead to the same sorts of hydrologic impacts that we have seen historically in the ground-water using areas. As a consequence, the unmanaged use of water resources may well prove to be unsustainable at some point beyond 2035. This aspect is not clearly pointed out in the report.

Douglas S. Cherkauer Professor

A-7

COPY

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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

May 19, 2009

Dr. Douglas S. Cherkauer Professor of Hydrogeology University of Wisconsin-Milwaukee Department of Geological Sciences Lapham Hall 344
P.O. Box 413
Milwaukee, WI 53201

Dear Dr. Cherkauer

This is to acknowledge receipt of your March 12, 2009, letter providing comments on the preliminary This is to acknowledge feeely it of your March 12, 2005, teach providing comment during the period extending from January 2 to March 16 of 2009. We were surprised to have you formally submit comments in this manner, given your position on the planning Advisory Committee and the project technical team. However, given your letter, the following summarizes our responses to your comments

The preliminary plan does not address the environmental or hydrologic impacts and related costs associated with the return flow from the City of Waukesha.

The impacts of the return flow have been specifically addressed to the extent practicable at the systems level of planning. The preliminary recommended plan contains considerable information on pollutant concentrations and loadings, a conceptual management plan for information on pollutant concentrations and loadings, a conceptual management plan for avoiding problems during high-flow periods, and an assessment of the potential impacts on water quantity, as well as calling for more-detailed environmental assessment analyses as a part of any plan implementation effort. You raised the same issue at the September 23, 2008, Advisory Committee meeting and the issue was discussed in a collegial manner. The Committee agreed, with no objections, to recognize the need for additional environmental analyses of the potential impacts on the receiving waters receiving return flow. Such analyses were recommended to be completed under more-detailed second-level planning to be carried out by the City of Wankesha and others. As you know, that plan also includes an extended to the complete of the properties of the potential impacts on the receiving water procedures and others. option that would return the spent water directly to Lake Michigan via a pipeline, thus avoiding the need to discharge to any of the streams concerned. The Committee also agreed that the return flow option to be included in the plan be left open pending completion of the more-detailed environmental evaluations. Because of the level of detail required and more-cetailed environmental evaluations are properly the subject of second-level planning and preliminary engineering. The second-level planning and preliminary engineering. The second-level planning and preliminary engineering, including additional evaluations needed to support a diversion application would be the responsibility of the City of Waukesha should it choose to proceed with that step. In this regard, we note that the Milwaukee Metropolitan Sewerage District and the City of Waukesha are considering a cooperative evaluation of the potential environmental impacts of the return flow on Underwood Creek in more detail than could be done at the systems level of planning.

Dr. Douglas S. Cherkauer May 19, 2009 Page 2

The plan did not explore the viability of options considering placement of wells preferentially along waterways receiving treated effluent.

You have also raised this issue in the past, and it has been discussed and addressed, to the You have also raised this issue in the past, and it has been discussed and addressed, to the degree practicable at the systems level of planning, by incorporating the recommendation into the recommended well sting procedure. That procedure calls for a "preference to be given to (well) sites adjacent to major rivers receiving treated effluent from municipal wastewater treatment plants." You now indicate that the planning did not specifically explore an alternative plan which focuses on locating municipal wells along streams receiving wastewater treatment plant effluent. Presumably, you are raising this with regard to the City of Waukesha, as you suggest comparisons to "Option 2" which we assume is Subalternative 2 of the Composite Plan, which, in turn, was approved as the preliminary recommended water supply plan by the Advisory Committee.

The option you have suggested is approximated by Subalternative 1 to the Composite Plan, when set forth in the context of the well sitting procedure previously noted. Under that subalternative, the City of Waukesha would add up to eight shallow aquifer wells and maintain some of its deep wells. That subalternative does envision one-half, or up to four, of the wells being located generally along the Fox River. Presumably, the others could also of the weins being located generally along the Fox River. Tresuminally, the others could also be located along the Fox River. However, the location may need to be well south or north of the City, due to existing development and required setbacks from potential sources of pollution. This would likely require additional costs for transmission to other portions of the City. In any case, the cost of such an alternative would be about the same, or likely greater, than Subalternative 1 of the Composite Plan. The cost of Subalternative 1 of the Composite Plan is more than or the same as the preliminary recommended plan, depending upon the return flow option selected for the preliminary recommended plan. Sting of the wells along the Fox River would reduce the baseflow reduction to selected streams, and upon the return flow option selected for the preliminary recommended plan. Siting of the wells along the Fox River would reduce the baseflow reduction to selected streams, and potentially impact areas along the Fox River south of the City which are adjacent to the Vernon Marsh. In the past you have raised potential negative impacts regarding the siting of such wells. In any case, the potential negative impacts on baseflow to surface waters will be more significant under the refined alternative you have suggested than under the preliminary recommended plan. The other advantages which have lead to selection of the preliminary recommended plan would remain, namely 1) favorable impacts attendant to recovery of the deep aquifer; 2) reduction in chloride discharges to the environment; and 3) ability to eliminate the use of point-of-entry water treatment. Given these considerations, and the cost and surface water baseflow considerations, as previously noted, it is concluded that the preliminary recommended water supply plan as approved by the Advisory Committee should remain unchanged. You could raise this issue at the next Advisory Committee meeting. However, it would have been better to have raised this issue earlier so Committee meeting. However, it would have been better to have raised this issue earlier so that it could be resolved prior to the selection of a preliminary recommended plan and the related extensive public outreach program.

Comment: The preliminary recommended plan inadequately addresses management of water supplies est of the subcontinental divide, and there may be sustainability concerns in those beyond the year 2035.

Dr. Douglas S. Cherkauer May 19, 2009 Page 3

This issue has been discussed in the past, both during and outside of the Advisory Committee meetings. Based, in part, upon those discussions, the plan includes a high-capacity well siting procedure which is designed to mitigate the negative impacts of new well construction on surface waters and existing water supply systems. In addition, the preliminary recommended plan includes the following components which apply to the areas in question

- 1. Water conservation generally at an intermediate program level.
- Recovery of the deep aquifer which affects nearly the entire Region due to a combination of water conservation, conversions to Lake Michigan supplies, and limited increased reliance on shallow aquifer pumping
- Development of infiltration facilities and development practices and stormwater management measures designed to enhance groundwater recharge focused for mitigation in areas where the development of wells may have potential negative impacts on groundwater levels or surface water baseflows
- Preservation of the majority of the areas in the Region classified as having high and very high recharge characteristics.

In addition to these preliminary recommended plan components, the plan is to include additional auxiliary plan components. These may include elements, such as chloride management, improved management of emerging and unregulated contaminants, and further consideration for cooperative development and system integration for water supply

When this topic has been discussed in the past both within and outside of the Advisory when his topic has overi discussed in the past own within and outside of the Aurisary Committee meetings, our impression was that the recommendations included in the preliminary plan were satisfactory to you. Apparently, that may not be the case. If it is not, you are welcome to raise some specific suggestions at the appropriate time at the next Advisory Committee meeting. You could also informally advise the Commission staff of your recommendations at any time. However, again, it would have been better to have fully edited and this impropriate in the properties of the properties o addressed this issue earlier

We trust the foregoing adequately responds to your comments. The Commission staff would be pleased to meet with you to discuss the issues raised if you think that would be useful

Robert P. Biebel, P.E., P.H. Special Projects Environmental Engineer

RPB/pk #143915 V2 - RWSP CHERKAUER LTR



March 12, 2009

Robert Biebel Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive

P.O. Box 1607 Waukesha, Wisconsin 53187-1607

RE: Comments on SEWRPC's Preliminary Regional Water Supply Plan for Southeastern

We are submitting public comments to identify three major failings of the SEWRPC Preliminary Regional Water Supply Plan for Southcastern Wisconsin ("Water Supply Plan"), which we are confident further study, evaluation and revisions could rectify.

The Water Supply Plan is Premised Upon an Outdated and Questionable

First of all, we must raise our continuing objection to the underlying premise of SEWRPC's Water Supply Plan, which is based upon the SEWRPC 2035 Regional Land Use Plan ("Land Use Plan"). The Land Use Plan is outdated both in its approach and in

From the outset, it was clear that the analysis and findings of the Regional Water Supply Study should have been directed by a science-based assessment of the nature and extent of the region's water resources. Instead, SEWRPC's Land Use Plan emerged as the of the region's water resources, instead, 52 w. PC s Laint ose Frait entering as the driver of the Water Supply Study and, ultimately, the Water Supply Plan, notwithstanding the record's demonstration of repeated objections by Advisory Committee members, including University of Wisconsin-Milwaukee Professor and hydrogeologist, Doug Cherkauer, and Milwaukee Water Works Superintendent, Carrie Lewis. Of the many assumptions underlying the Land Use Plan and, thereby, the Water Supply Plan, perhaps the most questionable, and most at odds with water resource constraints, is the high increase in growth projected for Waukesha County over the next twenty-five years. Indeed, as reflected in the May 15, 2007 Water Supply Study twenty-n-we years. Indeed, as refereted in the way 15, 2007 water supply study Advisory Committee meeting minutes, the growth in Waukssha County's population and housing is projected precisely where water supply sources may least be able to accommodate that growth. At this same meeting, Mr. Bicbel, you drew attention to several places in the report, including Chapter IV, where it was noted that water supply conditions identified by the Water Supply Plan may identify a need to refine or revise the 2035 Land Use Plan. We say the time to revise the Land Use Plan is now.

Moreover, this projected growth, dependent as it will be on heavy automobile transit and expanded infrastructure costs, is exactly the kind of sprawl and its attendant costs that national planning experts, intent on reducing our oil dependency and carbon emissions counsel against. Indeed, this sprawl is already a major contributor to Waukesha's and Southeastern Wisconsin's non-compliance with federal ozone and fine particulate air quality standards. Following the existing Land Use Plan will only make this noncompliance situation worse. The result will be significant adverse health impacts on our region's citizens, including higher rates of asthma and respiratory illness, as well as the prospect of severe economic growth restrictions for our region overall.

While outdated land use planning of this type may not be surprising given that SEWRPC's Land Use Plan unapologetically rests upon planning principles and plan concepts heralding back to 1966, the citizens and communities in our Southeast Wisconsin region deserve a better—more progressive, intelligent and current—
template for growth and development than what SEWRPC is relying upon and, worse, has predicated its Water Supply Plan upon.

The Water Supply Plan's reliance on the Land Use Plan as its driver, rather than vice versa, also has resulted in Plan recommendations with little or no relevance to the sustainability of the region's water resources. For example, whereas the Water Supply Plan asserts that there will be enough water resources to implement the Land Use Plan, at the September 23, 2008 Water Supply Study Advisory Committee meeting, committee member, Doug Cherkauer, pointed to critical areas within the region where this will not be the case, notably, in Oconomowoc and Hartford, where existing problems with base flow reductions will place Western Waukesha County lakes at risk of being drawn down-promising adverse impacts both to the ecology of the lakes and to the assessed value of the lake properties.

Other examples pointing to the fallibility of the Water Supply Plan's assumptions regarding sustainability include the Plan's failure to specifically address or develop plans togatum assamment in the train a family of the growing population pressures and ongoing environmental concerns in the East Troy/Lake Beulah area. Likewise, the Water Supply Plan fails to take into account the potential cumulative impact of multiple high capacity wells in the region, an omission that is especially concerning given the region's hydrogeology. Moreover, it is our understanding that more sophisticated models exist, including one recently developed by the USGS and other scientists involved in the SEWRPC Water Supply Study, and would assist considerably in predicting impacts to lakes, streams and wetlands under different development scenarios. It is regrettable that SEWRPC has not taken the time and afforded itself the opportunity to take full advantage of these more sophisticated tools

Yet another critical assumption on the part of the Water Supply Plan, which pertains both to the Plan's sustainability findings and the Plan's recommendation that the City of Waukesha obtain Lake Michigan water, regards its "Strategic Conversion to Lake Michigan as a Source of Water Supply' element. This element assumes that nine communities currently part of MMSD sewage system—including a portion of the City of Brookfield, the City of Cedarburg, the Village of Elm Grove, the Village of Germantown,

2

the Village of Grafton, the Village of Saukville, and the Town of Yorkville, the central portion of the City of New Berlin and the City of Muskego—will convert from wells to Lake Michigan for their water supply. However, this underlying assumption is, at best, unsupported in terms of whether, when and to what extent these other communities, in fact, will agree to move off the deep aquifer for their water supply, especially in view of the present cost differential between Lake Michigan water and existing groundwater

Recommendation: Given the foregoing, we recommend that the Water Supply Plan's recommendations concerning the region's water resources be put on hold until further study is undertaken to provide a complete picture of the region's water resources in ten of their sustainability in the face of future demands. After this analysis is completed, more realistic findings could be developed and in turn be used to begin the process of revising the Land Use Plan.

The Water Supply Plan Fails to Evaluate or to Call For Further Study of Critical Environmental Impacts to Receiving Lake Michigan Tributary П. Waters Identified as Recommended Alternatives,

Despite the Water Supply Plan's description and recommendations concerning the three outlined return-flow alternatives enabling a diversion of Lake Michigan water to Waukesha, the Plan plainly fails to assess a wide array of important questions relating to waukesna, the rain planni rains to assess a wine array or important questions retaining potential water quality and ecosystem impacts that could result from implementation of the recommended alternatives. Contrary to the meaning suggested by the title of the Plan's Chapter IX, "Alternative Plan Comparative Evaluation and Selection of Initially Preferred Plan," the evaluation of alternatives is sorely lacking in terms of return-flow impacts on receiving tributaries.

Recommendation: Any proper "comparative evaluation" as intended by the Great Lakes Compact would, at the very least, compare return flow impacts to the tributary streams being contemplated as potential recipients of return flow discharges, including both Underwood Creek and the Root River. At the very least, a proper comparative evaluation would also examine the relative impacts of developing a separate pipe and evaluation would also examine the relative limplaces of developing a separate pipe and treatment system for direct discharge to Lake Michigan or of hooking up to the current MMSD system. Taking just one of these scenarios—the alternative of returning water back to Lake Michigan through Underwood Creek—would at a minimum require SEWRPC to examine the following areas of inquiry bearing upon water quality, water antity and cost considerations before reaching any specific recommendations as part of the Water Supply Plan:

- Are total loading of nutrients and other pollutants to Underwood Creek and Lake Michigan being considered in the permitting process?
- 2. What effluent limits would Waukesha need to meet to discharge to a restored Underwood Creek that fully meets the fishable and swimmable goals of the Clean

3

Water Act? Who will be monitoring the effects of this effluent on downstream

- 3. What impacts might increased flows of Waukesha wastewater in Underwood Creek have on creek restoration efforts underway now or being planned by MMSD, the city of Wauwatosa, Milwaukee County Parks, and others? How would returning flow to Underwood Creek affect the ability of parties to remove concrete channelization in the future?
- 4. Do the assumptions used about Underwood Creek's capacity to absorb more flow take into consideration extreme run off events of the kind seen in recent years?
- What are the impacts of the treated wastewater on water quality of Underwood Creek, which is currently a variance water? Will monitoring be conducted to ensure that this effluent is not having a negative effect on downstream receiving
- Does Underwood Creek, as a receiving water, contain the same base flow available in the Fox River to dilute pollutants to acceptable levels that ensure compliance with water quality standards?
- 7. What data exists showing the concentration or loading of each regulated pollutant in the receiving stream prior to addition of the Waukesha effluer
- 8. How would the proposed discharge of wastewater impact existing efforts to create Watershed Restoration Plan for the Menomonee River:
- Given Underwood Creek's status as one of the flashiest streams in Wisconsin. what are the impacts of the return flow on the safety of local residents and fishermen, especially during high flow events?
- 10. It is estimated that returning Waukesha's diversion water would increase the daily flow of Underwood Creek by 39%.
 - What steps will need to be undertaken to prevent erosion?
 - b. Who will pay for inevitable erosion damage/repair work?

III. The Water Supply Plan Recommendations Fail to Comply with Key Provisions of the Great Lakes Compact in the Absence of Act 227 Rule-Making

For like reasons, the Water Supply Plan fails to address, much less satisfy, key provisions of the recently enacted Great Lakes Compact or those of Act 227, Wisconsin's statutory implementation of the Compact. Specifically, SEWRPC's Water Supply Plan's recommendations concerning water conservation and the three outlined return-flow alternatives regarding a diversion of Lake Michigan water to Waukesha raise critical

issues pertaining to the Great Lakes Compact and Act 227 implementation in the absence of DNR rule-making, including the following

- · How does a return flow alternative that is not continuous but, rather, sporadic and spaced over the course of many months, even years, conform with the legal requirements for the Great Lakes Compact?
- With respect to the return flow alternative described immediately above, how would return flow to Lake Michigan be monitored? Over what interval? Daily? Monthly? Yearly? A five-year average? How will this be regulated to conform with the Great Lakes Compact?
- How does a return flow alternative that includes the option of discharging Lake Michigan water into the Fox River and thereby the Mississippi River basin (during a two-year storm event or greater and during low flow in the Fox River) conform with the legal requirements of the Great Lakes Compact?
- How does a return flow alternative that will, according to Waukesha Water Utility officials, include substantial quantities (20%) of infiltration and inflow (I & I) water from the Mississippi River basin in its calculations of return flow volume back to Lake Michigan conform with the legal requirements of the Great Lakes Compact?
- How does the conservation program of the City of Waukesha, referenced and relied upon in the Water Supply Study's recommendations, conform with the legal requirements of the Great Lakes Compact? Where in the Study is there an examination of the following pertinent questions
 - What water savings have been documented from the start of the City's water
 - conservation program?

 What water savings can be tied directly to the City's conservation measures as
 - opposed, for example, to an increase in precipitation? How does I & I water factor into the City's conservation program?
 - What additional measures are committed to?
 What conservation measures have been rejected and on what basis?

 - If a diversion is approved to Waukesha, will the city's water conservation programs be continued? If so, how will its compliance be monitored?
- . In view of the Water Supply Plan's failure to examine critical water quantity and water quality considerations as described in Section II above, how do any of the return flow alternatives outlined in the SEWRPC Water Supply Plan conform with the legal requirements of the Great Lakes Compact and Act 227, specifically the latter's provision that the applicant, in returning water to the source watershed, must document that "[t]he returned water will be treated to protect and sustain the physical, chemical and biological integrity of the receiving waters, including consideration of the impacts of temperature, nutrient loading and flow regimes"

Recommendation: It is in view of the above questions—which go to the heart of the Great Lake Compact's regional review process and whose resolution is absolutely dependent upon the Wisconsin DNR's rule-making responsibility—we recommend SEWRPC hold off completion of its Water Supply Plan until Wisconsin has rules in place to guide SEWRPC's recommended alternatives in keeping with the legal requirements of the Compact and Act 227.

Thank you for your attention to the foregoing matters of concern relating to the Preliminary Regional Water Supply Plan for Southeastern Wisconsin. We are hopeful that SEWRPC will commit to undertake the additional studies and efforts, identified above, as required to fulfill the Plan's necessary scope and purpose

Jodi Habush Sinykin, Of Counsel Midwest Environmental Advocates

Submitted on behalf of the following people and organizations:

Ecology Association of New Berlin Milwaukee Riverkeeper New Berlin Land Conservancy 1000 Friends of Wisconsin State Representative Cory Mason Sixteenth Street Community Health Center The Great Waters Group Sierra Club Waukesha County Environmental Action League Wisconsin Great Lakes Coalition Wisconsin Wildlife Federation

6

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

TELEPHONE (262) 547-6721 FAX {262) 547-1103

May 13, 2009

Ms. Jodi Habush Sinvkin Midwest Environmental Adv 617 W. Green Tree Road Milwaukee, WI 53217-3710 mental Advocate

Dear Ms. Habush Sinykin:

This is to acknowledge receipt of your March 12, 2009, letter providing comments on the preliminary regional water supply plan which was submitted for public review and comment during the period extending from January 2 to March 16 of 2009. The response to your letter which follows we believe indicates that there may be some misunderstanding of the regional land use plan as well as of the preliminary regional water supply plan. Therefore, we believe a response to your letter is required in order to correct any misunderstanding

The following summarizes our responses to your comments structured in accordance with the comments

I. The Water Supply Plan is Premised Upon an Outdated and Questionable Land Use

First of all, we must raise our continuing objection to the underlying premise of SEWRPC's Water Supply Plan, which is based upon the SEWRPC 2035 Regional Land Use Plan ("Land Use Plan"). The Land Use Plan is outdated both in its approach and in

From the outset, it was clear that the analysis and findings of the Regional Water Supply Study should have been directed by a science-based assessment of the nature and extent of the region's water resources. Instead, SEWRPC's Land Use Plan emerged as the of the region's white resources, instead, 5EPTET'S Latta USE train emerged as the driver of the Water Supply Stan, touly and, ultimately, the Water Supply Flan, norwithstanding the record's demonstration of repeated objections by Advisory Committee members, including University of Wiscosnim dilivaukee Professor and hydrogeologist, Doug Cherkauer, and Milwaukee Water Works Superintendent, Carrie Lewis. Of the many Cherkauer, and Milwaukee Water Works Superintendent, Carrie Lewis. Of the many assumptions underlying the Land Use Plan and, thereby, the Water Supply Plan, perhaps the most questionable, and most at odds with water resource constraints, is the high increase in growth projected for Waukesha County over the next twenty-five years. Indeed, as reflected in the May 15, 2007 Water Supply Study Advisory Committee meeting minutes, the growth in Waukesha County's population and housing is projected precisely where water supply sources may least be able to accommodate that growth. At this same meeting, Mr. Biebel, you drew attention to several places in the report, including Chapter IV, where it was noted that water supply conditions identified by the

Ms. Jodi Habush Sinykin May 13, 2009 Page 2

> Water Supply Plan may identify a need to refine or revise the 2035 Land Use Plan. We e to revise the Land Use Plan is now

Response:

Before responding to the substance of this comment, we would first comment on two statements included in the comment. First, there were no "repeated objections by Advisory Committee members' regarding the use of the adopted 2035 regional land use plan as the land use basis for the regional water supply plan. The issue was raised by Committee member Ms. Carrie M. Lewis at the Advisory Committee meetings in a collegial manner on two occasions and was discussed by the Committee. The Committee concignal manner on two occasions and was ususused by the committee. The Committee concluded that sound planning principles would dictate that the recently completed design year 2035 land use plan should be the basis for developing the regional water supply plan. However, the Committee also agreed, and it is specifically stated in the draft plan report, that if the regional water supply planning effort finds that the land use pattern envisioned in the plan was not sustainable with respect to water supply, the regional water supply plan would recommend that the regional land use plan be revised. As it turns out, the regional water supply sustainability issues which would require a chance in the adopted regional water supply sustainability issues which would require a change in the adopted regional

The second statement concerned is that the regional land use plan and attendant regional water supply plan are based upon a "high increase in growth projected for Waukesha County." The regional land use plan is not based upon projections of population, employment, and existing land use development trends. Rather, the plan is based upon a set of carefully crafted regional development objectives which seek to reverse the historic trends, as demonstrated in Attachment 1 to this letter, which presents historic trends and trends, as demonstrated in Attachment 1 to this letter, which presents historic trends and planned growth in population, households, and employment in the seven counties of the Region. The population of Milwaukee County declined by almost 113,000 persons over the approximately 30-year period from 1970 to 2003. Despite that trend, the regional land use plan envisions an increase in Milwaukee County population of almost 66,000 persons over the next 30 years. Similarly, employment levels in Milwaukee County declined by about 20,000 jobs from 1990 to 2003. Despite that trend, the regional land use plan envisions an increase of over 39,000 jobs in Milwaukee County from 2003 to 2035. The Commission has in the past been criticized for the use of population and employment forecasts is it is almost a Circle the kingost the decrease in historic trends. This reversel is Commission has in the past occur entruzed for the use of population and employment forecasts in its planning efforts that ignore these decreasing historic trends. This reversal of the decline in population and employment levels in the central county of the Region would be attended by major reductions in the historic growth levels of the outlying counties. For example, from 1970 to 2003 the population of Waukesha County increased by about 140,000 persons. The regional land use plan, however, envisions that from 2003 to 2035 Waukesha County's population would increase by about 76,000 persons. The plan envisions similar changes in the growth trends of the other collar counties. The regional land use plan, then, to the maximum extent practicable, seeks to recentralize development within the Region, encouraging redevelopment and new development to occur at higher densities in defined neighborhood units located in areas that either are already served by, or can readily be served by centralized sanitary sewerage, public water supply, mass transit, and police and fire protection

Ms. Jodi Habush Sinykin May 13, 2009 Page 3

> You also state that the regional land use plan is outdated. First and foremost, the plan was completed in 2006 and is up-to-date, timely, and accepted by the vast majority of the professional planners and elected officials in the Region, including the planning staff of the City of Milwaukee which was represented on the Commission Advisory Committee that directed preparation of the plan. As you know, State law requires counties and municipalities to adopt "smart growth" plans if the county or municipality is to exercise zoning, land subdivision control, or official map regulations. Within southeastern Wisconsin, three of the seven counties have now adopted such plans and three are in the process of completing such plans. These county plans, essentially incorporate the adopted regional land use plan. In addition to the county plans, 138 of the 146 municipalities within the Region have prepared, or are in the process of preparing, such "smart growth" plans. Again, with some exceptions, these local plans substantially incorporate the regional land use plan. The few exceptions involve proposed development which goes beyond the regional land use plan.

> We would also note that the Commission's land use planning efforts have received we would also note that the Commission's land use planning critical regional material and international attention for the pioneering concepts advanced in the original regional land use plan—adopted in 1966—including the delineation and preservation of environmental corridors and of prime agricultural lands. As shown in Attachment 2 to this letter, the regional land use plan recommends preservation of about 23 percent of the Region lying in its environmental corridors, and another 35 percent of the Region which encompasses its prime agricultural lands. The Commission also pioneered the delineation of protection of floodlands, wetlands, woodlands, and wildlife habitat areas and the preparation and use of detailed aerial surveys in planning. The Commission's 1966 and successive land use plans promulgated the delineation and design of neighborhood units at densities that could support mass transit service with mixed land uses and street patterns that facilitated pedestrian and bicycle movement—all features belatedly reflected in the "new urbanism" movement.

> Many factors must be taken into account in the development of an advisory land use plan that attempts to influence the land use pattern of a large region. In addition to the availability of water supply that you cite, such factors include provision of transportation facilities and services, sanitary sewerage, stormwater management and flood control, park and open space considerations, the maintenance of a productive agricultural base, air and water quality considerations, and protection of environmentally sensitive areas found throughout the regional landscape.

> The Commission has long subscribed to principles which recognize that natural resource base factors should influence the placement and intensity of urban development. This is base factors should influence the placement and intensity of urban development. This is why, for example, the Commission land use plan seeks to protect the floodlands, wetlands, woodlands, and other environmentally sensitive lands found within the Commission-identified environmental corridors. This is also why the Commission land use plan seeks to protect the most productive agricultural soils. Groundwater and surface water resources used for water supply are also important considerations in land use planning and recognition of this importance was one of the fundamental reasons why the Commission has long sought to prepare a regional water supply plan. The Commission has always recognized the relationship that exists between land use planning and water

Ms. Jodi Habush Sinykin May 13, 2009 Page 4

supply planning, and, as previously noted, indicated at the very beginning of the water supply study effort that, should that planning effort identify any water resource constraints on the development pattern envisioned in the adopted regional land use plan, the Commission would initiate a process to amend the land use plan in an appropriate manner.

What has become clear in the regional water supply study is that water supply is not a limiting factor within this Region with respect to the location of urban development either east or west of the subcontinental divide. Indeed, the study has clearly shown that the relatively modest increment of urban development envisioned in the regional land use plan west of the divide can be accommodated by the available groundwater supplies, with the shifting in recent years of a number of communities from the deep to the shallow aquifer, and with the recommended shift in the plan of another four water utilities from the deep to the shallow aquifer. Moreover, even the City of Waukesha, as well as all the other communities proposed in the plan to shift from groundwater to Lake Michigan water, could continue to be served by groundwater—with increased reliance on the shallow aquifer—without resorting to Lake Michigan as a source of supply. Accordingly, there is no basis for a change in the regional land use plan based upon water supply considerations.

Commen

Moreover, this projected growth, dependent as it will be on heavy automobile transit and expanded infrastructure costs, is exactly the kind of sprawl and its attendant costs that national planning experts, intent on reducing our oil dependency and carbon emissions, counsel against. Indeed, this sprawl is already a major contributor to Wauksha's and Southeastern Wisconsin's non-compliance with federal ozone and fine particulate air quality standards. Following the existing Land Use Plan will only make this non-compliance situation worse. The result will be significant adverse health impacts on our region's citizens, including higher rates of asthma and respiratory litness, as well as the prospect of severe economic growth restrictions for our region overall.

Response:

As noted above, the regional land use plan, on which the water supply plan is based, envisions a reversal of historic and recent trends in employment, population, and land use development. The plan secks to recentralize urban development within the Region; encourage new development at higher densities in neighborhood units that can be readily served by public utilities and transit. The plan proposes a 13 percent increase in urban land over the next 30 years to accommodate a 24 percent increase in households. In addition, the plan recommends preservation of 58 percent of the Region in environmental corridor and agricultural land uses. This is the opposite of what is implied in your letter.

Comment:

While outdated land use planning of this type may not be surprising given that SEWRPC's Land Use Plan unapologetically rests upon planning principles and plan concepts heralding back to 1966, the citizens and communities in our Southeast Wisconsin region deserve a better—more progressive, intelligent and current—template for growth and development than what SEWRPC is relying upon and, worse, has predicated its Water Supply Plan upon.

Ms. Jodi Habush Sinykin May 13, 2009 Page 5

Response

As noted above, your letter has characterized the regional land use plan in a totally misleading and incorrect manner. In fact, the plan is based upon sound planning objectives and includes recommendations which support modern urbanization. The single-purpose planning that you have advocated had long been rejected by the planning profession.

Comment:

The Water Supply Plan's reliance on the Land Use Plan as its driver, rather than vice versa, also has resulted in Plan recommendations with little or no relevance to the sustainability of the region's water resources. For example, whereas the Water Supply Plan asserts that there will be enough water resources to implement the Land Use Plan, at the September 23, 2008 Water Supply Study Advisory Committee meeting, committee member, Doug Cherkauer, pointed to critical areas within the region where this will not be the case, notably, in Oconomowo and Hartford, where existing problems with base-flow reductions will place Western Plankesha County lakes at risk of being drawn down—promising adverse impacts both to the ecology of the lakes and to the assessed value of the lake properties.

Response

This comment is also misleading. At the September 23, 2008, Advisory Committee meeting, Dr. Cherkauer did not identify any areas within the Region where the studies indicated that the available water supply was not sustainable, nor did he specifically cite the Oconomowoc and Hartford as areas where "base flow reductions will place western Waukesha County lakes at risk of being drawn down." Dr. Cherkauer did, in a collegial manner, indicate that caution should be used in concluding that a sustainable water supply existed in the areas along the western and southern portions of the Region. He indicated that uncertainties with regard to groundwater use in Fefferson County and northeastern Illinois were a consideration that could influence sustainability of this resource in the future. This issue was discussed in a collegial manner at the Advisory Committee meeting held on September 23, 2008. It was noted that, in the case of northeastern Illinois, there were plans underway for conversion of significant areas to a Lake Michigan supply which would decrease, not increase, the use of groundwater as a source of supply in the expanding Chicago metropolitan area, and especially in that area's northwestern suburbs. In the case of Jefferson County, there are no major pumping centers which would be expected to significantly change the sustainability conclusions. Furthermore, there has been very little drawdown in the deep aquifer on the western boundary of the Region because of the availability of local recharge. Thus, the conclusions in the preliminary plan remain sound with regard to sustainability through the year 2015.

With regard to the statements regarding Oconomowoe and Hartford being critical areas where existing problems with baseflow affect lakes, the proposed regional plan does not envision the need for new water supply facilities for either community, given that Hartford is nearing completion of a new well installation. Most of the lakes in the Oconomowoe area are through-flow lakes, for which water levels are not significantly impacted by groundwater levels. The lakes that are not through-flow lakes are currently experiencing very high lake levels that have persisted for over a year. Thus, the "existing problems with base-flow reductions (that) will place Western Waukesha County lakes at risk of being drawn down" that you report simply are not in accord with facts.

Ms. Jodi Habush Sinykin May 13, 2009 Page 6

Comment:

Other examples pointing to the fallibility of the Water Supply Plan's assumptions regarding sustainability include the Plan's failure to specifically address or develop plans for the growing population pressures and ongoing environmental concerns in the East Troy/Lake Beulah area. Likewise, the Water Supply Plan fails to take into account the potential cumulative impact of multiple high capacity wells in the region, an omission that is especially concerning given the region's hydrogeology. Moreover, it is our understanding that more sophisticated models exist, including one recently developed by the USGS and other scientists involved in the SEWRPC Water Supply Study, and would assist considerably in predicting impacts to lakes, streams and wetlands under different development scenarios. It is regretable that SEWRPC has not taken the time and afforded itself the opportunity to take full advantage of these more sophisticated tools.

Response:

This comment, also includes an incorrect statement that "more sophisticated models exist, including one recently developed by the USGS and other scientists..." You state further that it is regretable that SEWRPC has not taken the time to take full advantage of this new model. However, no such model exists. The model used in the development of the regional water supply plan is a state-of-the-art model developed for the Commission by the U.S. Geological Survey (USGS) with assistance from the Wisconsin Geological and Natural History Survey and the University of Wisconsin-Milwaukee Geoscience Educators. We have discussed this with the USGS staff and they agree no model such as you allude to exists which could be brought to bear on this issue.

Your letter also incorrectly indicates that the regional water supply planning does not take into account multiple high-capacity wells in the Region. The plan uses state-of-the-art groundwater-surface water modeling to specifically consider the impacts of all wells needed to serve the Region through 2035. Your comment is totally unfounded.

With regard to your comment regarding the East Troy-Lake Beulah area. As you are well aware, there is ongoing litigation concerning the specific siting of a Village of East Troy well. Because of that situation, and because the issue involved is related to very site-specific issues, it was not considered appropriate for the regional water supply plan to specifically address this issue. However, the general issue involved is addressed in the plan by the recommendation for adoption and application of a new high-capacity well siting procedure designed to avoid similar situations from occurring in other areas.

Comment

Yet another critical assumption on the part of the Water Supply Plan, which pertains both to the Plan's sustainability findings and the Plan's recommendation that the City of Waukesha obtain Lake Michigan water, regards its "Strategic Conversion to Lake Michigan os a Source of Water Supply" element. This element assumes that nine communities currently part of MMSD sewage system—including a portion of the City of Brookfield, the City of Cedarbung, the Village of Elm Grove, the Village of Gardon, the Village of Salwille, and the Town of Yorkville, the central portion of the City of New Berlin and the City of Muskego—will convert from wells to Lake Michigan for their water supply. However, this underlying assumption is, at best, unsupported in terms of whether, when and to what extent these other communities, in fact, will agree to move off the deep aquifer for their water supply, especially in view of

Ms. Jodi Habush Sinykin May 13, 2009 Page 7

the present cost differential between Lake Michigan water and existing groundwater

supplie

This comment again indicates a statement that is incorrect. The City of Cedarburg, Village of Grafton, Village of Saukville, and Town of Yorkville are not part of the Milwaukee Metropolitan Sewerage District (MMSD) sewerage system, as you indicate.

As previously noted, there are options for providing water supplies to the communities you cite using groundwater supplies. The study has concluded that the relatively modest increment of two drawled water and the relatively modest increment of two drawled water and the spin was of the divide can be accommodated by the available groundwater supplies, with the shifting in recent years of a number of communities from the deep to the shallow aquifer, and with the recommended shift in the plan of another four water utilities from the deep to the shallow aquifer. Moreover, even the City of Waukesha, as well as all the other communities proposed in the plan to shift from groundwater to Lake Michigan water, could continue to be served by groundwater—with increased reliance on the shallow aquifer—without resorting to Lake Michigan as a source of supply. However, because of environmental considerations, the plan recommends that these areas be converted to a Lake Michigan supply.

However, the Lake Michigan supply alternative was selected for inclusion in the preliminary recommended plan for the following reasons: 1) the favorable impacts attendant to the recovery of the deep aquifer; 2) the reduction in chloride discharges to surface waters; 3) the favorable impacts on stream flows and inland lake levels; 4) the ability to preserve the groundwater sources for other uses, such as agricultural; and 5) the opportunity to use available excess production capacity at the Milwaukee Water Works with its attendant fiscal benefits to Milwaukee ratepayers. The implementation issue you raise is one which is typically dealt with by the cyclical nature of the typical public works development process and the distinctions between areawide systems planning, local scoond-level planning and preliminary engineering, and local level final design and construction phases of that process. The regional water supply planning effort constitutes the first, or areawide systems planning, phase of this three-phase public works development process. The areawide systems planning phase concentrates on the definition of the problems which need to be addressed and on the development and evaluation of alternative measures for resolution of these problems in an environmentally sound, cost-effective manner. In this first phase, each alternative plan element is developed to sufficient detail to permit a sound, comparative evaluation of the plans, and the selection of an initially preferred plan. The second phase of the three-phase public works development process, local-level planning and preliminary engineering, is carried out subsequent to the adoption of an areawide systems plan, by the implementing units and agencies of government concerned. Under this phase, improvements recommended in the system plan are carried into greater depth and detail. Examples might include local-level planning and preliminary engineering phase of the project also can involve the development of specific information which may be needed to support

Ms. Jodi Habush Sinykin May 13, 2009 Page 8

Upon acceptance of the findings and recommendations of the local-level planning and preliminary engineering phase by the governmental units and agencies affected, the third or final design phase of the public works development process is initiated. This work should also be carried out by the implementing units and agencies of government concerned and involves the preparation of contract drawings and specifications and final cost estimates.

The process may be iterative and the findings at the second and third phases may lead to reevaluation and revision of the system plan. For example during the local-level planning and preliminary engineering phase, a new alternative—based on additional information—may be developed, costs of the initially preferred alternative may be found to be excessive, or environmental impacts may be unacceptable. In these cases, a reevaluation and potential amendment of the system-level plan is undertaken. This could be the case in a number of situations should a component of the regional water supply plan not prove implementable following the additional evaluation and legal processes involved in the second level of detailed planning.

Furthermore, if a component of the regional water supply plan does not proceed to preliminary engineering or the final design phase of project development, that component would typically be reevaluated at the time of the next system-level plan update. Likewise, should one or more of the communities you indicate conclude that they do not intend to proceed with implementation of the regional plan recommendations, that decision will then be considered and reflected as necessary in the regional water supply plan updating process. This does not mean, however, that completion of the systems level of planning should be held in abeyance until the results of the more detailed planning, engineering, and environmental studies are known.

Comment:

Recommendation: Given the foregoing, we recommend that the Water Supply Plan's recommendations concerning the region's water resources be put on hold until further study is undertaken to provide a complete picture of the region's water resources in terms of their sustainability in the face of future demands. After this analysis is completed, more realistic findings could be developed and in turn be used to begin the process of revising the Land Use Plan.

Response

As noted above, the preliminary regional water supply plan does provide for a sustainable water supply. The municipal sources of water supply envisioned to be used under the initially recommended plan include: Lake Michigan surface water, accounting for 76 percent of the use; deep aquifer groundwater, accounting for 7 percent of the use; and shallow aquifer groundwater, accounting for 17 percent of the use. The Lake Michigan supplies may be assumed to be fully sustainable assuming sound management and a return flow as envisioned in the plan. Water levels in the deep sandstone aquifer under most of the Region are expected to rise under the use and recharge conditions envisioned under the preliminary recommended regional water supply plan. This increase in water levels should ensure the sustainability of this aquifer.

Because unconfined shallow aquifers are hydraulically connected to surface waterbodies, water levels in the shallow aquifer are buffered by the surface water system. As a

Ms. Jodi Habush Sinykin May 13, 2009 Page 9

consequence, groundwater-derived baseflow to surface waterbodies is a better indicator of impacts on the shallow groundwater system than water levels in the shallow aquifer. These factors were carefully considered in the selection of the preliminary recommended plan. In many of the streams that may be expected to experience reductions in groundwater-derived baseflow, the baseflows are supplemented by discharges of effluent from wastewater treatment plants. For these streams, the impact of groundwater-derived baseflow reductions upon total streamflow may be expected to be small or negligible, since the groundwater withdrawals for the utility systems concerned are returned to the streams through the wastewater treatment plants. The preliminary recommended plan envisions mitigative measures for those waterbodies expected to experience reductions in groundwater-derived baseflow, representing about 2 percent of the total regional baseflow, may be expected. These changes in surface water baseflow range from a loss of about 4.5 percent to an augmentation of about 15 percent on average within each county concerned. Given that groundwater-derived baseflow typically comprises only a portion of total streamflow, this is considered to be an impact within the range considered acceptable. Furthermore, the high-capacity well siting procedures recommended are designed to further minimize the potential for any unacceptable site-specific impacts. It should be stressed that the conversion of selected utilities to a Lake Michigan supply, albeit modest, was recommended, in part, because of the positive impact on the surface water systems.

Comment

II. The Water Supply Plan Fails to Evaluate or to Call For Further Study of Critical Environmental Impacts to Receiving Lake Michigan Tributary Waters Identified as Recommended Alternatives.

Despite the Water Supply Plan's description and recommendations concerning the three outlined return-flow alternatives enabling a diversion of Lake Michigan water to Waukesha, the Plan plainly fails to assess a wide array of important questions relating to potential water quality and ecosystem impacts that could result from implementation of the recommended alternatives. Contrary to the meaning suggested by the title of the Plan's Chapter IX, "Alternative Plan Comparative Evaluation and Selection of Initially Preferred Plan," the evaluation of alternatives is sorely lacking in terms of return-flow impacts on receiving tributaries.

Response:

Again, we would note a misinterpretation of the regional water supply plan. You indicate that the plan fails to "...Call For Further Study of Critical Environmental Impacts to Receiving Lake Michigan Tributary Waters Identified as Recommended Alternatives." You were in attendance at the September 23, 2008, Advisory Committee meeting at which the Committee unanimously agreed to call for additional environmental analyses of the potential impacts on the receiving waters being considered for return flow. To quote from the plan report: "Because of the need for further more-detailed environmental assessment of the return flow alternatives, no final recommendations relating to the return flow component is included in Subalternative 2 to the Composite Plan. Rather, the selection of the best return flow option is left open until completion of the more-detailed environmental evaluation during the plan implementation phase."; and, "Should this return flow subalternative be selected and pursued, more detailed studies of the impacts

Ms. Jodi Habush Sinykin May 13, 2009 Page 10

of providing return flow through discharge of treated effluent into streams tributary to Lake Michigan will be necessary. Such studies would address the issues of water quality, baseflow enhancement, streambank crosion, and recreational use impacts, as well as any other identified issues." This issue is responded to in more detail in response to your next comment.

Common

Recommendation: Any proper "comparative evaluation" as intended by the Great Lakes Compact would, at the very least, compare return flow impacts to the tributary streams being contemplated as potential recipients of return flow discharges, including both Underwood Creek and the Root River. At the very least, a proper comparative evaluation would also examine the relative impacts of developing a separate pipe and treatment system for direct discharge to lake Michigan or of hooking up to the current MMSD system. Taking just one of these scenarios—the alternative of returning water back to Lake Michigan through Underwood Creek—would at a minimum require SEWRPC to examine the following areas of inquiry bearing upon water quality, water quantity and cost considerations before reaching any specific recommendations as part of the Water Supply Plan.

- Are total loading of nutrients and other pollutants to Underwood Creek and Lake Michigan being considered in the permitting process?
- What effluent limits would Waukesha need to meet to discharge to a restored Underwood Creek that fully meets the fishable and swimmable goals of the Clean Water Act? Who will be monitoring the effects of this effluent on downstream waterways?
- 3. What impacts might increased flows of Waukesha wastewater in Underwood Creek have on creek restoration efforts underway now or being planned by MMSD, the city of Watawatosa, Milwaukee County Parks, and others? How would returning flow to Underwood Creek affect the ability of parties to remove concrete channelization in the future?
- 4. Do the assumptions used about Underwood Creek's capacity to absorb more flow take into consideration extreme run-off events of the kind seen in recent years?
- 5. What are the impacts of the treated wastewater on water quality of Underwood Creek, which is currently a variance water? Will monitoring be conducted to ensure that this effluent is not having a negative effect on downstream receiving waters?
- 6. Does Underwood Creek, as a receiving water, contain the same base flow available in the Fox River to dilute pollutants to acceptable levels that ensure compliance with water quality standards?
- What data exists showing the concentration or loading of each regulated pollutant in the receiving stream prior to addition of the Waukesha effluent?
- 8. How would the proposed discharge of wastewater impact existing efforts to create a Watershed Restoration Plan for the Menomonee River?

Ms. Jodi Habush Sinykin May 13, 2009 Page 11

- Given Underwood Creek's status as one of the flashiest streams in Wisconsin, what are the impacts of the return flow on the safety of local residents and fishermen, especially during high flow events?
- It is estimated that returning Waukesha's diversion water would increase the daily flow of Underwood Creek by 39%.
 - What steps will need to be undertaken to prevent erosion?
 Who will pay for inevitable erosion damage/repair work?

Response:

Some of the questions you ask are unnecessary, as the answers are obvious or have been addressed in the plan report. For example, your first question asks if pollutant loadings will be addressed in the permitting process. Wisconsin Department of Natural Resources regulations and procedure require that pollutant loadings be addressed. Another example is the ninth question regarding impacts during high flows, As has been reported numerous times, there would be no return flow discharge to the streams concerned during periods of high stream flow. The proposed regional water supply plan does recognize the need for, and specifically calls for, more-detailed evaluation of the potential environmental impacts associated with return flow involving Underwood Creek, the Menomonee River, and the Root River if the return flow is to be discharged to one or more of these streams. The Commission Advisory Committee recommended that the required more-detailed environmental assessment be made as part of the necessary plan implementation steps of second-level planning and preliminary engineering associated with the City's diversion application. The plan, however, also includes an alternative that would return the spent water directly to Lake Michigan via a pipeline, thus avoiding the need to discharge to any of the streams concerned. In this regard, we would note that the Milwaukee Metropolitan Sewerage District and the City of Waukesha are apparently planning to cooperatively evaluate the potential environmental impacts of the return flow on Underwood Creek in more detail than could be done at the systems level of planning. This is a good example of the cyclic nature of the progressive phased public works development process previously cited.

We also note that by letter dated January 6, 2009, you asked very similar questions to those listed above of the City of Waukesha. It is unclear to us why you would expect the regional water supply plan to answer the same questions you asked the City of Waukesha to address as part of the City's more-detailed second-level planning.

Comment:

III. The Water Supply Plan Recommendations Fail to Comply with Key Provisions of the Great Lakes Compact in the Absence of Act 227 Rule-Making

For like reasons, the Water Supply Plan fails to address, much less satisfy, key provisions of the recently enacted Great Lakes Compact or those of Act 227, Wisconsin's statutory implementation of the Compact. Specifically, SEWRPC's Water Supply Plan's recommendations concerning water conservation and the three outlined return-flow alternatives regarding a diversion of Lake Michigan water to Waukesha raise critical issues pertaining to the Great Lakes Compact and Act 227 implementation in the absence of DNR rule-making, including the following:

Ms. Jodi Habush Sinykin May 13, 2009 Page 12

- How does a return flow alternative that is not continuous but, rather, sporadic and spaced over the course of many months, even years, conform with the legal equirements for the Great Lakes Compact?
- With respect to the return flow alternative described immediately above, how would return flow to Lake Michigan be monitored? Over what interval? Daily? Monthly? Yearly? A five-year average? How will this be regulated to conform with the Great Lakes Compact?
- How does a return flow alternative that includes the option of discharging Lake Michigan water into the Fox River and thereby the Mississippi River basin (during a two-year storm event or greater and during low flow in the Fox River) conform with the legal requirements of the Great Lakes Compact?
- How does a return flow alternative that will, according to Waukesha Water Utility officials, include substantial quantities (20%) of infiltration and inflow (f & l) water from the Mississippi River basin in its calculations of return flow volume back to Lake Michigan conform with the legal requirements of the Great Lakes Compact?
- How does the conservation program of the City of Waukesha, referenced and relied upon in the Water Supply Study's recommendations, conform with the legal requirements of the Great Lakes Compact? Where in the Study is there an examination of the following pertinent questions:
- a. What water savings have been documented from the start of the City's water
- Conservation program?

 What water savings can be tied directly to the City's conservation measures as

- what water savings can be teal unextly to the City's Conservation measur-opposed, for example, to an increase in precipitation? How does I & I water factor into the City's conservation program? What additional measures are committed to? What conservation measures have been rejected and on what basis? If a diversion is approved to Waukesha, will the city's water conservation programs be continued? If so, how will its compliance be monitored?
- In view of the Water Supply Plan's failure to examine critical water quantity and water quality considerations as described in Section II above, how do any of the return flow alternatives outlined in the SEPRPC Water Supply Plan conform with the legal requirements of the Great Lakes Compact and Act 227, specifically the latter's provision that the applicant, in returning water to the source watershed, must document that "[1] he returned water will be treated to protect and sustain the physical, chemical and biological integrity of the receiving waters, including consideration of the impacts of temperature, nutrient loading and flow regime

Recommendation: It is in view of the above questions—which go to the heart of the Great necommentation. It is in New of in our work quantities and whose resolution is absolutely dependent upon the Wisconsin DNR's rule-making responsibility—we recommend SEWRPC hold off completion of its Water Supply Plan until Wisconsin has rules in place to guide

Ms. Jodi Habush Sinykin May 13, 2009 Page 13

> SEWRPC's reci ended alternatives in keeping with the legal requirements of the Compact and Act 227.

Response:

All of the alternative regional water supply plans were specifically developed to meet the All of the differentive regional water supply plants were specifically overloyed to need the spirit and intent of the Great Lakes Water Resources Compact and 2007 Wisconsin Act 227. The regional plan, however, was never intended to be sufficient in terms of meeting the letter of the requirements of either the Compact or Act 227. Rather, as noted above, it was always envisioned that more detailed engineering, legal, and environmental studies would be required in this respect, studies that appropriately are the responsibility not of SEWRPC, but rather of the implementing units and agencies of government concerned. Hence, the regional water supply system plan should not be held out by anyone as complete and full justification for a proposed diversion.

There are only three diversions proposed in the preliminary recommended plan. One of these—for the central portion of the City of New Berlim—remains in active consideration at this time and, as we understand it, enjoys the support of the City of Milwaukee. A second diversion—the City of Waukesha—is much more complex in nature and is clearly deserving of a significant amount of additional engineering and environmental assessment. While the regional water supply planning effort found that the proposed water diversion would be viable, taking into account the benefits and costs broadly water diversion would be value, and into account in the criteria and vois so doubt, defined, both to the environment and to the sending and receiving populations concerned, there is no guarantee that the letter of the Compact and Act 227 can and will be met. Indeed, there is an intentional bias in those laws that disfavors such diversions even if it can be demonstrated that the benefits—both environmental and fiscal—exceed the costs. can be demonstrated that the benefits—outs environmental and its call—acceed use costs. The only way to ascertain if that is the case will be for the City of Waukesha to proceed with a diversion application. The third and final proposed diversion in the preliminary regional plan involves that portion of the City of Muskego served by the Milwaukee Metropolitan Sewerage District. Given that Muskego is a straddling community like New Berlin and further given that return flow infrastructure is already in place, it may well be possible to reachly implement that recommendation should the City of Muskego ultimately determine to pursue such a course of action.

We hope that upon careful consideration of our response to your letter of March 12, 2009, you will agree that the regional land use and attendant water supply plans are in the best interest of the Region and worthy of your support. The Commission staff would be pleased to meet with you to discuss the issues raised if you think that would be useful.

Sincerely,

Kenneth R. Yunker, P.E Executive Director

KRY/RPB/pk/mlh 1 - RWSP MIDWEST ADVOCATES LTR

Attachment 1

HISTORIC AND PLANNED CHANGE IN POPULATION IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historic 1990-2003	Planned 2003-2035
Kenosha	36,300	26,000	55,900
Milwaukee	(112,900)	(18,000)	65,800
Ozaukee	30,000	11,700	16,600
Racine	20,300	16,100	22,500
Walworth	32,200	20,600	44,400
Washington	58,100	26,600	35,400
Waukesha	139,900	66,500	75,600
Regional Total	203,900	149,500	316,200

Source: SEWRPC

HISTORIC AND PLANNED CHANGE IN HOUSEHOLDS IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

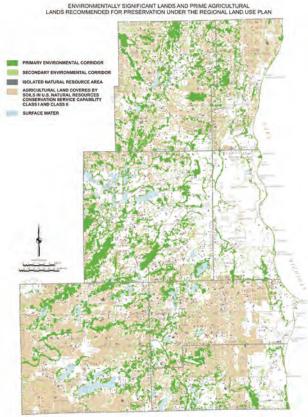
County	Historic 1970-2003	Historic 1990-2003	Planned 2003-2035
Kenosha	23,400	11,900	24,000
Milwaukee	42,400	8,000	46,500
Ozaukee	17,700	6,800	7,500
Racine	23,100	9,200	11,100
Walworth	18,200	9,100	17,700
Washington	29,200	13,600	16,200
Waukesha	80,400	36,300	31,800
Regional Total	234,400	94,900	154,800

Source: SEWRPC.

HISTORIC AND PLANNED CHANGE IN EMPLOYMENT IN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 REGIONAL LAND USE PLAN

County	Historic 1970-2003	Historic1990-2003	Planned 2003-2035
Kenosha	27,400	17,300	19,000
Milwaukee	64,600	(20,000)	39,100
Ozaukee	27,900	13,900	13,100
Racine	25,400	400	16,600
Walworth	25,900	12,400	17,100
Washington	37,500	15,700	17,100
Waukesha	185,400	76,700	67,300
Regional Total	394,100	116,400	189,300

Attachment 2



Source: SEWRPC



Executive Director outheastern Wisconsin Regional Planning Commission P.O. Box 1607 Waukesha, WI 53187-1607 Fax: 262-547-1103

Re: Preliminary Recommended Regional Water Supply Plan

Dear Mr. Yunker:

E-mail: sewrpc@sewrpc.org

The Alliance for the Great Lakes (Alliance) and the National Wildlife Federation (NWF) urge the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to ensure that the regional water supply plan provides guidance that is fully protective of the Great Lakes, a national and international treasure.

On October 3, 2008, the President signed a joint resolution of Congress consenting to the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact). This followed nearly five years of negotiations between the States and three years of review and approval by the eight Great Lakes state legislatures. Our groups were actively engaged in Compact negotiations and worked with state and federal officials for Compact approval. The Compact provides the comprehensive management and legal framework for achieving sustainable water use and resource protection in the Great Lakes basin.

The Compact framework requires each state to create a management program for water withdrawals and consumptive uses within the Great Lakes basin, a program that Wisconsin created through Act 227 of 2007. While it prohibits new or increased diversions of water outside of the basin, it includes exceptions for public water supply purposes to communities that straddle the Great Lakes basin divide, and to communities located wholly within counties that straddle

17 North State Street, Suite 1399 * Chicago, Illinois 60602 * (312) 959-0838 * Fax (312) 939-2708 * e-mail: illinois@greatlakes. 700 Falton Street, Suite A * Grand Haven MI 49417 * (616) 850-0745 * Fax (616) 850-0765 * e-mail: michigan@greatlakes.org www.greatlakes.org

We commend SEWRPC for its deliberative and comprehensive approach to the development of a regional water supply plan (Plan). The information developed and available from the process will be very useful as southeast Wisconsin communities continue to plan for managing limited

We note that the preliminary recommended regional water supply plan includes new and increased withdrawals from Lake Michigan to meet supply needs within the Lake Michigan basin. These withdrawals must comply with the requirements of the Compact and Act 227. The plan also suggests new water diversions from Lake Michigan to communities wholly and partially outside the basin. These communities are classified as "communities in a straddling county" and "straddling communities", respectively under the Compact. SEWRPC is nended for explicitly noting within the plan that new diversions to these community types ist comply with the Compact's return flow requirements.

The recommendation for a new diversion of Lake Michigan water to the City of Waukesha (City), a community in a straddling county, was included in the plan following a SEWRPC analysis of two sub-alternatives, as presented in SEWRPC Newsletter #3. In subalternative 1, the City would continue to utilize groundwater as its source of supply. In subalternative 2, the City would be connected to a Lake Michigan supply. Newsletter #3 includes the following conclusions and statements:

"There are viable options which rely on increased use of the shallow groundwater as a source of supply for communities located west of the subcontinental divide,'

"Both subalternatives to the preliminary recommended plan represent viable water supply plans for the Southeastern Wisconsin Region,"

"When Subalternative 2 is assumed to include the most costly return flow option for the City of Waukesha, the equivalent annual costs of the two subalternatives to the preliminary recommended plan are about equal."

- "... both of the subalternatives to the plan are considered to be equally cost-effective and are considered to be viable options which generally meet the plan objectives and standards
- "...the plan...is specifically designed to be consistent with the Great Lakes-St. Lawrence River Basin Water Resources Compact..."

The Compact's Section 4.9, Subsection 3. Straddling Counties requires, in part, satisfaction of the following conditions for approval of a diversion

a. the Water shall be used solely for the Public Water Supply Purposes of the Community within a Straddling County that is without adequate supplies of potable water; and

d. There is no reasonable water supply alternative within the basin in which the community is located, including conservation of existing water supplies" (emphasis added)

The Wisconsin statute approved to implement the Compact defines reasonable water supply alternative at 281.346(1)(ps) as: "... a water supply alternative that is similar in cost to, and as environmentally sustainable and protective of public health as, the proposed new or increased diversion and that does not have greater adverse environmental impacts than the proposed new or increased diversion." increased diversion.

The same Wisconsin statute defines Without adequate supplies of potable water at 281,346(1)(zm) as: "...lacking a water supply that is economically and environmentally sustainable in the long term to meet reasonable demands for a water supply in the quantity and quality that complies with applicable drinking water standards, is protective of public health, is available at a reasonable cost, and does not have adverse environmental impacts greater than those likely to result from the proposed new or increased diversion.'

The SEWRPC Plan fails to discuss all facets of compliance with the Compact and indicates a near equivalency of the two options. The SEWRPC regional water supply plan documents do not demonstrate that the City of Waukesha is without adequate supplies of potable water, nor that it has no reasonable water supply alternative.

We fully acknowledge that the City of Waukesha may well be able to ultimately demonstrate compliance with these standards of the Compact in its application. However, this demonstration would not be adequately supported by reference to the regional water supply plan. The limited information supplied in the plan does not satisfy the requirements of the Compact.

We request that SEWRPC: 1) remove all statements in the plan that it "...is specifically designed to be consistent with the Great lakes-St. Lawrence River Basin Water Resources Compact... and 2) that the preferred water supply plan be modified to clearly indicate both Waukesha subalternatives and the related analysis. Since a proposal's consistency with a regional water supply plan is a requirement of many water withdrawal approvals under Act 227, water supply plan recommendations should be careful not to go beyond underlying supportive information.

Thank you for the opportunity to submit these comments. Should you have any questions about nents, please contact Ed Glatfelter at 312-939-0838 x235 or eglatfelter@greatlakes.org.

J. Edward Clatheth F. Edward Glatfelter

Water Conservation Program Director Alliance for the Great Lakes

Great Lakes State Policy Manager National Wildlife Federation

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COPY

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION W239 N1812 ROCKWOOD DRIVE - PO BOX 1607 - WAUKESHA, WI 53187-1607-TELEPHONE (262) 547-6721

(262) 547-1103

May 15, 2009

Mr. F. Edward Glatfelter Water Conservation Program Director Alliance for the Great Lakes 17 N. State Street, Suite 1390 Chicago, IL 60602

Mr. Marc Smith Great Lakes State Policy Manager Great Lakes Natural Resource Center 213 W. Liberty Street, Suite 200 Ann Arbor, MI 48104

Dear Messrs. Gladfelter and Smith:

This is to acknowledge receipt of your letter of March 12, 2009, providing comments on the preliminary regional water supply plan which was submitted for public review and comment during the period extending from January 2 through March 16 of 2009. Your constructive comments are appreciated.

The following summarizes our responses to your comments:

Issue Raised: Compliance with the Great Lakes-St. Lawrence River Basin Water Resources Compact is not adequately supported by the regional water supply plan and the plan should be revised to indicate this.

Response:

All of the alternative regional water supply plans were specifically developed to meet the spirit and intent of the Great Lakes Water Resources Compact and 2007 Wisconsin Act 227. The regional plan, however, was never intended to be sufficient in terms of meeting the letter of the requirements of either the Compact or Act 227. Rather, it was always envisioned that more detailed planning, engineering, legal, and environmental studies would be required in this respect, studies that appropriately are the responsibility, not of SEWRPC, but rather of the implementing units and agencies of government concerned. Hence, the regional water supply system plan should not be held out by anyone as complete and full justification for a proposed diversion. With regard to the Waukesha diversion, the regional water supply planning effort found that such a water diversion unversion, the regional water supply planning error touth that such a water diversion would be potentially viable, taking into account the benefits and costs broadly defined, both to the environment and to the sending and receiving populations concerned. However, the plan is not intended to provide a guarantee that the letter of the Compact and Act 227 can and will be met by City proposed plan implementation actions. The only way to ascertain if that is the case will be for the City of Waukesha to proceed with a diversion application

As you recommend, the Commission staff will revise the text of the planning report to clearly indicate the need for additional planning, engineering, legal, and environmental supporting information required to meet the requirements of the Compact.

Issue Raiscd: The preferred water supply plan should be modified to indicate both subalternatives considered for the City of Waukesha.

Mr. F. Edward Glatfelter Mr. Mare Smith May 15, 2009 Page 2

Response

The preliminary recommended water supply was selected based upon a careful and detailed comparative evaluation of four alternative plans and two subalternative composite plans based upon the planning objectives and standards. These objectives and standards are broadly based and included consideration of land use, costs, environmental impacts, water supply sustainability, public health and safety, and adaptability. The preliminary recommended plan, including provisions for an advanced level of water conservation and the provision of a Lake Michigan source of supply to the City of Waukesha service area, was selected primarily because of its favorable environmental and sustainability characteristics. These include: 1) the favorable environmental impacts attendant to the recovery of the deep aquifer; 2) the reduction in chloride discharges to surface waters; 3) the favorable impacts on stream flows and inland lake levels; and 4) the ability to preserve the groundwater sources for other uses, such as agricultural.

The final regional water supply plan cannot include two differing recommendations for addressing the same identified problem. If the final plan includes a recommendation that the City of Waukesha be served with Lake Michigan water, the planning report will recognize that there is a need for more detailed information to be developed on the environmental and legal aspects of the plan during the second-, or local-, level of planning and preliminary engineering. This relationship between system-level regional planning and second-, or local-, level of planning is typical of the phased approach to public works development. Should the information developed during the second level of planning result in a determination by the City of Waukesha not to move forward with a formal diversion application, or should a proffered diversion application by the City of Waukesha ultimately be found wanting with respect to any aspect of the Great Lakes Water Resources Compact and fail to receive the required approvals, then such results will be reflected in a future update of the regional water supply system plan, in accordance with the cyclical nature of the public works development process. In any case, the alternative of continuing to serve the City of Waukesha by groundwater will be fully described in the planning report.

We trust this responds to your comments. The Commission staff would be pleased to meet with you to discuss the issues raised if you think that would be useful to you.

Sincerely,

Kenneth R. Yunker, P.E. Executive Director

KRY/RPB/pk #144034 V1 - RWSP GLADFELTER-SMITH LTR



March 13, 2009

Robert Biebel
Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, Wisconsin 53187-1607

RE: Comments on the Regional Water Supply Plan for Southeastern Wisconsin

Dear Mr. Biebel,

On behalf of Milwaukee Riverkeeper (formerly Friends of Milwaukee's Rivers), we are submitting comments regarding certain shortcomings of the Draft Regional Water Supply Plan for Southeastern Wisconsin. We have identified four areas which we strongly believe require further study and planning to ensure the viability and sustainability of our region's water resources. Although a lot of time and energy has already spent on this effort, we feel additional study and planning is warranted to avoid costly mistakes both economically as well as environmentally. In addition to the comments below, Milwaukee Riverkeeper has also signed onto comments as part of the Compact Implementation Coalition. Those comments detail concerns with the Regional Land Use Plan, Waukesha's proposed diversion, and Great Lakes Compact implementation.

Milwaukee River baseflow reduction concerns

Milwaukee Riverkeeper is very concerned with the modeled reductions in groundwater derived baseflow to surface waters, specifically in the Milwaukee River Basin. Table 4 from the December 2008 SEWRPC Newsletter lists West Bend, Jackson, and Slinger as having adequate existing sources of water supply, however, we believe the sustainability of the water resources in this area is very much in baseflow (greater than 10 percent) in headwater streams near West Bend and the Jackson/Slinger area as well as the Milwaukee River from West Bend to Waubeka. In particular, the drawdown downstream of West Bend is severe and corresponds with an area where we have seen drastically declining water quality in recent years. SEWRPC claims that baseflow reductions are not a problem because affected reaches will be augmented with treated wastewater, thus there will be no overall effect on flow. It may appear that quantity effects will be nominable, but water quality may be substantially affected.

We urge SEWRPC to study and recommend other water supply solutions for these communities rather than encouraging depletion of these surface aquifers in important headwater stream communities. The loss of cooler groundwater means a warmer river less suitable to certain species in an already damaged ecosystem that has suffered from mismanaged upstream development. If aquifer drawdown in these areas were to reach higher proportions as stated (up to 71 feet of drawdown), this would have drastic

implications for these headwater streams and on the downstream biological communities of the Milwaukee River, Cedar Creek and other tributary streams. Headwater streams provide critical habitat for spawning fish and provide a source of cool water to help regulate warmer temperatures in the main channel of the Milwaukee River. Compounding the problem is the fact that wastewater effluent will increase to the Milwaukee River, and this effluent will most likely add pollutants, nutrients, and increase water temperature and biological oxygen demand.

Further complicating this scenario is the fact that it appears a majority of the high and very high recharge areas in the Quasa Creek watershed and Jackson areas are not protected through the 2035 land use plan. As recharge areas are paved over from development, this could further exacerbate baseflow reductions. In addition, siting of high capacity wells could further decrease baseflows, and Washington County is one of the fastest growing areas in the State of Wisconsin. We are very concerned with siting of a municipal well in the Quasa Creek watershed along with additional wells in Slinger and Jackson, as this will cause additional loss of groundwater recharge areas and critical habitat, and a further reduction in baseflow.

Washington County seems to have received short shrift in the Water Supply Plan as related to other areas. Without a more detailed analysis of this region, the ability to sustain groundwater supplies without having a negative effect on surface water bodies remains in question. We are unclear of whether or not using the deep aquifer, with recharge areas would be a valid option in Washington County to protect surface waterbodies. If a detailed alternatives analysis has already been performed for this area, we would appreciate more information on how alternatives affect water quantity and water quality within the Milwaukee River Basin. If a detailed analysis has not been performed, we recommend further study and evaluation be conducted so that proper management and protection of this important headwater region for the Milwaukee River will occur.

Effects of climate change

If baseflow reductions are combined with projected impacts on water levels from climate change, there could be severe impacts on flows of the Milwaukee River as well as assimilative capacity for wastewater from treatment plants (e.g. West Bend, Fredonia, Cedarburg, Grafton, etc.). SEWRP Cresponded at a public hearing that they did not model for climate change due to complexity and conflicting models. It is our understanding that an excellent climate change model is currently being worked on by DNR, University of Wisconsin, and others as part of the Wisconsin Initiative on Climate Change Impacts (WICCI), and that these models could be very helpful analyzing the effects of climate change on water levels. We recommend that climate change impacts be considered before committing to further drawdown local aquifers whose impact could be made more severe by an altered hydrologic cycle. We concede there are a lot of opposing opinions on how to model for climate change, but would add that the "precautionary principle" be applied, and that we are managing for the "worst" possible scenario and protecting our water resources accordingly.

Groundwater recharge concerns

SEWRPC recommends that rainfall infiltration systems should be encouraged in areas where high capacity wells will be sited in the shallow aquifer (e.g. West Bend) that will lead to probable reductions in baseflow to surface waterbodies. Given the importance of water to ecosystems and the ability for high capacity wells to drastically alter local hydrology/hydrogeology, we feel that this should not be a recommendation, but a mandate.

In addition, SEWRPC also states that important groundwater recharge areas with high or very high recharge will be largely protected through implementation of the 2035 land use plan and also because 65% of the highly rated and 83% of the very highly retead are so as within primary environmental corridors (PEC) and other areas recommended for preservation. Based on our experience, the PEC designation is "advisory" and often doesn't mean that these areas are protected or that regulations aimed at their protection are enforced. PEC designations may mean that sewers are not extended into sensitive areas within the PEC, but this does not curtail SEWRPC redrawing the lines, new tree removal, or other actions that would impair the protection and functionality of these recharge areas. We feel there should be more strict protections put in place at the state level for these high recharge areas whether or not they are part of PECs.

Waukesha diversion concerns

Our complete comments on the proposed Waukesha diversion will come in a separate document submitted by the Compact Implementation Coalition. Pertaining to the Water Supply Study, we are very concerned that SEWRPC could recommend Waukesha receive a diversion of Lake Michigan water and return it through Underwood Creek or the Root River without having done a detailed study of the water quality and quantity impacts that these alternatives would have on these surface waters. The recommendation that Waukesha return flow through Underwood Creek or the Root River without considering the impacts on the water quality and flooding potential of these surface water resources is completely inadequate. Waukesha can and will use this Water Supply Plan recommendation to validate their application for a Lake Michigan diversion. It seems that they will worry about the impacts of return flow after the fact, and regardless of whether return flow options are deemed unacceptable by downstream communities or are protective of our water resources? We also are concerned about how additional pollutant loading from Waukesha will affect our efforts to restore the Menomonee River and improve water quality and restore wildlife habitat through measures such as concrete removal, bank stabilization, etc.

Why did SEWRPC not consider subalternative 1 with some sort of water conservation and reinjection scenario? We feel this is a viable alternative that did not receive the study it deserved due to concern by SEWRPC that cost and current regulations precluded it. Given the immense costs of the proposed diversion and return flow scenarios to local surface waters, it seems that looking at a reinjection/conservation scenario would be feasible to help address the draw down and negate or minimize the need for Lake Michigan water.

Thank you for your consideration of these comments. Please feel free to contact us with any questions or concerns at (414) 287-0207.

Sincerely,

Cheryl Nenn Milwaukee Riverkeeper Jason Schroeder Water Quality Assistant COPY

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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May 15, 2009

Ms. Cheryl Nenn Ms. Cheryi Neur Riverkeeper/Interim Executive Director Milwaukee Riverkeeper 1845 N. Farwell Avenue, Suite 100 Milwaukee, WI 53202 Mr. Jason Schroeder Water Quality Assistant Milwaukee Riverkeeper 1845 N. Farwell Avenue, Suite 100 Milwaukee, WI 53202

Dear Ms. Nenn and Mr. Schroeder:

This is to acknowledge receipt of your March 13, 2009, letter providing comments on the preliminary regional water supply plan which was submitted for public review and comment during the period extending from January 2 to March 16 of 2009. In your letter you identify a number of areas of concern which you believe require further study. We believe that the following responses to each of your concerns, indicate that the concerns have indeed been addressed in the planning effort.

Issue Raised: Milwaukee River baseflow reductions to surface waters and shallow aquifer drawdown in the Washington County portion of the Upper Milwaukee River watershed.

Response:

In your comments you express concerns regarding the groundwater-derived baseflow You base your concern, in part, on mapping illustrating areas in which baseflow reductions may be expected and on related tabular data set forth in the regional water supply planning documents. As stated in the draft planning report and communicated directly to Mr. Schroeder, the data presented are not intended to be used on a site-specific basis. The data were developed as a basis for comparatively evaluating alternative plans on an areawide basis.

Of the four alternative plans and two composite plans considered, the preliminary recommended plan had the least negative impacts and most positive impacts on the baseflow of streams and shallow aquifer in Washington and Ozaukee Counties, except baseflow of streams and shallow aquifer in Washington and Ozaukee Counties, except for Alternative Plan 4 which provided for more extensive conversion of groundwater to Lake Michigan supplies. While the data presented are intended to be used only on an aggregate basis for alternative plan comparison, it is important to note that the baseflow reductions that are most significant in Washington County are related to streams which currently receive artificial flow augmentation far in excess of any expected reduction due to water supply pumping. You also raised the issue of drawdown of the shallow aquifer that you cite is not located in Washington County. The potential 71-foot drawdown on the shallow aquifer that you cite is not located in Washington County. In Washington County, the average drawdown expected is less than 1.0 foot, with a maximum of 34 feet in a small isolated area, in the immediate vicinity of a well. This level of drawdown is not considered to be a significant impact. Furthermore, the utilities in Washington County that are recommended to continue to utilize groundwater as a source of supply under the preliminary water supply plan, all have existing water supply facilities which are considered adequate, with only

Ms. Chervl Nenn Mr. Jason Schroeder May 15, 2009 Page 2

> limited additional expansion being required. Thus, it is envisioned that only three new wells will likely be needed in the Washington County portion of the Milwaukee River watershed over the plan design period.

The preliminary plan, moreover, includes a recommended procedure to be followed in the siting of new high-capacity wells. That procedure, if adopted, would require analyses to determine the site-specific impacts of a proposed well on groundwater contributions to the baseflows of streams and the impacts on inland lake levels. The recommended procedure is to be applied in the early stages of locating sites for proposed high-capacity wells in the shallow aquifer, and is intended to develop the necessary understanding of wens in the snanow aquiter, and is interduct to teverop the necessary understanding of the performance of the hydrogeological system associated with each candidate site and its surrounding area, and to provide the means for assessing the potential impacts of proposed wells upon nearby existing wells and surface waterbodies. The procedure also provides for monitoring of water levels in the vicinity of new high capacity wells in the provides for monitoring of water levels in the vicenity of new high capacity weits in the shallow aquifer, both during the test well phase of placement, and during operation of such wells over time. The preliminary plan calls for consideration of alternative sites for the pumped well concerned, or for the installation of enhanced rainfall infiltration systems and other mitigating measures if the site-specific analyses indicate that the proposed siting would be likely to adversely affect streamflows or water levels in lakes or wetlands.

Issue Raised: The impact of wastewater treatment plant discharge on the Upper Milwaukee River

You also note concern regarding the impact of wastewater treatment plant effluent discharges on water quality in the Milwaukee River. These discharges currently exist and may be expected to continue to exist, and are not, therefore, related to the regional water may be expected to continue to exist, and are not, therefore, related to the regional water supply plan. These discharges are in compliance with the Wisconsin Pollution Discharge Elimination Program permit requirements. A review of the recommendations in the adopted regional water quality management plan update for the greater Milwaukee watersheds' recognizes that the existing wastewater treatment plant discharges will continue in the Upper Milwaukee River watershed. The plan indicates that achieving the desired instream water quality conditions will depend predominately upon the implementation of identified nonpoint source pollution abatement measures, and not upon further improvements in the quality of the existing sewage treatment plant discharges.

Issue Raised: The potential for future development of a portion of the areas categorized as having high and very high recharge characteristics and located in the Quaas Creek subwatershed and "Jackson area."

Ms. Cheryl Nenn Mr. Jason Schroeder May 15, 2009 Page 3

Response:

You also indicate that a majority of the high and very high potential recharge areas in the You also indicate that a majority of the high and very high potential recharge areas in the Quasa Creek subwatershed and in the "Jackson area" are not protected through the 2035 land use plan. In this regard, we would note that the Quasa Creek subwatershed contains about 4.7 square miles of land area rated as having high or very high potential recharge characteristics. About 2.7 square miles, or about 57 percent, of this area would be protected under the regional land use plan. The Town and Village of Jackson together contain about 9.1 square miles of land area rated as having high or very high potential recharge characteristics. About 8.6 square miles, or 95 percent, of this area would be protected. The Commission staff intends to recommend to the Advisory Commistics that protected. The Commission staff intends to recommend to the Advisory Committee that protected. In Commission start intends to recomment to the Advisory Committee that this final regional water supply plan include a recommendation that the environmental corridors be expanded to include additional lands categorized as having high or very high recharge characteristics. In addition, the preliminary regional water supply plan recommends the use of development and stormwater management practices designed to maintain the natural hydrology in the areas expected to be developed. These practices include the use of conservation subdivision design, stormwater bioretention systems, rain earders, and infiltration ponds. gardens, and infiltration ponds

Issue Raised: The impact of siting new shallow aquifer wells in Washington County and the potential for using the deep aquifer as a source of supply.

Response:

This concern relates to the potential impact of siting new wells by the City of West Bend and the Villages of Slinger and Jackson. These utilities, as well as the City of Hartford, all have existing water supply facilities which are considered to be adequate through the design year of the plan. The Villages of Jackson and Kewaskum—and now with the completion of a new well in the City of Hartford—should have no additional capacity needs through the year 2035. We believe that given the limited need for new wells, the generalized estimates of surface water baseflow impacts, and the recommended high-capacity well siting procedures included in the plan, there need be no concerns over the potential adverse impacts of well siting in the areas concerned.

Issue Raised: The potential for increased reliance on the deep aquifer for Washington County

You also raise the need to consider an alternative plan which relies primarily on the deep sandstone aquifer to serve the utilities in Washington County. The Commission staff initially did give consideration to such an alternative. In the case of the Allenton Sanitary District, the deep aquifer well option was recommended. However, as noted above, in the case of most of the other utilities in Washington County, the water supply facilities needed through the year 2035, which presently rely on shallow aquifer wells, are largely in place and fully comply with State regulations. Washington County has a shallow aquifer which not only typically provides adequate well capacities, but limits the well drawdown impacts. Deep aquifer wells have disadvantages with regard to potential radium contamination which has been found in municipal wells in three Washington County communities, increased pumping and attendant energy use, and the potential for the continued drawdown of the deep aquifer with its associated quality impacts. The City of Hanford Water Utility is in the process of completing a new shallow aquifer well

Ms. Chervl Nenn Mr. Jason Schroede May 15, 2009 Page 4

> which will allow abandonment of a deep aquifer well which produced water that did not meet the radium standard. This was done to comply with Wisconsin Department of Natural Resources requirements. Given the status of the existing water supply system and in the absence of well-documented significant negative environmental impacts, it would be impractical to implement an alternative which would provide for abandonment of the existing wells and replacing them with deep aguifer wells

Issue Raised: The effects of climate change on the flows in the Milwaukee River and the capacity of the River to assimilate the impacts of wastewater treatment plant effluent discharge.

Response:

As previously noted, the wastewater treatment plant discharges to the Milwaukee River are not a topic which would be directly addressed in the regional water supply plan. The regional water supply plan did, however, include an evaluation of the issue of climate change. The findings of that evaluation are included in Chapter VII of the planning report. Although evidence of climate change over the last 100 years and projections of future climate change are indicated by the findings of various studies, those studies have all been conducted on global, continental, and oceanic scales. Considerable uncertainty is attached to the projections for relatively reall peers evide at the courbestern. Wisconzieris attached to the projections for relatively small areas such as the southeastern Wisconsin. On these small spatial scales, the directions and magnitudes of projected changes and impacts over the next 30 to 40 years are model-dependent, with the suite of models used producing conflicting projections as to impacts relevant to issues of water availability. As a consequence of this, and of the coarse spatial resolution of the models, these projectic cannot be used in regional water supply planning. Climate change might indeed have impacts on the flow regimen of the Milwakee River and its wastewater assimilative capacity, but these impacts, if any, could be positive as reflected in potential increased capacity, but these impacts, if any, could be positive as reflected in potential increased baseflows, as well as negative in potential decreased baseflows. Any attempt to define these impacts would be purely speculative. We know through the Commission staff's active involvement in the Wisconsin Initiative on Climate Change Impacts that there are ongoing efforts to develop additional information on the potential impacts of climate change in Wisconsin. However, at this time, it should be stressed, no existing models or downscaled data are available which can be used to develop realistic explicit impacts of climate change on groundwater-surface water impacts in southeastern Wisconsin over the period to the year 2035. Given the foregoing, it was concluded by the Advisory Committee overseeing the planning effort—which includes representatives from the Wisconsin Department of Natural Resources, the U.S. Geological Survey, the State Geologic office, and major universities—that there was no practical way to make the potential effects of climate change quantitatively operational in the development of the potential effects of climate change quantitatively operational in the development of the regional water supply plan. Rather, it was determined to consider the issue by developing a recommended water supply plan which is flexible and adaptable to change.

Issue Raised: The need to have more stringent regulations to require artificial recharge to mitigate well impacts and to preserve areas with high and very high recharge potential.

You note that the regional water supply plan recommends artificial infiltration to mitigate the potential impacts of new wells, and indicate that strict measures should be put in

A-16

¹SEWRPC Community Assistance Planning Report No. 50, A Regional Water Quality Plan Update for the Greater Milwaukee Watersheds, December 2007.

Ms. Cheryl Nenn Mr. Jason Schroeder May 15, 2009 Page 5

place at the State level to protect areas classified as having high and very high potential recharge characteristics. We would agree entirely with you in this respect. The Regional Planning Commission is, by law, a strictly advisory agency. We will, however, include the essence of your position in this respect in the implementation chapter of the plan report, and recommend appropriate State regulations. Enactment of such regulation will require State action.

Issue Raise

Concerns regarding the potential water quality and quantity impacts relating to the return associated with the use of a Lake Michigan water supply by the City of Waukesha.

Response:

The preliminary regional water supply plan does specifically address this concern. Pertinent data developed at the systems level of planning are included in the planning report. In addition, the planning report clearly acknowledges that, if the provision of Lake Michigan water to the City of Waukesha service area is adopted and plan implementation efforts are initiated, additional, more-detailed evaluations of the alternative means of return flow will be needed. The Technical Advisory Committee overseeing the planning effort unanimously recommended that the required more-detailed environmental assessments be made as part of the necessary preliminary engineering. The plan, however, also includes an alternative that would return the spent water directly to Lake Michigan via a pipeline, thus avoiding the need to discharge the return flow on any of the streams concerned. Because of the level of detail required, the environmental assessments required are properly the subject of local second-level planning and preliminary rengineering. The preliminary engineering and additional evaluations would be the responsibility of the City of Waukesha should it choose to proceed with an effort to obtain Lake Michigan water. In this regard, we note that the Milwaukee Metropolitan Sewerage District and the City of Waukesha may cooperatively evaluate the potential environmental impacts of the return flow on Underwood Creek in more detail than could be done at the systems level of planning.

The findings of environmental assessments carried out in the second-level planning and preliminary engineering may result in reevaluation and revision of the system plan. For example, if, during the second-level planning and preliminary engineering phase, information is developed which would indicate that costs of the initially preferred alternative are excessive, or the environmental impacts are unacceptable, the system-level plan would be amended.

Issue Raised:

Recommendation for further consideration of an alternative providing for water conservation, groundwater supply, and reinjection of treated wastewater into the shallow aquifer—presumably in the Waukesha area.

Response:

The Commission staff did specifically consider the option you note by review of the components of Alternative Plan 3 and Subalternative 1 to the Composite Plan. The highest practicable level of water conservation was considered and is included in the

Ms. Cheryl Nenn Mr. Jason Schroeder May 15, 2009 Page 6

preliminary recommended plan. The component providing for injection of treated wastewater was not included in the preliminary plan for a number of reasons, including: 1) high cost; 2) limited spacial impact on mitigating baseflow reductions to surface waters; 3) potential public health issues relating to conventional and emerging pollutant contamination of the shallow aquifer; and 4) lack of available sites for the needed scepage cells in areas which do not impact existing residences, wetlands, or other environmentally sensitive areas. The initially recommended plan was selected for the following reasons: 1) the favorable environmental impacts attendant to the recovery of the deep aquifer; 2) the reduction in chloride discharges to surface waters; 3) the favorable impacts on surface water baseflows; 4) the ability to preserve the groundwater sources for other uses, such as agricultural; and 5) the opportunity to use available excess production capacity at the Milwaukce Water Works with its attendant fiscal benefits to Milwaukce ratepayers.

We trust the foregoing adequately responds to your comments. We hope that upon reflection you will agree that the preliminary regional water supply plan considered is in the best interest of the Region. The Commission staff would be pleased to meet with you to discuss the issues raised if you think that would be useful to you.

Sincerely,

Kenneth R. Yunker, P.E. Executive Director

KRY/RPB/pk/lgh #143885 V2 - RWSP NENN-SCHROEDER LTR March 13, 2009



Robert Biebel Southeastern Wisconsin Regional Planning Commission P.O. Box 1607 Waukesha, WI 53187-1607

ALSO SUBMITTED VIA FAX, 262-547-1103

RE: Comments on Water Supply Study and Environmental Justice

Dear Mr. Biebel:

We are submitting these comments to express our concern that SEWRPC's Water Supply Study violates federal civil rights regulations and environmental justice requirements. As you know, this study was completed by an almost entirely all-white advisory committee, with no representation from organizations representing communities of color and low income communities. Further, the scope of the study - as well as its content - was itself defined by these unrepresentative entities.

We are requesting that you ensure that the Water Supply Study not be finalized at this time. Instead, the Water Supply Study must remain pending until there has been meaningful outreach to, meaningful involvement of, and meaningful consideration of the potential effects, and meaningful mitigation of potential adverse effects, of various water proposals on, communities of color and low income communities throughout the region. As set forth below, SEWRPC's own prior commitments, as well as federal civil rights requirements, make it clear that specific evaluation of the effects of the Water Supply Study on low income and minority communities is required before the plan can be finalized.

COMPLIANCE WITH EJTF REQUESTS

The draft Water Supply Study has not complied with recommendations of SEWRPC's Environmental Justice Task Force (EJTF). A failure to do so before the plan is finalized will evidence an intentional violation of civil rights and environmental justice requirements.

On Nov 27, 2007, SEWRPC Executive Director Philip Evenson specifically informed the Environmental Justice Task Force that SEWRPC was looking to the EJTF for guidance "with respect to analyses that should be conducted to consider the impacts of the [Water

Supply Study] alternatives on minority and low income populations." (EJTF minutes of

On March 18, 2008, SEWRPC's then-Assistant Director Kenneth Yunker reiterated that the EJTF "has been asked to help define any of the environmental justice considerations to be used in the plan evaluations." (EJTF minutes of 3/18/08, pp. 7-8).

On Oct. 14, 2008, the Environmental Justice Task Force provided this guidance. The EJTF overwhelmingly recommended, with only a single "no" vote, that "every SEWRPC plan, i.e. housing, land use, transportation, water, etc. will incorporate a socio-economic impact analysis by a reputable, independent source other than SEWRPC before the plan may be adopted to meet the guidelines and specific purposes of the Environmental Justice Task force [sic] as outlined by SEWRPC." (emphases added), (EJTF minutes of 10/14/08, pp. 8-9). This analysis needs to occur - and any recommendations from it meaningfully evaluated and implemented - before the Water Supply Study is finalized.

UNREASONABLE FAILURE TO ADDRESS EFFECTS OF NONCOMPLIANCE WITH REGIONAL PLANS

SEWRPC's failure to meaningfully evaluate civil rights and environmental concerns is compounded by its unreasonable refusal to discuss the possibility, if not the likelihood, that communities seeking water will not be in compliance with the regional land use plan.

At a March 18, 2008 meeting of the EJTF, you were asked by an EJTF member whether the Water Supply Study would consider "worst case" scenarios, *i.e.*, water needs related to community non-compliance with the land use plan. You stated that the Study would not consider such scenarios and would instead be limited to assuming implementation of the land use plan. (EJTF Minutes of 3/18/08, p. 6.)

Whether or not SEWRPC in all situations must evaluate "worst case scenarios," it is completely unreasonable for SEWRPC to ignore the likelihood of non-compliance where, as here, such non-compliance has routinely occurred in the past. SEWRPC itself acknowledged - at the same EJTF meeting during which the above discussion occurred - that local communities have ignored its land use recommendations, including recommendations that could affect regional water supplies. (EJTF Minutes of 3/18/08, p. 5.)

The refusal to evaluate the potential effects of non-compliance with regional land use plans raises serious environmental justice concerns. Pabst Farms, for example, which was developed despite land use plan recommendations that such development not occur, has few

residents of color or low income residents.\(^1\) Other developments that have occurred counter to land use plan recommendations may well be the same. Development of these communities also exacerbates segregated residential patterns - and Milwaukee/Waukesha is, overall, the most racially segregated region for African-Americans in the entire United States\(^2\) - and if these or other localities use an increased water supply to facilitate or accelerate sprawl development, segregated residential patterns may worsen. At a minimum this potential problem needs to be investigated and evaluated as part of the Water Supply Study, not ignored.

Conversely, if water supply recommendations are structured in a way that disadvantages non-compliant development, low income and minority communities in urban centers may well benefit. Again, this is an issue that the Water Supply Study must address, and the failure to do so violates civil rights and environmental justice requirements.

FAILURE TO EVALUATE ADDITIONAL ENVIRONMENTAL JUSTICE RECOMMENDATIONS

Finally, the Water Supply Study has failed to address issues raised by organizations representing low income and minority communities other than the EJTF, and has failed to evaluate identified methods of ensuring that low income and minority communities are not unfairly burdened by the potential sale of water to suburban communities.

For example, in a letter sent to SEWRPC on Sept. 7, 2007, multiple community organizations articulated civil rights deficiencies in the Water Supply Study process. A copy of that letter is attached.

Unfortunately, SEWRPC's draft Water Supply Study has not addressed those deficiencies. The Water Supply Study never collected data on the racially segregated residential and employment demographic patterns in the region, nor evaluated whether supplying Lake Michigan water to additional communities could exacerbate those patterns. The Water Supply Study never evaluated whether shifting to multifamily affordable housing

¹There have also been concerns expressed - but not evaluated in the Water Supply Study-that Pabst Farms may have exacerbated the severity of flooding in the region. See, e.g., Scott Williams, "Summit officials may set up special tax district for flood cleanup," Milwaukee Journal Sentinel (Posted Feb. 3, 2009).

 7See , "Residential Segregation of Blacks or African Americans: 1980 to 2000," U.S. Census Bureau (Dec. 2004), Ch. 5 and Fig. 5.3

3

could facilitate water conservation (a suggestion raised by the EPA and mentioned in that letter), and, concurrently, reduce some of those disparities. The Water Supply Study failed to investigate reverse effects, that is, whether declining to supply Lake Michigan water to communities that do not now receive it could assist in reversing some of the segregated residential and employment patterns in the region.

In addition, as SEWRPC is also aware, several years ago the City of Milwaukee Common Council unanimously voted that any water diversion request must "minimize residential, industrial and commercial sprawl, and the accompanying air and water pollution;" "include an analysis of the impact of such diversion on land use, transportation and economic development, and how comprehensive planning, including conservation programs can mitigate any negative effects;" and "[r]equire that any community which seeks water from the Great Lakes adopt a water conservation plan, a "Smart Growth" comprehensive plan, as well as a comprehensive housing strategy which provides affordable housing opportunities." City of Milwaukee Resolution 040646. Moreover, on March 18, 2008, SEWRPC Executive Director Evenson stated that the Water Supply Plan could be used as a basis for requiring assurances from communities receiving water to address such issues as housing, transportation and economic development. (EJTF minutes of 3/18/08, p. 5). Yet nothing in the Water Supply Study discusses these issues, and there is no mention of such potential solutions in the recommendations section (or anywhere) in the study. The Study also fails to evaluate the potential benefits to low income and minority communities that could occur if such assurances were required.

Again, well before the Water Supply Study was completed, SEWRPC was specifically requested to consider these issues. Its failure to address *any*, much less all, these concerns is further evidence of its intentional disregard of environmental justice and civil rights requirements.

Submitted by:

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4

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Karen Schapiro Executive Director Midwest Environmental Advocates 551 W. Main Street, Suite 200 Madison WI 53703

Gretchen Schuldt Co-Chair Citizens Allied for Sane Highways P.O. Box 080215 Milwaukee WI 53208

cc: Kenneth Yunker, Executive Director, SEWRPC
Todd Ambs, Wisconsin Dept. of Natural Resources
Alan Walts, Environmental Justice Program Manager, US EPA - Region 5
Charles Lee, Acting Director - EPA Office of Environmental Justice

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Ser tember 7, 2007

Ku t Bauer, Chair, SEWRPC Water Supply Study Ro sert Biebel, Secretary, SEWRPC Water Supply Study Phil Evenson, Executive Director, SEWRPC Sortheastern Wisconsin Regional Planning Commission P.(). Box 1607 Weikesha, WI 53187-1607

RE: Environmental Justice and Water Supply Study

De ir Mr. Bauer, Mr. Biebel and Mr. Evenson:

We are writing to express concern that the SEWRPC Water Supply Study appears to be operating in violation of federal civil rights regulations and environmental justice requirements. We are requesting that you immediately distribute copies of this letter to all Water Supply Study advisory committee members and to all Environmental Justice Task Force members. We do not believe this study can or should be completed until there is meaningful participation from, and the inclusion of meaningful outcomes for, minority and low-income communities in our region.

The Water Supply Study advisory committee is comprised of 33 persons - 32 of whom are white.¹ That study is being funded at least in part with federal funds from the U.S.G.S., which is an entity within the U.S. Department of the Interior. Federal regulations, 43 C.F.R. § 17 3(b)(2), prohibit recipients of federal funds from taking actions that have a discriminatory effect, regardless of whether intentional discrimination exists. Among the prohibited forms of discrimination is "Deny[ing] a person the opportunity to participate as a member of a planning or advisory body which is an integral part of the program." 43 C.F.R. § 17.3(b)(1)(vii).² Regardless of ntent, it appears that the selection of persons for he water study advisory committee has had the clear effect of discriminating against persons of color, in violation of these regulations.

In addition to the exclusionary aspects of the advisory committee, it appears that the Writer Supply Study will fail to address outcomes relevant to civil rights and environmental jusice requirements. As stated above, Title VI of the Civil Rights Act prohibits actions that have a discriminatory effect, and this applies to the substantive outcomes of program decisions, as we I as to participation in the process. AS C.F.R. §17.3(b)(3): "In determining the site or

The Advisory Committee also includes at least three corporate representatives, but no representatives of organizations representing low income and minority communities. This distanted treatment in the context of other Advisory Committees is a matter that has been raised with SEWRPC for at least the past four years (and thus was raised before this advisory committee was chosen), but is an issue that the Commission continues to ignore.

 $^2\mathrm{El/A}$ regulations are virtually identical, but they also specifically reference participation in "a local sanitation board or sewer authority." 40 C.F.R. § 7.35(a)(5).

³Se2, e.g., 43 C.F.R. §17.3(b)(1)(ii): A recipient may not, "directly or through contractual or

To comply with Title VI, SEWRPC also must consider the fact that the City of Mi waukee has unanimously voted that any water diversion request must "minimize residential, industrial and commercial sprawl, and the accompanying air and water pollution;" "include an ant lysis of the impact of such diversion on land use, transportation and economic development, anilysis of the impact of such diversion on land use, transportation and economic development and how comprehensive planning, including conservation programs can mitigate any negative efficts;" and "frequire that any community which seeks water from the Great Lakes adopt a water conservation plan, a "Smart Growth" comprehensive plan, as well as a comprehensive horsing strategy which provides affordable housing opportunities." City of Milwaukee Resolution 040646. Given that the City of Milwaukee is home to the vast majority of low income and minority persons in the region, given that its interests and concerns will be directly implicated by any plans regarding water supply, and given that the existing Advisory Committee fails to represent the interests of low income and minority communities, these issues - and ou comes - must be incorporated into the study.

The time is long past due for SEWRPC, and all SEWRPC committees, to substantively ad lress critical civil rights issues, and to incorporate environmental justice into the outcomes of all planning processes. That includes the Water Supply Study.

Kryn Rotter, Attorney at Law ACLU of Wisconsin Foundation 207 F. Buffalo St.

M Iwaukee, WI 53203

Rosemary Wehnes, Midwest Associate Representative Sierra Club

8112 W. Blue Mound Rd., Ste 108

Wauwatosa, WI 53213

Karen Schapiro (mik)
Karen Schapiro, Exèc. Director
Milwest Environmental Advo.
551 Main St., Suite 200
Madison, WI 53703

Pamela Jendt

Pamela Fendt, Director

Good Jobs and Livable Neighborhoods Coal.
633 S. Hawley Rd., Suite 115

Milwaukee, WI 53214

Treme Senn Religious Coal. for the Great Lakes 3221 S. Lake Dr. St. Francis, W1 53235

3

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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

Mr. Dennis Grzezinski Environmental Attorney Former Commissioner,
Milwaukee Metropolitan Sewerage District 312 E. Wisconsin Ave. #210 Milwaukee, WI 53202

Robert Theine Pledl Disability Law Attorney 1110 N. Old World Third St. #215 Milwaukee, WI 53203

Ms. Karen Schapiro Executive Director Midwest Environmental Advocates 551 W. Main Street, Suite 200 Madison, WI 53703

Ms. Jerry Ann Hamilton President Milwaukee Branch NAACP 2745 N. Dr. Martin L. King #202 Milwaukee, WI 53212

Ms. Karvn L. Rotker Senior Staff Attorney ACLU of Wisconsin Foundation 207 E. Buffalo St. #325 Milwaukee, WI 53202

Ms. Gretchen Schuldt Co-Chair Citizens Allied for Sane Highways P.O. Box 080215 Milwaukee, WI 53208

Dear Sirs and Madams:

The Commission has received your communication of March 13, 2009 providing comments on the regional water supply study with particular emphasis on environmental justice matters. Your comments have been entered into the formal record established for this purpose.

In your letter, you express concern over the Advisory Committee guiding the regional water supply study, The Advisory Committee for the Regional Water Supply Study is intended to focus on the technical aspects of water supply planning and engineering. Toward this end, the Committee is largely populated by individuals with extensive knowledge in water supply management issues, in industrial and agricultural water supply needs, and in planning and development issues. As such, the individuals asked by the Commission or directed by others to serve were done so on a race and income neutral basis. We would note that the Committee includes the water utility managers of the Cities of Milwaukee, Racine and Kenosha, which together encompass large minority and low-income populations. In the Committee deliberations to date, those individuals have demonstrated a great deal of concern for the populations they Mr. Dennis Grzezinski Ms. Jerry Ann Hamilton Mr. Robert Theine Pledl Ms. Karyn L. Rotker Ms. Karen Schapiro Ms. Gretchen Schuldt June 15, 2009 Page 2

In your letter, you also cite the need for a socio-economic impact analysis to be conducted of the preliminary recommended regional water supply plan, including analysis of the impacts of that plan on regional demographic and employment location patterns, and civil rights and environmental justice implications for minority and low income populations. Please be advised that the Commission has approved the conduct of a socio-economic impact analysis of the preliminary recommended regional water supply plan, and will include an analysis of the impacts of that plan on regional demographic and employment location patterns, and implications for minority and low income populations. The findings of that analysis will be considered by the Commission in formulating a recommended water supply plan for

In your letter, you also indicate concern over the implications of the potential lack of compliance with the regional water supply plan, specifically whether communities could use increased water supply to facilitate development beyond that recommended in the regional land use and water supply plans. In response, we would specifically note with respect to the water supply attendant to any diversion of water from Lake Michigan under the Great Lakes Compact, the community applying for the diversion-such as the City of Waukesha—will have to submit an estimate of the proposed volume of water to be diverted and a map showing its proposed water supply service area. The water supply service area is to be delineated by this Commission and must be consistent with the adopted area wide water quality management plan. The water supply service area approved as part of any diversion request would limit provision of Lake Michigan water to that service area. No expansion beyond the Waukesha Water Utility service area—as delineated in Chapter IV—which is consistent with the regional land use plan and the area wide water quality management plan-is envisioned in the preliminary recommended regional water supply plan. The only other diversions recommended are to the communities of New Berlin and Muskego. Their expansions would also be delineated to be consistent with the adopted regional land use plan, the area wide water quality management plan and the regional water supply plan.

Lastly, in your letter you cite a City of Milwaukee Common Council resolution which states that any water diversion request of the City must minimize residential, industrial and commercial sprawl, and the accompanying air and water pollution; include an analysis of the impact of such diversion on land use, transportation and economic development, and how comprehensive planning, and conservation programs can mitigate any negative effects; and require that any community which seeks water from the Great Lakes adopt a water conservation plan, a "Smart Growth" comprehensive plan, as well as a comprehensive housing strategy which provides affordable housing opportunities. You suggest that the water supply study should address these issues.

In response, the conditions that the City of Milwaukee, or any other water utility, would place on their provision of water-whether attendant to a diversion request or not-is their prerogative. It is our understanding that the City of Milwaukee most recently agreed to a diversion with the City of New Berlin principally in return for a one-time payment of \$1.5 million. In the recent past, the City of Racine agreed

Mr. Dennis Grzezinski Ms. Jerry Ann Hamilton Mr. Robert Theine Pledl Ms. Karvn L. Rotker Ms. Karen Schapiro Ms, Gretchen Schuldt June 15, 2009 Page 3

to provide sewer and water service to surrounding municipalities principally in return for tax base sharing with respect to new development.

With respect to the regional plan, the Commission recommends that all counties and communities consider implementation of all elements of the regional plan.

Sincerely

Smette Kenneth R. Yunker

KRY/PCE/lgh/dad

#144983 v1 - WaterSupplyStudy-EnvJustice Ltr

Mr. Todd Ambs, Wisconsin Department of Natural Resources Mr. Alan Walts, Environmental Justice Program Manager, US EPA – Region 3 Mr. Charles Lee, Acting Director – EPA Office of Environmental Justice

Appendix A-2

WRITTEN COMMENTS RECEIVED BY MAIL, E-MAIL, FAX, OR ONLINE COMMENT FORM

From: Chris Gustafson Sent: Wednesday, January 21, 2009 5:43 PM To: Hahn, Michael G. Subject: Regional water plan TO: Mike Hahn, P.E. : Mike Hahn, P.E. Southeastern Wisconsin Regional Planning Commission P.O. Box 1607, Waukesha, WI 53187 Tel. 262-547-6721, ext. 243 Fax: 262-547-1103 email: mhahn@sewrpc.org

Wednesday, January 21, 2009

Dear Mr. Hahn:

Please enter into the public record my electronically transmitted objection to this preliminary general municipal water supply plan if not ammended due to a reasonable possibility of sustantial negative impacts. Substantive evidentiary references are mentioned below. I am aware by definition, natural resources means those actual and potential forms of wealth derived from the same. However, in my unqualified opinion, I believe there is cause for grave concern to which I will attempt here to clarify.

- 1. Overdraft (in this context)=ground-water mining, as defined in "Sustainability of Ground-Water Resources", U.S. Geological Survey Circular 1186, pg. 4, ISBN: 0-607-93040-3, 1999.
- 2. "Hydraulic conductivity determined on the basis of a pumping test, is an average value 2. "Hydraulic conductivity determined on the basis of a pumping test, is an average value. This averaging will conceal real differences in hydraulic conductivity across the aquifer. These differences in hydraulic conductivity exist in both vertically and longitudal sections. Porisity varies over a much smaller range, from 1% to 60% or less than two orders of magnitude." Source: Contaminated Hydrogeology, C.W. Fetter, Professor Emeritrus, UW-Oshkosh, past personal conversation with Prof. Fetter at his consulting firm, 920-236-7012.
- 3. The administrative code (NR.811) for the MC Well Permit Approval process as administered by the Wisconsin Dept. of Natural Resources, only requires all potential source of contamination within a half-mile radius of the wellhead be identified. that are within one-half mile of a proposed MC Well's bore location. However, within ONE mile of the WVIL stateline where it bisects Cross Lake in Salem Twp. (T. 1 N., R. 20 E., Sec. 35, Kenosha Co.) there exists a US E/A Superfund site in Antloch, It. Known as: The "HOD Landfill" facility identification number: ILD880605836 dense chlorinated solventsTCE and DCE entered the unconfined and hydraulically-connected confined aquifers and contaminated the public water supply.

The breakdown product and known carcinogen, VC was found in the St. Peters Sandstone Aquifer. IL-EPA wanted air-sparging remediation to be included in the Record of Decision as introduction of oxygen would help VC breakdown into a harmless nitrogen gas, however, US-EPA determine that could push it into potential receptors (people in this context) The US-EPA conservitively estimated the cancer risk factor to be nine additional ancer cases per tenthousand people.

4. Molecularly-heavier than water, DNAPLs are capable of three-phase flow thru groundwater. During periods of when the water table is drawdown, new vapor-phase is created. During periods of recharge when the water table rises, the vapor-phase of TCE and DCE can get pushed away from the source up to THREE MILES from the source irregardless groundwater flow direction and into potential receptors (people in this context again) who then become exposed to the toxic, cancinogenic, and terogenetic substances by through dermal and

SEE: "Dense Chlorinated Solvents and other DNAPLs in Groundwater". James F. Pankow and John A. Cherry, Waterloo Press, Library of Congrees Catalog Card Number: 95-61690

- 5. Waste Management USA is the volunteer "Responsible Party" for the HOD Landfill. They are alledgedly converting the methane gas from that facility into electricity for the new Antioch, IL High School, and then selling the surplus to ComEd. This publically beneficial activity may also be negatively impacted by any high capacity MC Well should one be located in the Cross Lake Watershed of Salem Twp., WI.
- 6. Although IL-USGS detrmined an "aquitard" at the stateline, to which I do not know for a fact is in reference to the confined St. Peters Sand Stone aquifer, it would not be a stretch to suspect any claim of a "state-line-fault" owing to differences in the interpretation of geological maps at statiline boundaries as defined in the "Dictionary of Geological Terms", 3rd. Ed., ISBN: 0-314-77135-02 may apply.

Inconclusion, I object to the Regional Water Supply Plan for Southeastern Wisconsin for as of when WI-DNR tested my private well drinking water for GROs (gas-range organic compounds) DROs (dlessel-range organic compounds) and VOS (volatile organic compounds) through the Wisconsin State Lab of Hygeine, I was assured my family's health and welfare for safe for the time being when the tests all came back negative. I'd hate to do a OA/QC sample during a period of low atmosphic pressure and find that this has changed for the worse.

Respectfully, Christine Gustafson 24001-119th St., Trevor, WI 53179 Tel. 262-862-2874

From: Curt Bolton Sent: Tuesday, January 06, 2009 4:29 PM To: Hahn, Michael G. Cc: Mayor Netzke; Rick Sokol Subject: Proposed Regional Water Supply Plan for Southeastern Wisconsin Do we know the floodplain impacts if Waukesha discharges into the Root River? Has DNR Do we know the floodplain impacts if Waukesha discharges into the Root River? Has DNR commented on discharging to a river instead of Lake Michigan? I know that Green Bay ended up installing two pipes to get water from Lake Michigan. Would two supply pipes be necessary in this case as well?

Thanks,
Curt Bolton, PE
City of Greenfield

From: Hahn, Michael G. From: Harit, Michael S. Sent: Wednesday, January 07, 2009 10:02 AM To: Biebel, Robert P. Subject: FW: Proposed Regional Water Supply Plan for Southeastern Wisconsin

From: Biebel, Robert P. [mailto:RBIEBEL@SEWRPC.org]
Sent: Wednesday, January 07, 2009 10:57 AM
To: Curt Bolton
Co: Hahn, Michael G.
Subject: RE: Proposed Regional Water Supply Plan for Southeastern Wisconsin

This is in response to your January 6 2009 e-mail inquiry about the water supply plan.

There should be no floodplain impacts due to the Waukesha return flow. The plan is to cut off There should be no floodplain impacts due to the Waukesha return flow. The plan is to cut off the return flow during any periods of high flow on the tributaries and discharge to the Fox River as is presently done. This can be a viable active management strategy because the amount of wastewarder available is about 15 – 20 % greater than the amount of water used. WDNR has reviewed the proposal and provided guidance on the discharge quality requirements. The Waukesha effluent is of a high quality – about 1 to 2 mg/ of BOD and SS. The issue of one or two pipes is to be evaluated at the next level of planning. Initially we were thinking of one, but that may change. In most places where a long Lake Michigan supply has been developed, only one pipe has been used. The existing wells may be kept as a backup. Thanks for your interest.

From: Curt Bolton From Curt Button
Sent: Friday, January 16, 2009 1:49 PM
To: Biebel, Robert P.
Subject: RE: Proposed Regional Water Supply Plan for Southeastern Wisconsin

Bob:
To not have two supply lines is poor design. Now the decision could be made to construct the second pipeline in the future like Green Bay did, but don't lowball the costs by poor design. To a lesser degree this holds true for the return line as well. However, I suppose it will be recommended to divert flows down the Fox if work on the return line is necessary.

My only other comments are also about the return line. The report states that the final decision about where to discharge treated effluent will be decided based on what's best for the City of Waukesha. While this may be true, it certainly doesn't reflect the ideals! believe a regional organization should express. In my opinion, Milwaukee County, in general, and the City of Milwaukee, in particular, gets dumped on enough. Given the concentration of poverty in our urban areas (also a regional issue), the fact that rarely are treatment plant discharges pumped over a drainage divide. To sum things up, none of the alternatives should be approved until the issue of where the return line will end and the cost of the return line are added to the cost estimates.

estimates. Thanks, Curt Bolton

A-20

From: Gary Koppelberger Sent: Thursday, January 08, 2009 3:58 PM To: Bibela, Robert P. Subject: Regional Water Supply Plan for Southeastern Wisconsin - Hartford Water Utility

It is my understanding that you are an appropriate contact for the ongoing REGIONAL WATER SUPPLY PLAN FOR SOUTHEASTERN WISCONSIN. If this is untrue, please forward to the appropriate SEWRPC personnel.

In reading Newsletter #3 I note one page 9, under "Elements of the Preliminary Recommended Plan" the following comment: "The plan proposes

reliance on use of the shallow groundwater aquiter as a source of water supply either by replacing existing deep wells with shallow wells or by supplementing pumpage from existing deep wells with pumpage from shallow wells as new wells are constructed".

Please be advised that the only "deep well" owned by the Hartford Water Utility is Well #4. All other municipal wells are shallow wells. The City of Hartford entered upon a consent order concerning Well #4 several years ago, due to a marginally unacceptable radium level under the current Federal standard. As a result Well #4 was shut-down at the end of 2006. The Wisconsin DNR did agree that Well #4 could be used in a fire emergency, provided the DNR was notified. However, this has never occurred, and the well has not been operated in TWO YEARS. The City has no intention of using the well in the future unless some technology. occurred, and the well has not open operated in TWO YEARS. The City no intention of using the well in the future unless some technology change occurs which makes its use practical in light of current Federal standards. Our current plan is to permanently close Well #4 in 2009. Consequently, there is no way the Hartford Water Utility can meet the recommendation noted above because the City has no deep wells to be replaced. I believe this recommendation, with respect to the Hartford Water Utility, is illogical and misleading, and should be removed.

TABLE 4 on page 11 of Newsletter #3 is a list of "UTILITIES CONSIDERED TO HAVE ADEQUATE EXISTING SOURCES OF WATER SUPPLY UNDER THE PRELIMINARY RECOMMENDED REGIONAL WATER SUPPLY PLAN". This determination appears to be related to TABLE VII-1 found on the SEWRPC website related to this

be related to TABLE VII-1 found on the SEWRPC website related to this project. I believe TABLE VII-1 was produced by Ruekert Mielke for this project, and is based on year 2000 data provided to the PSC. TABLE VII-1 shows negative results for the City of Hartford in year 2000 under column headings "Surplus Waximum Day Supply Capacity", "Surplus Peak Hour Storage Capacity", and "Surplus Fire Flow Capacity", Please advise me which of these criteria formed the basis for the exclusion of the City of Hartford from TABLE 4 of Newsletter #3, and the formula used by Ruekert Mielke which resulted in calculation of inadequacy. If more than one of the column headings formed this determination, I would like to understand each of these formulae.

The City of Hartford is within months of opening the largest shallow water well ever constructed by the City, at a cost exceeding \$7.5 million including piping and treatment facilities. Because this new well will be "on-line" pirot to the completion of the SEWRPC study, I am greatly concerned that the final published SEWRPC document, which is likely to receive wide circulation in the media, not contain erroneous or outdated information detrimental to the economic development efforts of the City of Hartford.

Gary Koppelberger City Administrator City of Hartford 109 North Main Street Hartford, WI 53027 262.673.8204

From: Biebel, Robert P. [mailto:RBIEBEL@SEWRPC.org] Sent: Friday, January 09, 2009 10:50 AM To: 'Gary Koppelberger'
Subject: RE: Regional Water Supply Plan for Southeastern Wisconsin - Hartford Water Utility

Mr. Koppelberger:
Thank you for the update and related comments . We will make the appropriate changes to the regional water supply plan in Chapter VII and the alternative and the recommended plan chapters. Part of the problem is that we are using a base year of 2005. Under that condition, the actions you outlined would indeed be to generically "place greater reliance on the shallow aquifer." It would be helpful to know the estimated capacity of the new shallow well. We will then revise accordingly and share the changes with you. Part of the problem was that we were unable to obtain requested information on planned facilities from the City when we were developing the inventory data. Thanks for the input.

From: Gary Koppelberger Sent: Friday, January 09, 2009 12:24 PM To: Biebel, Robert P. Subject: RE: Regional Water Supply Plan for Southeastern Wisconsin - Hartford Water Utility

Thanks for your prompt reply. The new Well #16 is rated at 1650 gpm Gary

From: Biebel, Robert P. [mailto:RBIEBEL@SEWRPC.org]
Sent: Monday, January 19, 2009 1:50 PM
To: Gary Koppeiberger'
Subject: RE: Regional Water Supply Plan for Southeastern Wisconsin - Hartford Water Utility

One more question. Was there any new storage developed in conjunction with the new well Thanks

From: Gary Koppelberger Sent: Monday, January 19, 2009 2:18 PM To: Biebel, Robert P. Subject: RE: Regional Water Supply Plan for Southeastern Wisconsin - Hartford Water Utility

The Hartford Water Utility is completing the design phase of a 750,000 gallon water tower to be constructed this Spring. We expect the tower to be operational by the end of 2009. The land has been acquired and a construction authorization has been granted by the PSC.

From: Village of Saukville-Roy Wilhelm Sent: Tuesday, January 13, 2009 2:47 PM To: Blebel, Robert P. Co: Jerry Dickmann Subject: regional water supply plan study

The Village will have representation at one of the public information meetings. The Village was never contacted by SEWRPC regarding the proposed option to convert from ground water to Lake Michigan water. It is rather presumptuous to incorporate a change of this significance into a regional plan draft without first contacting the local officials to get a read on how that might impact local long term planning.

Roy Wilhelm Director of Public Works Village of Saukville 262 284 9423

From: Biebel, Robert P. [mailto:RBIEBEL@SEWRPC.org] Sent: Wednesday, January 14, 2009 9:40 AM To: Village of Saukville-Roy Wilhelm' Cc: Jerry Dickmann Subject: RE: regional water supply plan study

Roy:
Thanks for your comments. The point is well taken. Keep in mind the status now is that there is a "preliminary plan" being considered. To date we have relied on careful review by a 32 member advisory committee for input. Input from the Village and others will be carefully considered before a final plan is developed. On the surface, it would appear that the preliminary plan puts the Village in a very good position in that there will be no requirement for a conversion to Lake water as the plan is advisory not regulatory. Also it has a year 2035 horizon. Thus, it would likely help keep the door open for a Lake Michigan supply should the Village decide to pursue it down the road. Now that we have a preliminary plan developed for consideration, we would be happy to meet with you and others from the Village to discuss the matter if you feel that would be helpful.

Thanks for your input.

From: Village of Saukville-Roy Wilhelm Sent: Wednesday, January 14, 2009 10:10 AM To: Biebel, Robert P. Cc: Village of Saukville - Dawn Wagner'; Jerry Dickmann Subject: RE: regional water supply plan study

Getting together at some point in the near future would be great. I will forward this to our administrator.

Roy Wilhelm Village of Saukville

Richard P. Jahnke

Waukesha, Wisconsin 53188

JANUARY 22, 2009

ROBERT BIEBEL SPECIAL PROJECTS ENGINEER SEW RPC DEAR BOB IT WAS GOOD TO SEE YOUR NAME AS THE PRESENTER OF OPTIONS BEING STUDICO FOR THE REGION'S USE OF LAKE MICHIGAN WATER, WHILE I THINK THAT THE EPA RULES ARE TOO STRINGENT, I FOR THAT THE USE OF LAKE MICHIGAN WATER IS FINE SO LONG AS TREATED WATER 15 RETURNSO TO THE LAKE OR ONE OF 175 TRIBUTARIES. AND I HOPE THAT THESE IDEAS DO NOT GET CHOKED BY GOVERNMENTAL RED TARE . KEEP UP THE GOOD WORK

sincerei Y, Liek Julinka

From: Wheeler, Rochelle C Ms CIV USAR 88TH RSC G1

Sent: Thursday, January 22, 2009 1:09 PM To: Hahn, Michael G.

Subject: OBJECTION TO MUNICIPAL WATER SUPPLY PLAN (UNCLASSIFIED)

Classification: UNCLASSIFIED Caveats: NONE

TO: Mike Hahn, P.E b. Mike Hahn, P.E. Southeastern Wisconsin Regional Planning Commission P.O. Box 1607, Waukesha, WI 53187 Tei. 262-547-6721, ext. 243 Fax: 262-547-1103 email: mhahn@sewrpc.org

Wednesday, January 21, 2009

Dear Mr. Hahn:

Please enter into the public record my electronically transmitted objection to this preliminary general municipal water supply plan if not ammended due to a reasonable possibility of sustantial negative impacts. Substantive evidentiary references are mentioned below. I am aware by definition, natural resources means those actual and potential forms of wealth derived from the same. However, in my unqualified opinion, I believe there is cause for grave concern to which I will attempt here to clarify.

- 1. Overdraft (in this context)=ground-water mining, as defined in "Sustainability of Ground-Water Resources", U.S. Geological Survey Circular 1186, pg. 4, ISBN: 0-607-93040-3, 1999.
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The breakdown product and known carcinogen, VC was found in the St. Peters Sandstone Aquifer. IL-EPA wanted air-sparging remediation to be included in the Record of Decision as introduction of oxygen would help VC breakdown into a harmiess nitrogen gas, however, US-EPA determine that could push it into potential receptors (people in this context) The US-EPA conservitively estimated the cancer risk factor to be nine additional ancer cases per ten-thousand neonle

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SEE: "Dense Chlorinated Solvents and other DNAPLs in Groundwater", James F. Pankow and John A. Cherry, Waterloo Press, Library of Congrees Catalog Card Number: 95-61690.

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Inconclusion, we object to the Regional Water Supply Plan for Southeastern

RONALD & ROCHELLE WHEELER 10714 269TH AVENUE Trevor, WI 53179

Leah & Andrew Rigazzi 23516 126th place Trevor, Wi 53179 Classification: UNCLASSIFIED Caveats: NONE



Public Service Commission of Wisconsin

Eric Callisto, Chairperson Mark Meyer, Commissioner Lauren Azar, Commissioner

P.O. Box 7854 Madison, WI 53707-7854

January 21, 2009

Robert Biebel Special Projects Engineer
Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Dr. P.O. Box 1607 Waukesha, Wisconsin, 53187



Thank you for the opportunity to provide comments on the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) preliminary recommended water supply plan. These comments reflect the opinions of PSC staff and should not be construed as an endorsement of the plan or any of its

The preliminary plan supports the creation or expansion of water utility service in a number of communities that are currently served by private wells. Over the past several years, the PSC has worked to encourage the regionalization of water systems to achieve economies of scale. In general, expanding existing utility service area boundaries is more favorable for ratepayers and less costly for utilities. As a result, the final plan should encourage continued regionalization over the creation of smaller utilities, where feasible

PSC staff support incorporating water conservation and efficiency programs into the final plan. Since 2006, the PSC has been working to implement a statewide water conservation program for water utilities. The conservation elements included in the preliminary plan are consistent with the PSC's ongoing water conservation efforts, which include promoting both supply and demand-side initiatives such as water loss control programs and conservation-oriented water rate structures. The PSC is willing to work with SEWRPC and the region's utilities to ensure that these programs are implemented in a cost-

Overall, the plan provides a good overview of the challenges and opportunities facing water utilities in southeast Wisconsin. I commend you and the study committee for the work that went into the development of the plan. Please contact me at (608) 267-9640 if I can be of further assistance.

David a. Sheard

David A. Sheard, P.E. Assistant Administrator

Division of Water, Compliance, and Consumer Affairs

DAS:JJR:pc w:\water\correspondence\Jeff Ripp\SEWRPC Water Supply Plan

Telephone: (608) 266-5481 Fax: (608) 266-3957 TTY/TextNet: In Wisconsin (800) 251-8345, Elsewhere (608) 267-1479

Home Page: http://psc.wi.gov

--Original Message From: Douglas S Cherkauer Sent: Thursday, January 22, 2009 12:00 PM To: Biebel, Robert P.; Boxhorr, Joseph E. Subject: Comments on the Washington Co. presentation

Just a couple of things that caught my attention last night

First, a reminder to look at the overlays on the recharge maps. Those huge First, a reminder to look at the overlays on the recharge maps. Inose nuge white areas in Richfield, for example, attributed to urban cover just don't make sense. Low or medium density housing with streets that do not have storm sewers will not serve as a deterrent to recharge. I can assure you that the only time rain runs off in my neighborhood is when the ground is frozen or when the precip intensity is very high. Recharge continues unabated in the area – unless developers put in storm sewers. I hope you'll reconsider what's truly urban on your maps.

Secondly, the water service maps still show parts of eastern Richfield being served by Germantown in 2035. Now that Richfield has incorporated, that will require intergovernmental cooperation which will meet with the same GT mindset that you encountered last hight. GT will want to annex any area that they serve. Perhaps that recommendation needs to be rethought?

Lastly, the presentation (and the report) staunchly refers to the potential Waukesha diversion as being 10 mgd, which is what was simulated in the model and is projected as their 2035 need. But isn't Waukesha talking about seeking a diversion of 20 to 24 mgd? Shouldn't this much higher number be acknowledged in the presentation and the report? - so that the public knows that the diversion being sought has not been simulated and potentially will cause much bigger impacts.

By the way - what is Waukesha thinking it will do with the extra water? If one intent is to sell it to communities farther west, then that will alter all the the simulations that have been done.

From: Biebel, Robert P. From, Debbe, Robert P. Sent: Thursday, January 22, 2009 1:59 PM To: 'Douglas S Cherkauer' Subject: RE: Comments on the Washington Co. presentation

Doug: Thanks for your thoughts. We will deal with the first two items.

With regard to the Waukesha water demand, for the year 2035, the City of Waukesha only needs about 10.0 mgd on average. I believe we will find that the City's diversion request will not be significantly different when everything shakes out. However, we have no information beyond this. I do not believe that Waukesha is planning to sell water to other communities. We have prepared a water supply service area map for the City to use in developing its water supply plan as required under 2007 Wisconsin Act 227 If that mapped area is used in the application, as I expect it will be, that should allay all of the concerns about the 20 plus mgd amounts that seems to have you and others concerned. I believe the concerns will turn out to be unfounded and probably are leading to a lot of unnecessary efforts. I will send you a copy of the water supply service area map and supporting text for your information.

Mike Hahn, P.E. Southeastern Wisconsin Regional Planning Commission P.O. Box 1607, Waukesha, WI 53187 Tel.: 262-547-6721, ext. 243 Fax: 262-547-1103 Email: mhahn@swerpc.org

Friday, January 23, 2009

Dear Mr. Hahn:

Please accept my corrected public record objection to the conceptual, initially preferred, Subalternative Plan 2 as it pertains to Salem Township. The following substantive facts need inclusion.

Two proposed MC Wells in Salem Twp. are within the 3-mile influence zone of HOD Landfill, Antioch, Lake Co. IL CERCLIS No. ILD980605836. ATSDR's APH: September 14, 1998 states no QA/QC reports found, IDPH had to rely on reference documents, Only complete and reliable information validates PHA, plume is not defined, potential for contaminates to migrate, better characterization is necessary, sampling parameters were not clear and not corresponding with sampling at same location.

2000 US Census Bureau socioeconomic statistics for zip codes 53105, 53109, 53168, 53170, 53179 show many of the populace to be of low attainment therefore future local funding expectations likely to cause hardship if final version of regional water supply plan is not ammended.

Most Sincerely and Respectfully, Chatter Suntafer Christine Gustafson 24001-119th St. Trevor, WI 53179

From: Mike Von Gunten
Sent: Monday, January 26, 2009 11:51 AM
To: Hahn, Michael G.
Subject: 13 New Municipal Wells SE-WI
Mr. Hahn,
We are OPPOSED to having municipal wells for Salem Township. Our wells are all fine.
We have paid to have them put in, and why would we now want to pay to have city
water? It will be an additional assessment to our property, and another monthly bill, that
is not necessary at this time, in this community, and in light of today's economy. Many
people are unemployed, or are working for less wages, and having a difficult time paying
property laxes, sewer assessments etc. Many of us have a hard time allocating money
expenses for grocenies, and monthly bills. Now you want to add another expense. Not
necessary at this time.
NO...NO...NO...NO...NO...NO.

Michael & Bonnie Von Gunten

-----Original Message----From: Hahn, Michael G. [mailto:MHAHN@SEWRPC.org] Sent: Monday, January 26, 2009 1:56 PM To: Mike Von Gunten' C:: Biebel, Robert P.; Boxhorn, Joseph E. Subject: RE: 13 New Municipal Wells SE-WI

Dear Mr. and Mrs. Von Gunten: Dear Mr. and Mrs. von Gunten:
Thank you for your comments on the preliminary draft regional water supply plan that is documented in SEWRPC Planning Report No. 52. As you may know, the public comment period runs through February 9, 2009. After that date we will consider all formally-submitted public comments such as yours.

As a point of clarification, the plan calls for the provision of municipal water supply service to certain areas that are currently served by private, onsite wells only when need is demonstrated and at the option of the affected residents and units of government of the areas involved. Above the demonstrated and at the option of the affected residents and units of government of the areas involved.

the areas involved. Absent a demonstrated need, residents and businesses of the areas would remain on individual wells indefinitely. In other words, areas are only included as potential future municipal service areas to cover long-term problems which may arise with private wells.

Once again, thanks for your interest in the plan.

Michael G. Hahn, P.E., P.H. Chief Environmental Engineer Southeastern Wisconsin Regional Planning Commission P.O. Box 1607 W239 N1812 Rockwood Drive Workshop WI 621927 (607) Waukesha, WI 53187-1607 Phone: (262) 547-6722 Ext. 243
Fax: (262) 547-1103
E-mail: mhahn@sewrpc.org
Web site: www.sewrpc.org

From: Mike Von Gunten Sent: Monday, January 26, 2009 4:40 PM To: Hahn, Michael G. Subject: RE: 13 New Municipal Wells SE-WI

Dear Mr. Hahn
My question to you is, if the municipal water supply runs past my property/frontage who is
going to be responsible to pay for that instillation, the municipality or the property owner? Even
though I would remain on private well but to supply a neighbor who may want municipal water it
is ran across my frontage I would have to pay?

Michael Von Gunten Lakes Area Home Inspections Inc.

From: Hahn, Michael G.

Tuesday, January 27, 2009 10:20 AM 'Mike Von Gunten' Biebel, Robert P.; Boxhorn, Joseph E. Sent: To:

Subject: RE: 13 New Municipal Wells SE-WI

Municipal water service would, typically, not be extended to your area unless a majority of the properly owners requested such an extension. Such a request would generally be made if there were problems with the existing, individual, private wells that would make connection to the municipal supply desirable.

The Town Utility would decide how to recover the costs of extending service. They could defer connection (and assessment of costs) for those who did not want to connect at the time that service is initially extended. In that case, it is likely that such a property would eventually be connected and assessed, e.g., 1) if the owner requested connection at a later date, 2) upon a future transfer of ownership of the property, or 3) some other arrangement. If connection were deferred, the cost to connect at a later date would be greater than if the property were connected initially because the utility would initially have to appropriate funds to pay the difference between the full cost of extending service and the portion of the costs paid by those who connect when service is extended. The utility could also require all property owners in the area to which service would be extended to connect and pay at the time of the extension.

There are a number of different scenarios with regard to connection requirements. The method selected will be up to the utility should it be decided to extend municipal water service to a given

Michael G. Hahn, P.E., P.H.
Chief Environmental Engineer
Southeastern Wisconsin Regional Planning Commission
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Fax: (262) 547-1103
E-mail: mhahn@sewrpc.org
Web site: www.sewrpc.org

From: John W. Stern Front: John W. Stern Sent: Wednesday, January 28, 2009 7:10 PM To: Korb, Gary K. Cc: jill.hapner@co.washington.wi.us Subject: RE: February 10, 9:30 SE Area Mtg.

Gary:
Good to see you again at the regional water supply public hearing. My main concern is that if we do indeed ship water outside of the watershed that number 1. "We get it back to recharge the supply" and number 2. "That the water is just as pure as what we shipped out". As we discussed we know that salt is not removed in the waste water treatment process and I suspect that Rx drugs that are flushed are also not removed. What other contaminates are not going to be removed? I would have traveled with Dr. Hapner to your Feb. 10th meeting but it is on the same day as the Washington County Board of Supervisors monthly meeting. I have asked Dr. Hapner to place an agenda item on our February meeting to nail down a supervisor on the LCC Committee to attend with her. If no one is interested I will once again attend the meetings.

John W. Stern 5824 W. Lake Drive West Bend, WI 53095 Mike Hahn, P.E., P.H. Southeastern Wisconsin Regional Planning Commission P.O. Box 1607, Waukesha, WI 531871607 Tel: 262-547-6722, ext. 243 Fax: 262-547-1103

Thursday, January 29, 2009

RE: Regional Water Supply Plan

Dear Mr. Hahn:

I spoke with Dr. Doug Cherkauer, Professor of Geosciences, UW-Milwaukee vesterday, one the hydrogeologists who served on the SEWRPC Water Supply Advisory Committee.

Dr. Cherkauer said, "the one weakness of SEWRPC's regional water supply plan that it did not identify areas that cannot expand population because it will peak out to a point were one day it can no longer support the increasing costs of maintaining its infrastructure with the tax-base it has, as has occurred in Milwaukee.

Last night, the Town of Salem's Planning and Zoning Committee said, "our town has no economic development committee.

This morning, Kenosha County Supervisor, Kim Breunig told me, "the Kenosha County Board has no economic development committee, speak with Tod Badel, KABA's Pres."

Yet This afternoon, KABA, was unaware of your Water Supply Plan Public Meeting tonight at the Kenosha Co. Center. I had to directed them to your website and inform them that the Public Comment Period ends February 9, 2009.

Lastly, at 1:50 p.m. this afternoon, your staff told me, "SEWRPC has no Economic Development Committee, it has a person by the name of John Medland.

Dr. Cherkauer said, "Water is a fundamental resource to growing a community's economy." So why hasn't SEWRPC included calculating economic ability to maintain municipal community wells into the Regional Water Supply Plan?

Respectfully. Chris Gustafson Malla

24001-119th St. Trevor, WI 53179

- 1. Since two weeks is of such short duration when running a municipal community drinking water system on back-up generated power, does the SEWRPC's Subalternative Plan 2 identify readily available secondary source water supplies for these MC systems in the event of an engineered attack or as required by the Wisconsin's Source Water Protection Plan?
- 2. When SEWRPC projected future population densities and needs of communities west of the state's sub-continental divide were any areas identified as having a peaked-out tax-base incapability of supporting ever-increasing infrastructure costs as in Milwaukee, if so where?
- 3. (a) What "functional value" was assigned the 31 to 100 sensitive sites That'll experience groundwater-derived decreased base flow of 10 percent or greater, and, (b) what techniques did SEWRPC use to ascertain this value other than the "Rapid Assessment Method"?
- 4. Since a prolonged and progressive pumping scenario of the shallow unconsolidated aquifer will eventually result in land sustenance, artificial recharge by injection wells is of dismally limited use in the state, rainfall infiltration systems are incapable of equal replenishment to groundwater withdrawal rates, the state lacks antigroundwater piracy legislation because every one has equal rights to the surface and subsurface waters of the State of Wisconsin, and past SEWRPC planning has not prevented areas from becoming blighted, what policy and procedural recommendations aside from weather modification techniques are to prevent the Region's communities from exceeding the plan's estimated 2035 sustainable Groundwater-derived MC well withdrawals?
- 5. Given the state's current fiscal budget deficit is an estimated 5.3 million dollars and therefore its unlikely the state will be able to quickly come up with matching funds to qualify for President Obama's National Recovery Infrastructure Aid, how does SEWRPC's Economic Development Committee (if it has one) figure The Region's taxpayers can afford this 2035 plan when one in every four property owners owes more than its current value, many have lost jobs, and the state's unemployment compensation is about out?

From: DeidreAHardy@aol.com [mailto:DeidreAHardy@aol.com]
Sent: Thursday, January 29, 2009 8:02 AM
To: Hahn, Michael G.
Subject: Municipal Well
I was floored when I heard about the possible municipal wells planned for our area. I have no interest in having this added to my area. Due to a problem with my old well pump, I had to have a new well drilled for my own home 12 years ago. This was a financial challenge for my family at the time. In today's economically challenging times, I'm not sure we could even survive such an expense. My husbands hours have been cut at work which puts a serious strain on our finances. We have great water already, as do all of our neighbors. There is no need for these municipal wells in our area. If this is followed thru with, all I can think is this is one more way for our local government to waste our diminishing incomes. Lurge you to please stand up for the people of our government to waste our diminishing incomes. Turge you to please stand up for the people of our community and save us this needless expense. Please let me know if there is anything else I can do to fight this decision. I would attend the meeting scheduled for tonight, January 29th, but I will be useful and the proof of the people of our community and save us this needless expense. Please let me know if there is anything else I can do to fight this decision. I would attend the meeting scheduled for tonight, January 29th, but I will be useful and the proof of the people of our community and the proof of the people of the people of our community and the people of o working until 7PM myself.

Sincerely Yours, Deidre Hardy 12137 224th Ave Bristol, WI 53104

From: Hahn, Michael G. Sent: Thursday, January 29, 2009 10:06 AM

Boxhorn, Joseph E.; Biebel, Robert P.; Yunker, Kenneth R. t: RE: Municipal Well Subject:

Follow Up Flag: Follow up Flag Status: Flagged

Dear Mrs. Hardy:

Thank you for your comments regarding municipal wells. Our preliminary draft regional water supply plan that will be presented at tonight's meeting in Kenosha County is documented in SEWRPC Planning Report No. 52. As you may know, the public comment period runs through February 9, 2009. After that date we will consider all formally-submitted public comments such as yours. We certainly sympatrize with your situation in these difficult ceonomic times. Perhaps the following information will provide some helpful perspective on this issue.

As a point of clarification, the plan calls for the provision of municipal water supply service to As a point of clarification, the pian calls for the provision of municipal water supply service to certain areas that are currently served by private, onsite wells only when need is demonstrated and at the option of the affected residents and units of government of the areas involved. Absent a demonstrated need, residents and businesses of the areas would remain on individual wells indefinitely. In other words, areas are only included as potential future municipal service areas to cover long-term problems which may arise with private wells. The plan is designed to address conditions through the year 2035, so it has a long-term perspective.

Municipal water service would, typically, not be extended to your area unless a majority of the property owners requested such an extension. Such a request would generally be made if there were problems with the existing, individual, private wells that would make connection to the municipal supply desirable

The area in the western part of the Town of Bristol that could be served by a municipal groundwater supply in the long-term as described in this e-mail is shown in our December 2008 regional water supply plan newsletter. You can view the newsletter, by going to sewrpc.org, clicking on "Water Supply Study" in the right margin, then clicking on "Newsletter 3, December 2008." The potential service area is shown on Map 7 on page 15.

Once again, thanks for your interest in the plan. If you have any further questions or comments

Michael G. Hahn, P.E., P.H.
Chief Environmental Engineer
Southeastern Wisconsin Regional Planning Commission
P.O. Box 1607
W239 N1812 Rockwood Drive
Waukesha, WI 53187-1607
Phone: (262) 547-6722 Ext. 243
Fax: (262) 547-1103
Fax: (262) 547-1103 E-mail: mhahn@sewrpc.org Web site: www.sewrpc.org

	City of
Port	Washington

100 West Grand Avenue, P. O. Box 307 Port Washington, WI 53074-0307 City Hall 262-284-5585 Engineering 262-284-2600 Inspection 262-284-2600 Planning 262-284-2600

FAX

Date:	1/29/09
Date:	129/09
Number of	pages including cover
sheet:	I -0

Bob Biehel
Phone: Fax phone: 202-547-1103 CC:

	Mark Grams
	100 West Grand Avenue
	Port Washington, WI 53074
Phone:	262-284-5585
Fax phone:	262-284-7224

REMARKS:	☑ Urgent	For your revi	iew 🔲 Rcpl	y ASAP	Please comment
Thi	s is W/	hat we	liscusse	1 M	nday_
					7

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 26, 2009 Ozaukee County Administration Center, Auditorium
121 W. Main Street
Port Washington, Wisconsin

Name David Ewia
Affiliation City of Port Washington. Mailing Address 100 W. Grand Ave
Mailing Address 100 W. Grand Ave
Port Washington, WI 53044

Thanks for listening to our comments pertaining to your study.

In terms of serving the Village of Grafton, please consider that if Port Were to serve Grafton thru Soukville on County O. This route would be the least distance in serving both communities.

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

From: Kuyper Sent: Thursday, January 29, 2009 8:07 PM To: Biebel, Robert P. Subject: jan 29 hearing on regional water supply plan

I attended the Jan. 29 public informational meeting for the regional water supply plan at the Kenosha County Office Building in Bristol.

At this time, and I project to 2035, there is and will be no need for a municipal water system in Silver Lake, Kenosha County, Wis.

Availability and qualify of water is provided for our family by a 100-foot private well and I suspect village residents are served well by their own private wells.

The hearing was informational and interesting. Since the SEWRPC suggestions for water supply are advisory, there is no need to take action on them now or in the immediate future.

J. E. Kuyper 29424 Silver Lake Road Silver Lake, WI 53170

pitopitsch Friday, January 30, 2009 7:46 AM Boxhorn, Joseph E.

Comment from Regional Water Supply Study Website Form

Submitted: 1/30/2009 7:39:18 AM Name: Phyllis Ito-Pitsch

Organization: Resident PO Box/Street: 23423 84th PI Montgomery Highlands Salem WI 53140

City: Salem State: WI

State: WI
Zip: 53168
Phone:
Comments: I understand the need for sustainable water supply. I do not beleive those who have sustainable wells should be a part of this program. Installing supply centers in these areas could affect those with wells. I am against this in the SW area of Salem Township. This is a residential, rural area and development is on hold and probably will be for the next 10 years. For this area this is an unfare expense for the residences with sufficient water. I do beleive it is a good idea to conserve our water and already do so.

Sent: To: Subject:

peakrut Saturday, January 31, 2009 1:39 PM Boxhorn, Joseph E. Comment from Regional Water Supply Study Website Form

Submitted: 1/31/2009 1:36:36 PM Name: Anthony Fraley

Organization:

Organization:
PO Box/Street:
City: Trevor
State: WI
Zip: 53179
Phone:
Comments: I in no shape, way or form support the new 13 New Municipal wells that are targeted for Salem Township! I already incur many bills and wish to not incur anymore especially for this

COMMENT REGISTRATION FOR COURT REPORTER

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

: 4 FEB - 2 ZUU9

W1.53/04

Affiliation ____

Mailing Address 12105 219TH AVE BRISTOL

SEE ATTACHED SHEET!

Comments may be dictated to a court reporter or written and left at the registration table or given to a SEWRPC staff member. Written comment forms are available at the registration table. Additional comments will be accepted through February 9, 2009, and may be sent to the SEWRPC offices: W239 N1812 Rockwood Drive, P.O. Box 1607, Waukesha, Wisconsin 53187-1607. Comments may also be submitted via fax, (262) 547-1103, e-mail to rbiebel@sewrpc.org, or online at www.sewrpc.org/water

Thank you

to Supply Re dien't Adem for

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

0601

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

Do Not wAND CITY SEWER OR WATER / BECAUSE OF ALL the Stress of money AND the CONOMY, WE DON'T NEED

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

> Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> > Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

> > > Thank you.

Town of Hartford

Washington County

SEWE

3360 Highway K Hartford, Wisconsin 53027

January 26, 2009

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, WI 53187-1607

Re: Public Informational Meeting Regional Water Supply Plan Written Comment

To Whom It May Concern:

Please let me introduce myself to your committee. My name is Dennis Gehring and I am the Chairman for the Town of Hartford. On January 21, 2009, I attended the informational meeting but, unfortunately, was unable to stay till the end.

The City of Hartford has the goal of increasing its current population of 12,000 to 25,000. My question for your committee is; what roll would you have in this? Also, would there be some kind of permit process to control development? Restrictions are necessary to insure a safe and abundant supply of water for future generations. My concern is also, that if there are new wells drilled, this will dry up the present wells being used by the present Town of Hartford residents.

Thank you in advance for your consideration of these issues and I would like to ask if someone on the committee could contact me with any information that could be provided

Enclosed is my card with my cell and email address.

Dennis Gehring Chairman, Town of Hartford

Town Hall Phone: (262) 673-7214 Town Garage Phone: (262) 673-6729 (262) 673-7066

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

February 11, 2009

Mr. Dennis Gehring Chairman Town of Hartford 3360 CTH K Hartford, WI 53027

Dear Mr. Gehring

This is to respond to your January 26, 2009, letter regarding the regional water supply planning program as summarized at a January 21, 2009, informational meeting held in Washington County, which you attended. You indicate in your letter that the City of Hartford has a goal of increasing the current population of 12,000 persons to 25,000 persons. You further asked about controls on development and indicated a concern regarding the impact of potential new wells on the existing private individual wells in the Town of Hartford. In response to your request, the Commission staff offers the following response:

The regional land use plan and the regional water supply plan envision a planned year 2035 population in the City of Hartford sewer service area of about 18,200 persons. This includes existing development in the Town of Hartford, including portions of the Pike Lake area and the Hilldale Sanitary District. While the year 2035 planned population level in the sewer service area is 18,200 persons, the buildout potential of the planned sewer service area at the Activ's sewer service area is about 26,000. That population level was also used as the planned condition for the Washington County comprehensive plan

The Southeastern Wisconsin Regional Planning Commission has no direct role in the land development approval process. The Commission does work with the local units of government involved in establishing planned sewer service area boundaries. The boundary of the sewer service area attendant to the City of Hartford sewage treatment plant was last amended in September 2006.

With regard to the regional water supply plan recommendations, it has been determined that, with the new Hartford municipal well currently nearing completion, there will be no further need to develop new wells to serve the City's water supply service area through the year 2035. That assumes the planned population level of 18,200 persons. The preliminary recommended water supply plan, which is now in the public involvement phase, indicates four new smaller wells would be needed. However, given the high capacity achieved by the new City well now being completed, there is no anticipated need for additional wells through the year 2035. The final recommended water supply plan will reflect this. The information on the new well now nearing completion was not available when the preliminary ralay was developed. new well now nearing completion was not available when the preliminary plan was developed

Given the current situation, it would appear that there will be no significant new municipal well development which will potentially impact the Town of Hartford residents in the near future. In the much longer term, some potential impacts may occur. In order to address that issue generally for the entire Southeastern Wisconsin Region, the regional water supply plan includes recommendations related to the siting of all new high-capacity wells and for the analysis and monitoring of impacts of such wells in the shallow aquifer. These provisions specify the measures that should be taken in the early stages of locating sites for high capacity wells in the shallow aquifer to develop the necessary understanding of the

Mr. Dennis Gehring February 11, 2009 Page 2

hydrogeological system associated with each candidate site and its surrounding area and to assess the likelihood of impacts of proposed wells upon nearby existing wells and surface waterbodies. Where appropriate, changes in well locations, operating procedures, and other mitigation actions are recommended to avoid any significant impacts. These components also provide for monitoring of water levels in the vicinity of new high capacity wells in the shallow aquifer, both during the test well phase of placement and during operation of the well.

We hope this responds to your questions. Should you have any other concerns or questions, please do not hesitate to call or write. Thank you for your interest in the regional water supply planning program.

Kenneth R. Yunker, P.E. Executive Director

KRY/RPB/pk #142804 V1 - RWSP GEHRING LTR

Mr. Gary Koppelberger, City of Hartford

bcc: Joseph E. Boxhorn Nancy M. Anderson From: lolson4@co.walworth.wi.us [mailto:lolson4@co.walworth.wi.us] Sent: Wednesday, February 04, 2009 9:02 AM

To: Korb, Gary K.

Cc: mcotter@co.walworth.wi.us; jdougla1@co.walworth.wi.us Subject: Fw: Feb 10 County Board referrals

Please forward this onto the appropriate people at SEWRPC, would like a response to this prior to our LCC Meeting on

Louise Olson, Deputy Director/ LURM Dept. 100 W. Walworth Street PO Box 1001 Elkhorn, WI 53121

Telephone # 262/741-7912

Fax # 262/741-4973 ----- Forwarded by Louise A Olson/WALCO on 02/04/2009 09:00 AM ---

Michael P Cotter/WALCO

To Joeann Douglas/WALCO@WALCO, Louise A Olson/WALCO@WALCO

02/04/2009 08:39 AM

Subject Fw. Feb 10 County Board referrals

Could you please print a copy of this attachment for the LCC agenda?

Thanks

Michael P. Cotter Deputy Corporation Counsel/Director Land Use and Resource Management Department Post Office Box 1001 100 West Walworth Elkhorn, Wisconsin 53121 tel. 262.741.7915 fax.262.741.4974

----- Forwarded by Michael P Cotter/WALCO on 02/04/2009 08:39 AM Suzanne L Harrington/WALCO

To Michael P Cotter/WALCO@WALCO, Tammy Werblow/WALCO@WALCO

02/03/2009 04:05 PM

Subject Feb 10 County Board referrals

No explanation needed.

Suzanne Harrington, Administrative Assistant Walworth County Administration Office Post Office Box 1001 Elkhorn, WI 53121 mailto:sharring@co.walworth.wi.us 262.741.4357, phone 262.741.4390, facsimile

Biebel, Robert P

From: Sent:

Korb, Garv K.

Subject: Attachm

Wednesday, February 04, 2009 9:29 AM Biebel, Robert P.; Boxhorn, Joseph E. FW: Feb 10 County Board referrals Eucker Itr opposing SE Wis Regl water supply plan.pdf

Please see the attached letter, and note that Walworth County is seeking a response before 2/16.

Thanks, Gary



Administration

Memorandum

David A. Breth County Administrator

Kimberly Bushey, County Clerk To:

Suzanne Harrington Idministrative Assistant

Nancy Russell, County Board Chair

Tammy L. Werblow

Michael Cotter, Deputy Corporation Counsel Land Use and Resource Management Director

From: David A. Bretl, County Administrator

Date: February 3, 2009

C:

February 10 County Board Referrals to Committee

Please include the attached letter, referenced below, in the Clerk's list of communications received following agenda mailing for a referral to the county's land conservation committee. Thank you.

Letter from Butch Eucker concerning recommending disapproval of the Southeastern Wisconsin Regional Water Supply Planning Program Plans

DAB/sh Attachment

To: The Walworth County Board 100 N. Wisconsin Street Elkhorn, WI 53121



From: Butch Eucker N6637 Cty O, Elkhorn, WI Cell: 608-314-7867

Subject: Recommend Immediate Disapproval of Southeastern Wisconsin Regional Water Supply Planning Program Plans

Dear Ladies & Gentlemen;

On January 22nd, 2009, SEWRPC held a public hearing in Elkhorn to reveal their Regional Water Supply Plan for the year 2035. I attended that meeting and was shocked to learn of the specifics of that plan. I urgently recommend that Walworth County disapprove of this plan and reject all four alternative

Point #1: Taxation without representation. The plan is estimated to cost between \$170 and \$470 million dollars. SEWRPC is an appointed, non-elected, quasi-governmental organization that is not accountable to the public. This huge expense is taxation without representation.

Point #2: Poor Planning. The plan released to the public does not define a problem for Walworth County. The plan mentions wild assumptions about population growth & ground water problems in Walworth County. The plan mentions wild assumptions about population growth & ground water problems in Walworth County. When pressed about these assumptions, the main pitch man for the plan, Robert P. Biebel, could not provide any specifics. The plan calls for numerous municipal wells to be drilled in the shallow aquifer to depths of approximately 200 feet. Here is the technical truth: Virtually all private wells already draw this same water from this shallow aquifer. Why spent nearly \$1/2 Billion to install municipal systems when the taxpayers of SE Wisconsin already have paid-for, private well systems in place to perform this exact task?

Point #3: Deceptive Procedures. SEWRPC is not interested in gaining input, nor coordinating with the general public. The public hearings were poorly advertised, not communicated with local levels of government, nor is the public comment period seriously considered. Public comment is due to close on February 9th, 2009, just 2 weeks after the hearing. The advertisements in the Shopper were very small fonts, and seriously looked like some telemarketing advertisement. Less than 10 people attended the Walworth County hearing. Public comments must be extremely specifically submitted to an obscure addressee or these comments are disregarded. SEWRPC is out of control, and appears to be self-serving. This study reportedly be above to require for 3 wors to self-footofed. Like the serving for the self-serving in the study reportedly has been ongoing for 3 years at a self-reported cost of \$900,000. I bet the actual cost is 2 or 3 times that amount when considering staff time, public service retirement plans, & engineering studies.

I admit that I have a vested interest in this plan. I am a well driller and pump installer. I earn a living by working on private water wells in 7 SE Wisconsin Counties. But, I am also a taxpayer and advocate for small government. Currently, there is no need for municipal water throughout every urbanized area in Walworth County. Walworth County has some of the very best groundwater supplies for both quantity and quality in the entire world. If our current ground water supply were so bad, why would this expensive plan call for municipal systems to use this same exact source: the shallow aquifer? This same reasoning was used to convert Pell Lake a few years back at a cost of \$30,000 to over \$50,000 per household. Why slam homeowners with this huge bill and 40-year liens if there is no problem?

I strongly urge you, the Walworth County Board, to act immediately this week and disapprove this plan Your disapproval must come this week. The written plan needs to be stopped from moving forward. Private wells are doing the work this plan proposes for NO COST. Why spend \$470 million tax dollars to "fix" a problem that does not exist?

Sincerely,

Butil Eups

SOUTHEASTERN WISCONSIN REGIONAL PLANNING

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•



February 9, 2009

Ms. Louise A. Olson Deputy Director Walworth County Land Use and Resource Management Department 100 W. Walworth Street P.O. Box 1001 Elkhorn, WI 53121-1001

Dear Ms. Olson

This is to respond to your February 4, 2009, e-mail requesting that the Commission staff respond to issues raised by Mr. Darrell "Butch" Eucker regarding the preliminary recommended regional water supply plan which is the subject of an ongoing public informational program. The public input received will be used to modify the preliminary plan to form a recommended water supply plan for somtheastern Wisconsin. The response you requested is included in the following paragraphs which are listed to correspond to the "points" raised by Mr. Eucker.

Point #1: Taxation without Representation. The recommended regional water supply plan is an advisory plan which will be certified to Walworth County and to the general-purpose units of government involved in the County at such time as the plan is completed. That is expected to occur in about June of this year after the preliminary plan is modified to reflect public comment and the plan implementation steps are completed. The County and the general-purpose units of government will be asked to endorse the plan as a guide for local-level water supply system planning and implementation. However, the plan will have no

The decision to develop the recommended water supply facilities over time and in an incremental fashion through the year 2035 will rest entirely upon the local units of government and the related utilities. Thus, no costs will be incurred by anyone unless projects to expand the water utilities are directed and carried out by the communities and their related utilities which are governed by elected officials. In this regard, it should be noted that the vast majority of the costs involved in Walworth County and the Region are should be hoted that the vast imaginary of the costs involved in Walvorth County and the Region are needed for the expansion of existing water supply systems to serve the expanded urban land area and population expected by 2035 in a manner consistent with the regional land use plan. In Walworth County, about 85 percent of the estimated \$28.7 million capital cost of the preliminary regional water supply plan is needed for this purpose. The remainder is for the potential future provision of new municipal systems to serve existing development currently served by private wells, if those wells develop quality or quantity problems and the local government concerned determines that a new municipal system is the best solution to the problem. As noted below, these costs may or may not actually be needed. However, in order to present a plan based upon the potential future needed water supply, the impacts and costs associated with the potential future conversion of selected areas to municipal systems are included. In this regard, it should be noted that there is typically a local area-by-area individual survey or similar action which needs a consensus of affected landowners before proceeding with more detailed implementation actions to develop a municipal water supply system.

Point #2: Poor Planning. The preliminary regional water supply plan does not indicate that there are significant groundwater problems in Walworth County. The opposite is true, in that the plan concludes that the groundwater supplies were found to be adequate to serve the County to 2035 and beyond. As previously noted, the majority of the new water supply facilities recommended in Walworth County are for an orderly expansion of the existing systems to serve development expected in the County. The regional land use plan envisions a population growth of from 98,500 persons in 2005 to 140,000 persons in 2035. Urban land is expected to increase from 71 to 84 square miles, or by 18 percent, from the year 2000 to the year 2035.

Perhaps Mr. Eucker's comment that the preliminary plan implies groundwater problems exist refers to the plan recommendations related to selected areas which are currently developed with lot sizes less than one acre served by private wells. No known problems exist in these areas which include the following:

- Town of Lyons sewer service area,
- The urban development around Delavan Lake, and
- The urban development around Potter Lake

For these areas, the preliminary plan has concluded that there is a <u>potential</u> future need for a municipal water supply system in the long-term should groundwater quality or quantity problems develop. Thus, the areas were designated as potential future municipal water supply service areas in order to assess the demands, added supply sources needed, and the effectiveness of the Regional and County supply system if such municipal systems were developed. However, the plan very specifically indicates that the development of such systems would only be envisioned if a local demonstrated need arose based upon groundwater quality or quantity and, if a local initiative was then undertaken to implement a municipal system. As previously noted, such a local initiative typically includes, and is dependent upon, a survey or other method of assessing to determine if the majority of the residents in a given area favor such actions

The plan very specifically indicates that implementation of municipal systems in areas now served by private wells would be based only upon a local initiative, and in the absence of such a need and initiative, the residents and businesses in these areas would remain on individual wells indefinitely. The subsequent development of such systems by the local units of government involved includes extensive local planning and public input steps prior to the development. Thus, no one is expected to be forced to spend money needlessly for a municipal water supply system. In developing revisions to the preliminary plan, consideration will be given to enhancing and clarifying this element to note more explicitly the need for local-level support prior to implementation based upon local concerns.

Point #3: Deceptive Procedures. The public informational meetings were announced through a newsletter Foint 25: Deceptive Procedures. In epublic informational meetings were announced involged a newsetter describing the preliminary plan which was sent to about 2,000 interested parties, including one or more representatives of all of the general-purpose units of government in Walworth County. The hearings were also advertized in 13 newspapers, including the Milwaukee Journal-Sentinel and the CSI Publications community mewspapers which serve Walworth County. The public informational meetings were also announced on the SEWRPC website. In total, about 160 people attended the public informational meetings and about 50 written comments have been received to date. The Commission staff has also made informational presentations to over 90 interested groups on the plan, including the Walworth

Ms. Louise A. Olson February 9, 2009 Page 3

County Intergovernmental Coordinating Council. Finally, in response to requests from several groups, the public comment period has been extended to March 16, 2009. As previously noted, local-level planning for the development of municipal water supply systems would be expected to include, and be dependent upon, local-level consensus

We trust this responds to your request. Should you need anything further, please do not hesitate to

Sincerely.

Kenneth R. Yunker, P.E. Executive Director

KRY/RPB/pk #142744 V1 - RWSP OLSON LETTER

cc: Mr. Michael P. Cotter, Walworth County

Kenneth R. Yunker Philip C. Evenson William J. Stauber Joseph E. Boxhorn Gary K. Korb Gary L. Carr

Robert Biebel, SEWRPC P.O. Box 1607, Waukesha WI 53187

Feb. 4, 2009

Comments on Regional Water Supply Plan for Southeastern Wisconsin, specifically Subalternative Plan 2

Map 8 in Newsletter 3 is not really clear in defining Options 1-4, but I would favor taking the return flow from the City of Waukesha beyond the (apparent) Underwood Creek location at the Milwaukee-Waukesha County line. Without exact knowledge of the comparison between present flow conditions and the conditions after putting Waukesha's return flow into the Creek, it would seem to be troublesome to the present conditions of such a small river because of the probability of flooding and/or other ecological problems. Returning the water to (at least) the Menomonee River in Wauwatosa seems to be a better plan—and even better all the way to Lake Michigan. If the City of Waukesha is prepared to finance getting water all the way from the Lake, it should be able to return it all the way to Lake.

A problem not addressed in the Newsletter is the probable expansion of the City of Waukesha to the west and south. If the City has expansion plans it can only go in those directions, and it has consistently stated that it needs much more water in the future than SEWRPC estimates. The City has stated that it may need more wells and it will site them somewhere west of the City. If the City should further annex into the Towns of Genesee and/or Vernon and/or Mukwonago would this not constitute a violation of the Great Lakes Compact? It would at least violate the spirit of the Compact. Any agreements made by the City with other municipalities should include some limitation on expansion. This issue should be addressed in future refinements of the water supply olans. water supply plans

The City of Waukesha has received recognition for its water conservation efforts, and I see it is planning a reduction in the point at which a residential user incurs a higher cost. This is a good refinement of the procedure, but a glaring exception is that commercial users don't "participate"; they apparently get the same rate no matter how much they use. This is not fair to residential users. The City has reduced overall use since they put in the present cost structure-leading me to wonder again why it plans for at least twice its present usage.

The plan rightly calls for protection of groundwater recharge areas. I would hope for some sort of requirements that these areas be protected, since the municipalities sometimes put undesireable developments in them. But, of course, 'SEWRPC is only advisory.'

Russel C. Evans S19 W29051 Cambria Road Waukesha Wi 53188 (Town of Genesee) revans@cc.edu cc: City of Waukesha

マニュダ質用 1EB - 3 2009

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

Name Richard + BONDie NAUSEDA Aftitisation CAMP LAKE GARDENS

Mailing Address 1405 271st. Ave. TREVER, W. 53179

· Why weren + Residents inFormed

Comment By Phone or ever sletter of this ternsition?

· How much is this coins to Cost (IF AUYTHING) the Residents? · Are the Residents Responsible

FUR the costs of Hook-up to city water? · Why chit we use our coun well aske? How Long has this profosal been in the works?

· What happens to our ExistiNG wells + WATER SYSTEMS ? WHY WASN'T ANYONE NotiFied except Politicians + Construction

Companies?

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

Why does it seem that ILCINOis AND Chicago Politics has been ADOPTED By trying to slipe this PROPOSAL UNDER the TABLE without giving the people much, if any, say so in the decisions ?

TE this UP FOR AUOTE this indivious L votes.

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

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Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

> Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> > Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

> > > Thank you.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

FEB - 6 2009 S WI

January 21, 2009 Washington County Fair Park Pavilion, Room 112

3000 County Highway PV Town of Polk, Wisconsin

Name STEVE MUSINSKY JR. Affiliation TOWN OF HARTFORD RESIDENT Mailing Address 3328 LAKE DR. HARTFORD, WI, 53027

SEE ATTACHED PAGES. Comment

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

> Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> > Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

January 28, 2009 3328 Lake Drive Hartford, WI. 53027

Comments:

SEWRPC Regional Water Supply Plan Public Information Meeting Washington County Fair Park Pavilion January 21, 2009

Planning objectives:

I can understand why the plan would place "support of existing land use patterns" as objective 1, as land use planning and development is the domain of municipalities and not SEWRPC. However, placing supporting land use as a first priority does seem to add credibility to the argument that such a plan rewards bad land use planning. Rather than doing development where the needed resources are, all too many developments seem to be done where the developer can find least cost land, or because a municipality wants a type of development. Then we spend a fortune in tax money to try to make the needs of the development sustainable. It seems the objectives should have been, 1-public health and safety, 2-conservation, 3-support land use plans, 4-economics, and 5-responsive. Thirty years ago, people in Waukesha were saying continued development would result in ground water shortages and expensive to fix problems. I think we're there.

Reduction in ground water base flows:

In 1991, STH 60 between Hartford and USH 41 was a 2 lane road, and salt use seemed limited. Today, highway 60 is a 5 lane road, frequently well salted. Even the Town of Hartford seems to be using more salt on Town roads every year. We live on the west side of Pike Lake and have watched the chloride levels in our well increase 4 fold since 1991. Numerous springs which use to dot our shoreline have disappeared in recent years, and lake levels seem to drop more each year during dry periods. Further, town officials have been reluctant to pass ordinances banning the use of phosphorus containing lawn fertilizers despite growing algae and weed growth in Pike Lake and the Rubicon river. On the east side of the lake, Pike Lake State Park continues to have problems with e coli bacteria contamination and "swimmers itch" at its public beach resulting in beach closings.

Will a 4.5% reduction in groundwater base flows add to all these increasing problems? Is there a

tipping point where reduced base flows will allow or cause these kinds of problems to get exponentially worse? Since the report includes "make up" water from the Slinger sewage treatment plant, I suspect these problems could get worse when sewage is bypassed around the treatment plant during a major rain event. It's hard to believe the proposed plan can adequately ensure water quality without additional study or controls, such as a road salt or sewage treatment/storm water management plan of some kind. I think the final recommended plan should include a recommendation to study and formulate a road salt management plan, and a recommendation to study and formulate a management plan to ensure water quality in the event of a major rain event such as June 2008.

Groundwater level impacts of the preliminary plan:

An average drawdown by county of 2 feet of less does not seem significant, but a 71 foot localized drawdown would seem to be able to dry up the average residential well in this area. Are costs to drill new wells, or provide water service to affected residents without annexation part of the projected costs?

Water softener savings:

At the meeting, water softener savings were characterized as "salt cost savings". Shouldn't this savings be offset by the plant loss experienced by residents abandoning functioning water softener or filtration systems?

Conservation:

Although we live in an area blessed with fresh water resources, it seems water conservation measures should be part of the plan. I see the item mentioned in the report summary, but do not see any details about how this is to be accomplished or encouraged.

Thanks for the opportunity to comment.

Steve Musinsky

From: Sent:

cursin6
Saturday, February 07, 2009 11:26 AM
Boxhorn, Joseph E.
Comment from Regional Water Supply Study Website Form

Submitted: 2/7/2009 11:09:33 AM

Organization:

PO Box/Street: 11507 207th Ave.

City: Trevor
State: WI
Zip: 53179
Phone:

Comments: I object to the plan on the basis that this would affect our communities that are now stressed by the bad economic times. Many people have lost jobs, are being forclosed on, and can't pay the bills they have now. Our water, as is, nas worked fine in the past, even during severe droughts. This plan would increase our financial burden. Development would have negative impact

impact on our wetlands, which I believe restore our water supplies naturally. I feel future developers should be required to pay for and implement suggestions in the plan to minimize affects on our area. I feel it would in our best interest to evaluate each site on an individual basis. I believe this would be better served by our local building and zoning commissions following recommendations described in the plan. I do not see the need or the urgency to implement this plan in these rough economic times

From: Kkort
Sent: Sunday, February 08, 2009 5:33 PM
To: Boxhorn, Joseph E.
Subject: Comment from Regional Water Supply Study Website Form

Submitted: 2/8/2009 5:30:06 PM Name: kathy kor

Organization: PO Box/Street; 2730 willow point dr City: delavan

Zip: 53115

Comments: I am opposed to changing from private wells to municipal wells. I do not believe this is in the best interests of property owners who would bear the costs of this particularly in a time where property values are decreasing and families are dealing with difficult economic decisions.

From: Gary Muskrat Sent: Monday, February 09, 2009 2:38 PM To: Biebel, Robert P. Subject: Walworth Co. Sunday Shopper

Feb. 9, 2009

Attn: Mr. Robert Biebel, Chief Engineer

Dear Mr. Biebel

A political attact letter regarding the 2035 plan was published in the Sunday Shopper, page 9A yesterday.

A political attact tetter regarding the 2003 pital was published in the oatmay snopper, page 7rx yearday. The letter was composed by Butch Euker of Elkhorn. This person is a well driller and the general public may not perceive the motive which has caused this individual to make these charges.

He claims that SEWRPC wasted \$900,000 of the taxpayers money over a 3-year study to develop this plan that the taxpayers cannot afford. For the seven county area, that divides out to roughly \$130,000 per county. Just one mistake in the location of a water supply system could result in millions of dollars wasted. This is why long range planning is needed to carefully determine population projections and groundwater quality and quantity must come first. Not long ago I was told that Jay Mfg. Co. spent \$60,000 on their private we'll in the hamlet of Lyons, only to later move out and relocate in the industrial park in Elkhorn. Also one of the local businesses just spent \$30,000 to have their private well refurbished. This is a fraction of the cost per home upfront that would be assessed for municipal water that is now available to Lyons residents. Also another downfall for private wells is that once the well is completed, nothing is ever tested again until the home is sold, or someone becomes sick from bacteria or chemical infiltration.

I am hoping that you people can/will respond to these allegations, and this person claims he is carrying his attact to the Walworth Co. Board, asking them to reject the plan.

If you so desire, you may edit this letter and use it to support the plan, or if you would like, I will send it a letter to the Shopper myself. Also please have one of your staff add my name to your e-mail list. Even though I am retired, I will certainly attend public hearings when I am available if I am aware of the placed, dates, and

In closing I would like to thank you and the entire staff for all the hard work that SEWRPC has performed over the past several years. Your credibility has been established as a result of honesty and unbiased approach toward all the electorate in this seven county area.

Gary L. Carr cell (262) 758-1107 e-mail yragrat@yahoo.com 1493 Park St. Burlington, WI,53105

From: Biebel, Robert P.

Sent: Monday, February 09, 2009 2:50 PM

Subject: RE: Walworth Co. Sunday Shopper

Lappreciate your interest. We are sending a letter to the County staff for the supervisors responding to Butch' comments. I will copy you on it.

krillja Monday, February 09, 2009 4:47 AM Boxhorn, Joseph E. d: Comment from Regional Water Supply Study Website Form Subject:

Submitted: 2/9/2009 4:41:13 AM

Organization: PO Box/Street: 2141 Blue Heron dr City: delavan State: WI Zip: 53115

Comments: While I don't doubt the need for planning and developing a regional water strategy. the cost and control of the water resource should not eliminate the use of private wells in rural or semi- rural areas where the wells are found to be of high quality and the demands for water are stable or increasing only moderately

Monday, February 09, 2009 7:33 AM
Boxhorn, Joseph E.

: Comment from Regional Water Supply Study Website Form

Submitted: 2/9/2009 7:27:53 AM Name: Ross Bilelio

Organization: PO Box/Street: City: Delavan State: WI

State: WI
Zip: 53115
Phone:
Comments: This plan is way to costly,This seems to be a done deal before the pulic gets involved,
taxation without representation. I see no evidence that shows that there is any problems, with our

gcasper Monday, February 09, 2009 9:09 AM Sent:

Boxhorn, Joseph E Comment from Regional Water Supply Study Website Form Subject

Submitted: 2/9/2009 8:56:54 AM

Organization: Univ. Wisc.-Milwaukee Field Station PO Box/Street: PO Box 375

City: Slinger Zip: 53086 Phone:

Comments: The Plan does not address environmental impacts to water dependant natural Comments: The Plan does not address environmental impacts to water dependant natural resources. These resources include fish and wildlife habitat, aquatic Endangered, Threatened, and Special Concern species, and state and regional Natural Areas and Critical Species Habitat Areas. Analysis of these environmental impacts in each alternative analysis is needed. An environmental impact statement is needed if alternatives are reasonably expected to impact Endangered and Threatened Species, such as would be the case with the expected reduced baseflow in streams supporting protected fishes, mussels, and turtles.

butch.eucker Monday, February 09, 2009 9:26 AM Boxhorn, Joseph E. Sent:

Comment from Regional Water Supply Study Website Form

Submitted: 2/9/2009 8:42:32 AM

Name: Butch Eucke

Organization: self Organization: sen PO Box/Street: N6637 County O City: Elkhorn, State: WI Zip: 53121

Phone: Comments: After more investigation into this plan, it needs to be rejected immediately. Here's

Phone:
Comments: After more investigation into this plan, it needs to be rejected immediately. Here's why: 1. Wrong Assumptions: a. Population growth estimates are way too high. The high taxes of Wisconsin are driving businesses and jobs out of Wisconsin fast. Harley, GM, Quad-Graphics, etc are cutting jobs fast. b. Water loss estimates at only 11%. According to Miya, a company whose expertise is directed toward helping cities reduce water loss, estimates that nearly 1/3 of water is lost through water systems. Why push big, inefficient, systems when private wells are extremely efficient? c. The assumption that "dry spells" will affect private wells, thus we need municipal wells. This assumption does not make sense. If dry spells will affect private wells in the shallow aquifer, why push municipal wells in this same shallow aquifer? Does not make sense. This reasoning is not logical? 2. The cost estimates of this plan are outright misleading. The estimates presented are \$14 to \$80 per capitia. Per Month? For how long? 40-years? What does this cost cover? I suspect his cost is only for the actual cost of the water mains. The real costs include hidden costs of laterals, special assessments, water treatment, curb, gutter, road repair, repaying sto, etc. Pell Lake converted to municipal water a few years ago in Walworth County. Some residents had to get 40-year loans to pay for the infrastructure. And then there is the monthly minimum charge. Water your lawn, get really charged. This plan is misleading. Private wells, which are virtually alp aid for by homeowners, cost approximately \$4 per month in electricity to run the pump. Monthly water bills in nearly every district is much higher. 3. This plan had not been debated in any kind of mature setting. The council listed on this website is made up of big government types, water utility officials, and SEWRPC employees. All have a vested interest in government expansion. In my opinion, this plan had a predetermined outcome before the study was ever started. This study a

sgraff Monday, February 09, 2009 11:02 AM Sent:

Boxhorn, Joseph E.
Comment from Regional Water Supply Study Website Form Subject:

Submitted: 2/9/2009 10:50:28 AM

Name: Shawn Graff

Organization: The Ozaukee Washington Land Trust, Inc. PO Box/Street: PO Box 917 City: West Bend State: WI Zip: 53095 Phone:

Phone:

Comments: The Ozaukee Washington Land Trust, Inc. is a non-profit organization that protects Comments: The Ozaukee Washington Land Trust, Inc. is a non-profit organization that protects land and water resources in our two county area. I have reviewed sections of this report with some of our expert volunteers and would like to make the following recommendations: 1) We would like to recommend that additional activities should be considered to reduce Ozaukee County's shallow groundwater withdrawals including the shallow aquifer recharge facilities that are part of Alternative Plan 3. Additional facilities of this kind should be incorporated into long-term stormwater management planning. We believe reducing the reliance of northern Ozaukee County communities on groundwater benefits the County as a whole. 2) In addition, the Plan does not address environmental impacts to water dependent natural resources such as Natural Areas, Critical Species Habitat, fish and wildlife habitat, endangered, threatened and special concern species. Analysis of these environmental impacts are needed if alternatives are reasonably expected to have an impact. expected to have an impact.

From: Biebel, Robert P.

Sent: Monday, February 09, 2009 11:41 AM

Boxhorn, Joseph E

Subject: FW: Comment about the Regional Water Supply Study

From: Craig and Judi Mahlum Sent: Monday, February 09, 2009 9:39 AM To: Biebel, Robert P.

Subject: Comment about the Regional Water Supply Study

MY WELL WORKS JUST FINE WHY SHOULD WE BUILD BIGGER ONES JUST TO REPLACE ONES THAT ARE EXISTING. I DO NOT WANT TO PAY HIGHER WATER BIULLS

Biebel, Robert P. Monday, February 09, 2009 11:41 AM Boxhorn, Joseph E. tt: FW: Regional Water Supply Comments

From: Jason Schroeder Sent: Monday, February 09, 2009 11:28 AM To: Biebel, Robert P Subject: Regional Water Supply Comments

Table 4 from the December 2008 Newsletter lists West Bend, Jackson, and Slinger as having adequate existing sources of water supply. The aquifer simulation model produced by USGS shows potentially substantial reductions in baseflow (greater than 10 percent) in headwater streams in and around these communities. At first thought, 10 percent might not sound like a substantial reduction in baseflow, however, the map and data produced for the report does not allow for more detailed analysis.

If baseflow in these areas were to be reduced by 80, 50, or even 20 percent, we would most assuredly want to opt for other solutions rather than depleting these surface aquifers in important headwater stream communities. The loss of cooler groundwater means a warmer river less suitable to certain species in an already damaged ecosystem as a result from urban development. If aquifer drawdown, in these areas were to reach higher proportions as stated (up to 71 feet drawdown), this would have drastic implications for these headwater streams and on the downstream communities, namely Cedar Creek and the Milwaukee River. Headwater streams provide critical habitat for sowning fish and provide a source of cool water to help regulate warmer temperatures in the main channel of the Milwaukee River. Depleting these reserves will have a twofold impact: 1) there will be less water in these streams available for aquatic habitat and 2) less cott water will be available to regulate the increase of warmer wastewater effluent added to the Milwaukee River due to the increase in development.

Further complicating this scenario is the fact that it appears a majority of the high and very high recharge areas in the Quaas Creek watershed and Jackson areas are not protected through the 2035 land use plan. As development continues, this will further exacerbate the loss of surface water and create potential flooding problems. As recharge areas are paved over from development, this will result in further decrease in baseflow. The siting of a municipal well in the Quaas Creek watershed along with additional wells in Slinger and Jackson seems like poor planning especially with future development causing the loss of groundwater recharge areas and critical habitat, and a reduction in baseflow.

Without a more detailed analysis of this region, the ability to sustain groundwater supplies without having a negative effect on surface water bodies remains in question. If this analysis has already been performed, it should be made a major part of the final report as substantial changes in water quality to this region are possible. If a detailed analysis of this region has not been performed, further studies should be conducted so that proper management of this important headwater region for the Milwaukee River can occur.

Sincerely, Jason Schroeder

From: shirleym26

Sent: Monday, February 09, 2009 1:23 PM
To: Boxhorn, Joseph E.
Subject: Comment from Regional Water Supply Study Website Form

Submitted: 2/9/2009 1:16:23 PM Name: Sirley Mielke

Organization: retired PO Box/Street: 279 Mielke Lane City: Williams Bay State: WI

State: WI
Zip: 53191
Phone:
Comments: I have just heard of the sewer study at hand...I am a widow on fixed income with a 3
year old septic system that is in great shape and doesn't need fixing! My neighbors also have no
need for a new system that will cost way too much money, when there is no way I can afford such
a change. How come we were not notified by mail of this program? Plow come shat notice lnow
have is so short? Will there be a chance for residents to vote on such a plan? Thank you

alphaequip Monday, February 09, 2009 2:39 PM Boxhorn, Joseph E. t: Comment from Regional Water Supply Study Website Form

Submitted: 2/9/2009 2:01:39 PM

Name: Robert Hoekstra

Organization PO Box/Street: 1647 Mound Road City: Delavan State: WI Zip: 53115 Phone:

Zip: 53115
Phone:
Comments: My name is Robert Hoekstra and I live 2 streets back from Delavan Lake. I read a letter to the editor this weekend about a water plan for Walworth County. Wow! What are you guys thinking. I had no idea there was such a plan out there. I have lived in the Delavan Lake area all my life. Finally, when I could afford it, I moved my family into a nice home in the Town of Delavan. Our well works great! About 20 years ago the powers that be brought sewers through and kept our wells because the water is so nice here. I have no iron in my water and it tastes great. Now I read about a plan to put city water thu: That is crazy. I checked out the plan. There is no way the population will nearly double here in Walworth County. I work in landscaping, and business is way down. It will take years to get this economy going again. I am angry that no one mentioned this plan sooner than now. Are our elected officials asleep at the wheel? Who is going to pay for this? I am not. I like my well. It is paid for, and it works great. Why would I want to pay big money to get city water all around the lake? From what I hear, the big wells would be about the same as our private wells, only bigger around. Why do that? Lastly, who is doing this planning there at SWERPC? Seems to me like those folks are not talking to the common people. All you folks seem to want to do is make us pay more to help Milwaukee. A few years ago they had bad water problems where many people got sick. SEWRPC should fix the problem sewers in Milwaukee and leave us alone out here in the country. Milwaukee dumps alot of raw sewage into the lake each big rain. Fix that first. We are fine out here. Please scap this plan, and stick to Milwaukee

From: rthompson

Sent:

Monday, February 09, 2009 7:37 PM
Boxhorn, Joseph E.
Comment from Regional Water Supply Study Website Form Subject:

Submitted: 2/9/2009 7:30:26 PM Name: Randall Thompson

Organization: PO Box/Street: W5724 Bonner Lane City: Walworth State: WI Zip: 53184

2Ip: 53184
Phone:
Comments: I live in the Township of Walworth and have a well and septic which are both efficient and effective. Our 176' sand bottom well produces very clean, pure water. This proposed plan seems under researched and expensive. Can you gaurantee that municiple water will be better for my family and more cost effective and cleaner than the system we are currently using? I would like to see better research and alternatives, including a no change alternative, before any additional dollars are spent.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN



January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

Name Killy	Rock.
	repetly nunet in Paddlock Lake + Salem
Mailing Address	
	4720 S Beaumont Aux. Kansasville WI 53139 Page 1 of 3
Comment	- First of all, I um not for putting municipal
	Wills all over Kinosha County. This is more government
	owning and telling as citizens what to do Dwning.
	up your well is the ownery one of the last utilities in your life. The well owner can regulate how much
	they want to use to a well is properly muntioned it will be cheeper in the end than the intentional
	payment of municipal water with laterals and
	water mainly and also no association with a water
	bella This expecially since the area is ulassady
	populated and pulling such a super system in
Add sheets as no	eeded and leave at the registration table or give to a SEWRPC staff member. Or, send by

Southeastern Wisconsin Regional Planning Commission

W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

February 9, 2009, to:

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

page 2 ot s

will execte financial hardships for everyone This is also a bad idea since these wills are going to be the shallow wills where many of the homeowners may have their well Ferninated How is this changing anything? is to line them their own porbet. Is it to put houses in even closer? To maximize more space with developments but then in turn use twee twice or three times the amount of wales. Developments have gone on in Kinosha Country for years with the use of gueste wells. It still can go on I relieve with all these municipal wills the landscape starts looking like Northers Illinois. I believe many people moved away from that to locate in Southeastern Wisconsin-If people are stressing we need fix hydrants, I don't buy that as one either I have experienced a fire first band, I have you through a house feel. Her peri hydrants will make it easier for the fire departments to hook hoses on and may or may not be able to put out a few. First of all the fire departments need to get there and then they need to wait for the Chief Engineer before any

water can be sprayed on anything

page 3 of 3

had is bearing, trugthing mes must be coordinated first. This all takes time. If coordinated first. This all takes kms. If
they do get to put the fine out-everything
is damaged and useless from water
damage. It esn't pretty either ways
This hydrants in front of my house
would not have saver seved it. The fire
department did put the fire out but the
house was still a total loss.
One last thing, if putting all these
wells in is support to help with water
recovery, how is this support to change
how much water people already use and waste.
Instead of muching residents angue and
put them through handships - wouldn't
time, energy and morning be more useful
temes, energy and morning he more useful
temes, energy everyone about water consensation?
Americans have more fush water available Americans have more just wales available to them than most of the world, and we waite the most. Wouldn't education be more helpful so we don't continue to patter with our fresh water supply?

I am person positive that our water supply will continue to be ion in person if anything other than "Conservation Education" is implemented!!!

worth4154 Wednesday, February 11, 2009 5:26 PM Boxhorn, Joseph E. Comment from Regional Water Supply Study Website Form

Submitted: 2/11/2009 5:21:07 PM Name: Leo Worth

Organization: Homeowner PO Box/Street: N7401 East Lakeshore Dr. City: Whitewater State: WI Zip: 53190

Comments: Walworth County should be excluded from your recommendation. We have metropolitan wells where needed now, and, rural areas are well served by private wells.



EGE!

FEB 2 7 2009

elephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

February 24, 2009

Mr. Kenneth R. Yunker Executive Director Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive Waukesha, WI 53187-1607

Comments in support of preliminary recommendation for the Southeastern Wisconsin Regional Water Supply Plan

Dear Mr. Yunker:

This letter is written on behalf of myself and the Waukesha Water Utility, to express our support of the preliminary recommendations of the Southeastern Wisconsin Regional Planning Commission (SEWRPC) regarding a Regional Supply Plan for Southeastern Wisconsin.

SEWRPC's recommendation of Subalternative 2 would have the City of Waukesha switching from groundwater to a Lake Michigan water supply, with return of the water to the lake after use Like SEWRPC, the utility believes that the use and recycling of lake water provides the most sustainable water supply, conserving both groundwater and surface water resources for future generations. A 2002 study for the Utility by experts of water supply options for the City reached a similar conclusion.

SEWRPC remarks that its plan is consistent with the Great Lakes-St. Lawrence River Basin Water Resources Compact and with Wisconsin's groundwater protection law. The Utility also notes that the recommendation meets the standards of 2007 Act 227, Wisconsin's new Compact implementation law, to protect public health while maximizing environmental benefits and

The City of Waukesha must find a new water supply soon. The deep aquifer that the City currently depends on has had severe drawdowns. Those drawdowns have been caused by years of overpumping by communities in southeastern Wisconsin (including Milwaukee until the 1950s). It is also due to a geological feature that limits the recharge of the aquifer from rain and snow in much of the region, including Milwaukee and castern Waukesha counties.

Mr. Kenneth R. Yunker February 24, 2009

Radium is only one of the growing water quality and quantity issues associated with the deep aquifer that Waukesha uses for its water supply. The City has obtained groundwater from some wells with total dissolved solids (TDS) at levels where it was necessary to abandon the lower portions of the well substantially reducing the well output. This trending of increasing TDS is consistent in the other wells in the system, further indicating the need to develop an alternative long term water supply

The Waukesha Water Utility, with around 19,000 customers, has invested approximately \$13.5 million to deal with radium in our drinking water (or more than \$700 per customer), allowing the City to currently meet the radium standards approximately eight months out of the year. Waukesha is legally required to fully comply with federal radium standards. The City is currently negotiating a final date for full compliance with the Wisconsin Department of Justice. At the same time, the City of Waukesha is leading the Midwest in water conservation, including adoption of a daytime sprinkling ban, the first conservation rates of any Wisconsin water utility, public education programs, toilet rebate programs and much more. Water use has dropped 11% in the past three years alone. This has resulted in a savings of almost 310,000,000 gallons in

Waukesha provides water that meets the Federal requirements for 8 months out of the year. This was accomplished by tapping into shallow groundwater south of the City by blending that water with non-compliant water and also by treating deep aquifer water to bring it into compliance. However, the long-term solution to radium and other contaminants, and to preserving the deep aquifer, is to obtain a new water supply.

For those reasons, the Waukesha Water Utility would like to express its appreciation for SEWRPC's extensive and thorough analysis of regional water supply alternatives. We also support the regional water supply plan recommendation that the utility switch its water supply to Lake Michigan, with return flow

Dan Wanes Daniel E. Warren Commission President Waukesha Water Utility

cc: Daniel S. Duchniak, P.E., General Manager, Waukesha Water Utility Mayor Larry Nelson, City of Waukesha City of Waukesha Common Council

RESOLUTION NO. 07 - 09

RESPONDING TO THE SEWRPC STUDY ON USE OF LAKE MICHIGAN WATER IN THE VILLAGE OF GERMANTOWN

WHEREAS, the Southeastern Wisconsin Regional Planning Commission investigated the water supply for this Region and its sustainability for existing and planned population and development; and

WHEREAS, the initial preferred plan recommends that the Village of Germantown shift its source of water from groundwater to Lake Michigan water for future domestic water supply through the year 2035; and

WHEREAS, SEWRPC has told the Village that this is only an advisory study that would require voluntary acceptance by the Village Board and an agreement with the City of Milwaukee Water Utility; and

WHEREAS, the Village of Germantown has been diligent in planning the future domestic water needs prior to the SEWRPC Study and has moved ahead with plans and construction to provide Village Residents with water supply extracted from shallow and/or deep wells within the

NOW, THEREFORE, BE IT RESOLVED, that the Village Board of the Village of Germantown, at this time, hereby declines to participate in the planning that would commit the Village of Germantown to acquire domestic water through the year 2035 from Lake Michigan as presented in the SEWRPC Study.

Introduced by: Trustee Vanderheiden

Adopted: February 16, 2009

Vote: Ayes: 8 Nays: 0 Absent:

Thomas Kempinski, Village President

ATTEST:

Elenated Granch Elizabeth Knaack, Village Clerk FEB 2 7 2009

From: jhoffnpuff Sent: Monday, March 02, 2009 10:00 AM To: Biebel, Robert P. Subject: Regional Water Supply Study

Dear Mr. Biebel,

I am writing in reference to the concerns over our regional water supply. I appreciate that the area wishes to maintain adequate and clean water supply to our southeastern wisconsin area. I was not able to attend your local meetings, so please excuse me if I express a concern you have addressed.

In Kenosha County we have a Waste Management facility that takes in hundreds of tons of garbage. I have been told that this facility is located over one of the largest aquifers in our regional area (possibly the midwest?) I do know that it is located next to a river. This immediate proximity to two bodies of water is of great concern.

I am concerned over the lack of oversight of the material being dumped into this I am concerned over the tack of oversignt of the material being dumped into this facility. I know that people will throw any and everything into their garbage. For example, the CFL (compact flourescent) bulbs that are such energy savers also have mercury in them. Though they have warnings about proper disposal - there is no facility in our area to properly 'recycle' this material. Hence, they go into the garbage. How much more are area businesses dumping into the garbage that is not monitored?

I have traveled past the location on a Sunday evening when they had machinery operating. What do you suppose they are doing on a Sunday evening that they perhaps do not want the DNR to know about?

I am opposed to limiting private wells, I see no advantage to limiting private water rights, unless you are a municipality trying to gain as much revenue as possible. Will you soon charge a clean air surcharge for breathing?

In short, while you are considering limiting private wells, I think you would be better advised to watch what we are doing to our future. If you took as much interest in actually providing clean water (keeping our water clean) as you do in charging potential consumers, we would have a better future.

Christy Hoff 5127 - 22nd Street Kenosha, WI 53144



Opar Sir: 3-14-9 I wholly agree with Butch Eucher's assessment of the SEWRPC's proposal. In case of an unthinbable catastrophe we would be safer with "13,200 wells." also the cost of 132 wella is too much to bear. John Fedorovick John Fedorovich 232 Maxwell St



■ Lake Geneva WI 53147-1717



from the desk of ... **Dorothy Simes**

3-14-09

J. SEWRPC:

Vendore The Calcenn by Butch Eucker from Elkhorn to voice my surpose in the regative to this water. plan you propose! Capecially during this down then in our slowing how Could you plan such an expensive plan when it is not improving our water supply at all! It water supply at well line fust seems it will line Someone else's fackets but not benefit the las pages one bit! TVOTE NO!!! Doesthy Simen 6 % 4th ave. Elekorn SH 53121

MARCH 14 2009

SEWRPC PO BON 1607 Wankula , Sti 53187-1607

This is to naice and Concern with the plan for a new municipal mater system in Halmorth County. He know there are Counties that do now on can have mater problems. But Walworth Caunty is not one of them. The are the around of a well one our property. It is a good, deep well with no Speakenes with and water. sucht for inon- mubich me have a little system for that. He not mess with things that are not broken! Who, this eronomic Clipmed and afford enew a study? The County is straped for funda more - and the taxes are autragions as it is. Stay and of Set.

S. Lichen. - La Grange, Wie .

mukappa Saturday, March 14, 2009 1:40 PM Boxhorn, Joseph E. Comment from Regional Water Supply Study Website Form

Submitted: 3/14/2009 1:32:51 PM Name: Perry Bradford

Organization:

Organization:
PO Box/Street: 301 Circle Drive
City: Williams Bay
State: WI
Zip: 53191
Phone:
Comments: To whom it may concern: In reviewing this study as a taxpayer in Walworth County I
want to voice that I do not approve of the plan. From all I can see the cost involved in this plan
looks as if it will be passed on to the taxpayer and I am against such a plan. I see technical
problems related to this plan as well as the fact that Lake Mi water treatment plants are operating
poly at 50 percent of canactic So. I'm writing to voice my objection to this plan. only at 50 percent of capacity. So...I'm writing to voice my objection to this plan.

From: Jim Thometz Sent: Saturday, March 14, 2009 6:04 PM To: Biebel, Robert P. Subject: water plan proposal

Hello, My name is Jim Thometz and I reside at N2647 Forest Drive in Lake Geneva, Wisconsin.

I am writing this letter regarding the SEWRPC water plan proposal currently under consideration. I understand this plan is only advisory at this time however, I want to go on record that I am against such a plan.

record that I am against such a plan. Not only is such a plan cost profibilitive but it is not necessary and would only prove to spur further development at the cost of current tax payers. Visionary planners understand that high density development and population growth result in greater needs for resources such as: schools, police, fire, roads, traffic, infrastructure, social services, etc... This ultimately leads to higher property taxes not only to support such a project but also to the future tax base as services out-weigh tax roles.

Please advise against such a plan - there is no real justification and it is not necessary - in fact it can be a detriment to our area.

Sincerely, Jim Thometz

From: thek-team

Saturday, March 14, 2009 7:06 PM Sent:

Boxhorn, Joseph E

Subject: Comment from Regional Water Supply Study Website Form

Submitted: 3/14/2009 7:04:04 PM Name: Richard Krutzik

Organization: homeowner/taxpayer PO Box/Street: 108 Elm Street City: ELKHORN State: WI

Zip: 53121

Comments: I do not feel that Walworth county needs this program. I am against spending money to expand the reach of the Regional water group. There is no need to replace the existing water system

From: Gerald K Hartlaub

From: Gerald K Hartlaub Sent: Saturday, March 14, 2009 7:48 PM To: Biebel, Robert P. Subject: Water-plan Walworth County

Mr Robert Biebel, Special Project Engineer

In your report you made a project of 15% increase in population for the region. If the population of Walworth County increase by 15% we are looking at about an increase of 15,000 people. How can you justify this kind of expense for Walworth County?

If Lake Michigan water - existing treatment plants are at less than 50% of capacity why not use

There doesn't seem to be much data on Walworth County yet you are suggesting Municipal Wells for the County.

Thank you for you time on this matter.

Jerry Hartlaub

March 15, 2009

To whom it may concern:

I am sending this letter to inform those that members of teh SEWRC that I strongly oppose the water municipality. Please vote no to the water municipality

Melody Brown W5635 Canary RD Elkhorn WI 53121

Worldber

March 15, 2009

To whom it may concern:

I am sending this letter to inform the members of South Eastern Regional Planning Corumissions SEWRPC, that I strongly oppose the water plan. With an unstable economy, I cannot understand how SWRPC would support charging all those that own private wells in Walworth County approximately 40,000 dollars for the creation and maintenance of a water municipality. The proposed plan is going to gain access to the same aquifer that is already accessed by private wells throughout Walworth County. This proposed plan just does not make sense, unless taxpayers would like to spend an additional 40, 000 doilars. My private well provides my needs and operates at a lesser cost and is less wasteful. Water municipalities can lose about eleven percent of the total water, which is added to consumer cost. I do not appreciate the way this plan was slipped through the system, without notifying those who reside in Walworth County and will be affected by this plan.

To those that are going to vote on Monday March 16, 2009, Vote NO to the water plan

Walworth County Resident,

Robert Zilke

W 5372 Kenosha Drive Elkhorn WI, 53121

March 15, 2009

To whom it may concern:

I am sending this letter to inform the members of South Eastern Regional Planning Commissions SEWRPC, that I strongly oppose the water plan. With an unstable economy, I cannot understand how SWRPC would support charging all those that own economy, I cannot understand how SWRPC would support charging all those that own private wells in Walworth County approximately 40, 000 dollars for the creation and maintenance of a water municipality. The proposed plan is going to gain access to the same aquifer that is already accessed by private wells throughout Walworth County. This proposed plan just does not make sense, unless taxpayers would like to spend an additional 40, 000 dollars. My private well provides my needs and operates at a lesser cost and is less wasteful. Water municipalities can lose about eleven percent of the total water, which is added to consumer cost. I do not appreciate the way this plan was slipped through the system, without notifying those who reside in Walworth County and will be affected by this plan.

To those that are going to vote on Monday March 16, 2009, Vote NO to the water plan

Walworth County Resident, Rosemary Watter No498 Cobb Rd Elkhon Wi 53121 To whom it may concern:

I am sending this letter to inform the members of South Eastern Regional Planning Commissions SEWRPC, that I strongly oppose the water plan. With an unstable economy, I cannot understand how SWRPC would support charging all those that own private wells in Walworth County approximately 40, 000 dollars for the creation and maintenance of a water municipality. The proposed plan is going to gain access to the same aquifier that is already accessed by private wells throughout Walworth County. This proposed plan just does not make sense, unless taxpayers would like to spend an additional 40,000 dollars. My private well provides my needs and operates at a lesser cost and is less wasteful. Water municipalities can lose about eleven percent of the total water, which is added to consumer cost. I do not appreciate the way this plant was slipped through the system, without notifying those who reside in Walworth County and will be affected by this plan.

To those that are going to vote on Monday March 16, 2009, Vote NO to the water plan

Walworth County Resident,

David ackain Ross 9121 Dense Dr. Feldom W153121

March 15, 2009

To whom it may concern:

I am sending this letter to inform the members of South Eastern Regional Planning I am sending this letter to inform the members of South Eastern Regional Planning Commissions SEWRPC, that I strongly oppose the water plan. With an unstable economy, I cannot understand how SWRPC would support charging all those that own private wells in Walworth County approximately 40, 000 dollars for the creation and maintenance of a water municipality. The proposed plan is going to gain access to the same aquifer that is already accessed by private wells throughout Walworth County. This proposed plan just does not make sense, unless taxapærs would like to spend an additional 40, 000 dollars. My private well provides my needs and operates at a lesser cost and is less wasteful. Water municipalities can lose about eleven percent of the total water with its added to consumer cost. I do not swere its the law we they also we silvened water, which is added to consumer cost. I do not appreciate the way this plan was slipped through the system, without notifying those who reside in Walworth County and will be affected by this plan.

To those that are going to vote on Monday March 16, 2009, Vote NO to the water plan

Walworth County Resident, Julia on NZ418 SHERE VIEW DRIVE LAKE GENEVA, W 63147

March 15, 2009

To whom it may concern:

I am sending this letter to inform the members of South Eastern Regional Planning Commissions SEWRPC, that I strongly oppose the water plan. With an unstable economy, I cannot understand how SWRPC would support charging all those that own economy, I cannot understand now SWRPC would support charging all under that own private wells in Walworth County approximately 40,000 dollars for the creation and maintenance of a water municipality. The proposed plan is going to gain access to the same aquifer that is already accessed by private wells throughout Walworth County. This proposed plan just does not make sense, unless taxpayers would like to spend an additional 40,000 dollars. My private well provides my needs and operates at a lesser cost and is less wasteful. Water municipalities can lose about eleven percent of the total water, which is added to consumer cost. I do not appreciate the way this plan was slipped through the system, without notifying those who reside in Walworth County and will be affected by this plan.

To those that are going to vote on Monday March 16, 2009, Vote NO to the water plan proposal.

Walworth County Resident.

CART ROWLAND Nonta CLOSELERE LANE WILLTERMER WE 53190

From: Ben Dunham [mailto:bjdun@genevaonline.com] Sent: Sunday, March 15, 2009 8:10 AM To: Biebel, Robert P. Subject: Water Plan for Southeast Wisconsin

It is with shock and surprise that we read about the proposed water plan for our area. As long time homeowners we have a plentiful supply of good water pumped from a drilled well, which is only 11 years old. With the economic recession we need to be conservative,not out spending and wasting money on something that we don't want or need. This plan is not affordable for any of us. This plan does not appear to be done in a democratic way. We have a right to our own water systems. Please reconsider all the aspects of this.

Sincerely, Ben & Joanne Dunham

From: Shafer, Kevin
Sent: Sunday, March 15, 2009 9:26 AM
To: Lyle Balistreri; David Cullen; Wallace White; Dale Richards; Pedro Colon 4; David Cullen;
Pedro Colon 2; Ashanti Hamilton; Ronald Hayward; Michael West; Marjorie Stahl; Pedro Colon,
Pedro Colon 3; Ben Gramling; Preston Cole; Bob Brunner Cc: Martin, Michael; Jacquart, Steve;
Graffin, Bill
Subject: Waukesha Diversion/Return Flow

Commissioners

As the discussion continues on whether or not to allow Lake Michigan water to be diverted to Waukesha, several environmental questions have arisen. Namely, if the diversion is allowed and flow is returned to Underwood Creek (this is currently Waukesha's preferred return route), what is the environmental impact on Underwood Creek and the Menomonee River. In order to protect our interests, we need to address these questions and provide more technical clarity on the impacts. The current computer models, that we developed for the 2020 Plan, provide one mechanism to address these questions.

Waukesha Water has approached us to run some scenarios with our models to look into this. We have developed a scope of work and a cost estimate of approximately \$40,000 to do this work. I believe this will be presented to the Waukesha Water Board this week. If they approve it and there are no concerns raised by you, MMSD will undertake an analysis paid for by Waukesha to

Again, MMSD is being looked to a the water quality leader in the region and asked to address these questions. I do not want to advocate one way or the other on this issue, but I think we all need to find out more answers on this very important issue. As we do this work, there may be other questions that arise and there may be the need for more scenarios to be run. We will address that as we get into the work further.

If you have any questions or concerns, please let me know. Also, please do not hit "reply all" if

From: Rich & Beth Sent: Sunday, March 15, 2009 9:43 AM To: Biebel, Robert P. Subject: Water Plan!!!

I live in rural Elkhorn area, not in the city. I bought my house in the country because I didn't want close neighbors, downtown business or the traffic that comes with living in the city. I enjoy the outdoors. The peace and quite and the freshness of the outdoors. Part of this is the fresh clean water I get from my well. It's fresh water that I have never had a problem with . It has never made me sick or ill. Why in gods name would I want some hidden governent committee to decide what kind of water I was going to drink. If I wanted chlorinated processed water I would of bought closer to town. Why would I want someone deciding what I can drink! Next they will be deciding what I can eat! lits bad enough that the government doesn't regulate whats imported or exported enough to keep jobs in our country to keep our people fed. If it was up to me I would put my foot right in there %#-1f thats all they have to do for there jobs, maybe someone should introduce them to some of the real problems we have in this country and let them make a difference for the better some of the real problems we have in this country and let them make a difference for the better instead of making life more costly than it already is!!

From: michael sontag Sent: Sunday, March 15, 2009 10:38 AM To: Biebel, Robert P.

Subject: Adequate & sustainable water supply???

To whom it may concern:

In my opinion the proposed addition to the municipal water supply and sewage system in southeast Wisconsin would not be a wise investment at this time.

I live just outside of Williams Bay and have some of the best tasting water imaginable, why would I want to mess that up? Williams Bay has tried to expand their water system to include my subdivision (in vain), by selling their plan with fear, not common sense I could understand...

It was intimated their plan to expand was not a matter of if—but when. (It was inevitable; so if you're smart you will hook up now while it is cheaper, later when we have our way, it will be much more expensive)... I find this type of arrogance to be unacceptable at any level of government...

Any plans the government may have to enhance and contribute to a better life for me, or my community, I find suspicious; if not dubious...

There is nothing wrong with my well, and septic. (I think I have some of the best tasting water there is). Making the move to a "water system;" would depreciate what I already have, and cost me money I do not wish to spend.

Summarily, you would be using the same resources currently being tapped, adding cost, diminishing quality, and efficiency. This is a lose—lose situation for the people, and for these reasons and the reasons stated so well buy Mr. Euker, I ask you to put this flawed plan and its' future ramifications on hold—in perpetuity.

Warmest regards, Michael J Sontag

From: Patricia Bahr Sent: Sunday, March 15, 2009 12:34 PM To: Biebel, Robert P. Subject:

It has come to my attention the SEWRPC has come up with an "advisory plan" that would replace existing private wells in Walworth county with municipal water systems. A plan that is ridiculously expensive and unnecessary!!!!!!!

I am happy with the well I have; the water quality is excellant. This is why I moved into

Not only is this proposed plan NOT in the best interest of Walworth county residents, it will be extrememly expensive, in any economic times. More so during this economic downturn, when most residents are struggling to stay in their homes and pay their bills. In more months than I care to mention I am grateful I don't have a water / sewer bill to contend with.

As far as I can see, this is just another example of government bureaucrats finding ways to waste money on problems that don't exist. Take care of the areas that do have issues on an individual local basis; leave the rest of us alone!!!!!!!

Patricia Babr Walworth county resident

Sent: Sunday, March 15, 2009 1:00 PM To: Biebel, Robert P Subject: our own well is very good

I am in much opposition for SEWRPC to attempt to replace the use of my own well. My well is a very efficient well with excellent water quality and I plan to use it indefinitely. Therefore, please do not try to change my water system in S.E. Walworth County. Thank you.

Richard R. & Elaine C. Gronert

donaldholden Sunday, March 15, 2009 1:03 PM Boxhorn, Joseph E. t: Comment from Regional Water Supply Study Website Form Subject:

Submitted: 3/15/2009 12:51:53 PM

Organization: none PO Box/Street: W934 Twin Lakes Rd City: Genoa City State: WI Zip: 53128

Phone: Comments: Dear. Mr. Biebel, We wish to comment on SEWRPAC'S plan to spend \$170,000,000 Comments: Dear. Mr. Elebel, We Wish to comment on SEWER-ACS plan to spend \$170,000,000 to drill \$25 zmunicipal wells in the same shallow aquifer that are currently serving our private wells. We believe this plan was developed by a group not repsentative of our community. Our private wells & septic systems were installed at our expense and are maintained to operate flawlessly. We believe the current plan will be financially damaging to us and our community. Please reconsider the plan to establish regional wells and allow the residents that have costly wells and septic systems already in place to keep them.

From: Gransee,Loretta Sent: Sunday, March 15, 2009 2:24 PM To: Biebel, Robert P. Subject: municipal water project

Roland & Evelyn Pagel 7093 Homeste Delavan, WI 53115

We vote NO - regarding the municipal Water & Sewer System for Southern Wisconsin. We have had our private well & septic for over 50 years and we want to keep it. There is nothing wrong with it.

Sincerely, Roland & Evelyn Pagel

From: Mike McTrusty
Sent: Sunday, March 15, 2009 3:10 PM
To: Biebel, Robert P.
Cc: The McTrusty Family
Subject: Walworth County should be excluded from SEWRPC Proposed Plan to "attain an sustainable water supply for the region"

- * Walworth County should be excluded from SEWRPC Proposed Plan to "attain an adequate, sustainable water supply for the region".
- * Before any such plan is advanced, residents of Walworth County should first be fully informed and then next be given the opportunity to vote Yes or No in a binding referendum concerning the plan.
- My vote is a resounding NO for any such water supply plan by SEWRPC to include Walworth County

Sincerely,

Michael J. McTrusty 5739 Laurentide Road Burlington, WI 53105 Walworth County – Lyons Township

From: Ruth Anderson Sent: Sunday, March 15, 2009 3:42 PM To: Biebel, Robert P. Subject: SEWRPC PLAN

We are Walworth county tax payers, and totally against any plan that would take away our rights to our individual well system. You can rest assured, we will do anything in our power to contest a municipal system. Our well system serves us well, and we are never going to conceed to anything else

From: Dick & Betty Hoover Sent: Sunday, March 15, 2009 4:41 PM To: Biebel, Robert P. Subject: Shallow aguifer - Walworth County

I am in agreement with Butch Eucker. We have existing wells that are working very well and I feel we do not need the added expense of a new municipal water system.

It also seems that the general public was not informed of these potential changes that would greatly affect our lives. I would appreciate acknowledgement of any future discussion of this subject.

Thank you,

Dick & Betty Hoover

mike
Sunday, March 15, 2009 6:26 PM
Boxhorn, Joseph E.
Comment from Regional Water Supply Study Website Form

Submitted: 3/15/2009 5:20:04 PM

Organization

Organization:
PO Box/Street: N6256 Sugar Creek Prairie Rd
City: Burlington
State: WI
Zip: 53105
Phone:
Comments: I am against any attempt to connect my water supply to a municipal system.
Comments: Organization and the Consection of the Consectio Commetting such a large number of houses will make problems such as the Cryptosperidium outbreak an even bigger problem. It is a bad idea. The cost of the plan is completely out of line with any benefits the plan claims to provide. Initial costs of construction to provide water to communities having no water problems is ridiculous. Ongoing costs of maintenance and delivery will make living in this corner of the state even more costly and will likely push me and others like me who are tired of the unrelenting supply of bad decision made by our government out of the state once and for good. Thanks, Mike Quernemoen

From: mike guernemoen Sent: Sunday, March 15, 2009 6:29 PM
To: Biebel, Robert P.
Subject: Comment on the Regional Water Supply Study

I am against any attempt to connect my water supply to a municipal system. Connecting such a large number of houses will make problems such as the Cryptosportidium outbreak an even bigger problem. It is a bad idea.

The cost of the plan is completely out of line with any benefits the plan claims to provide Initial costs of construction to provide water to communities having no water problems is ridiculous. Ongoing costs of maintenance and delivery will make living in this corner of the state even more costly and will likely push me and others like me who are tired of the unrelenting supply of bad decision made by our government out of the state once and for

good. Thanks. Mike Quernemoen N6256 Sugar Creek Prairie Rd Burlington, WI 53105

From: Isvandan Sent: Sunday, March 15, 2009 9:37 PM To: Biebel, Robert P. Subject: pricey water plan

We live in Walworth Co. and have a well with good water. We are retired and do not want the added expense of having to install a water line and pay water bills. Sell your water someplace else where it is needed!

Lawrence and Shirley Van Dan

March 13, 2009

Southeastern WI Regional Planning Waukesha, WI



I am opposed to the expansion of central water supplies for the following reasons:

- 1. Higher cost and maintenance Government always comes with a higher cost \$900,000 already for you just to do a study.
- 2. Tearing up the environment once again for installation
- 3. Frozen and broken pipes
- 4. Terrorism much easier to destroy or poison necessities for living when they are at centralized locations with miles of supply
- Dependency once again on government-from local to federal-for our needs \langle the best reason of all not to do it \rangle
- Additives in water

Phil Gillan Phil Cullen N6402 Millard Rd. Elkhorn, WI 53121 From: Philip Robinson Sent: Monday, March 16, 2009 12:19 AM To: Biebel, Robert P. Subject: SEWRPC Proposing millions and millions of dollars

I am writing this email to inform you of my outrage of the very thought, that SEWRPC would even consider expanding into Walworth county.

We have plenty of water and it IS NOT our problem that Lake Michigan water-treatment plants are only operating at 50 per percent capacity.

To even discuss spending somewhere in the area of 170 million to 470 million tax dollars (which we don't have to spend), is just another example of unelected bureaucratic overreach.

This is a very flawed plan and I urge you to abandon it immediately.

Thank you,

Philip & Lorrie Robinson Genoa City, WI

From: Judy Guntly Sent: Monday, March 16, 2009 8:25 AM To: Biebel, Robert P. Subject: Water Plan

The proposed plan to install new municipal water systems to replace private wells in Walworth County is a plan that my husband and I adamantly oppose

When there are a large number of homes being built in an area, the developer will take into account the accessibility of a municipal well and build near an area where they can hook up. What is being proposed is that growth should take place anywhere because there will be municipal wells throughout the county that can be accessed. This encouragement of widespread growth in Walworth County is not what the residents want. We also do not want to be burdened with the cost of municipal wells while living in the country where there is no need to be hooked up since we have private wells that operate well.

This has particular bad timing with the economy in a spiraling downturn. Rural residents do not want to be driven out of Walworth County with plans such as these nor do we want Walworth County to set a precedent for other Southeastern Wisconsin counties to follow.

Stop this flawed plan now

Respectfully

Judith and Frank Guntly

March 15, 2009

To whom it may concern:

I am sending this letter to inform the members of South Eastern Regional Planning I am sending this letter to inform the members of South Eastern Regional Planning Commissions SEWRPC, that I strongly ofpose the water plan. With an unstable economy, I cannot understand how SWRPC would support charging all those that own private wells in Walworth County approximately 40, 000 dollars for the creation and maintenance of a water municipality. The proposed plan is going to gain access to the same aquifer that is already accessed by private wells throughout Walworth County. This proposed plan just does not make sense, indiess taxpayers would like to spend an additional 40, 000 dollars. My private well provides my needs and operates at a lesser cost and is less wasteful. Water municipalities can lose about eleven percent of the total water, which is added to consumer cost. It do not appreciate the way this plan was slipped through the system, without notifying those who reside in Walworth County and will be affected by this plan.

To those that are going to vote on Monday March 16, 2009, Vote NO to the water plan proposal

Walworth County Resident,



NO TO WATER

Kurt and Sarah Zepezauer N 6641 Laurel rd. Elkhorn Wi. 53121 262-742-4075

From: McTrusty Family Sent: Monday, March 16, 2009 8:55 AM To: Biebel, Robert P. Subject: Please EXCLUDE Walworth Co. From The Municiple Water Plan

One of the reasons we love owning our home in the country is having our own well that provides delicious, healthy fresh water. We do not want any part of the municiple water plan.

A water plan of that magnitude should be voted on by the homeowners via a referendum

Thank you for your consideration.

Sincerely, Lynn McTrusty 5739 Laurentide Rd. Burlington, WI 53105 Town of Lyons, Walworth County

From: JAMES HOFFMAN Sent: Monday, March 16, 2009 9:20 AM To: Biebel, Robert P. Subject: municipal wells

I am a land owner in Walworth county. I get my water from a private well on this land. Tain a land wither in Wawkind to county, tget mily water in the protection of this failto. The nearest town to me is eight miles away This well supplies me with all the water I need, and than some. The idea of municipal water is dumb. It would mean that a well would have to be drilled near my subdivision and take water from the source that I now get my water from. At a great expense to me and my neighbors. WHY??

I think the bureaucrat that thought this one up, should go back to the drawing board and help those communities that need water. Leave us alone. This makes no sense at all.

James Hoffman N6591 Paradise Dr Burlington Wi. 53105

From: Sarah Zepezauer Sent: Monday, March 16, 2009 9:25 AM To: Biebel, Robert P. Subject: NO TO WATER PLAN Importance: High

NO TO WATER DLAN

Kurt and Sarah Zepezauer N6641 Laurel Rd. Elkhorn Wi. 53121

From: Robert Arnold Sent: Monday, March 16, 2009 9:26 AM
To: Biebel, Robert P.
Subject: SEWRPC Water plan for Walworth County

Robert W. Arnold N6202 Foster Rd. Elkhorn WI 53121

From: Barbara Arnold Sent: Monday, March 16, 2009 9:27 AM To: Biebel, Robert P. Subject: Munucipal water plan for Walworth County

Barbara Arnold N6202 Foster Roa Elkhorn, WI 53121

From: Sarah Zepezauer Sent: Monday, March 16, 2009 9:33 AM To: Biebel, Robert P. Subject: RE: NO TO WATER PLAN Importance: High

Please consider our vote No we own 100-150ft on Highway A, and on the adjacent road we own 500ft. My husband has been out of work since Nov. and we would have to sell our we could not afford this... Thank you, Sarah

Kurt and Sarah Zepezauer N6641 Laurel Rd. Elkhorn Wi, 53121

From: Ross From. Ross Sent: Monday, March 16, 2009 10:01 AM To: Biebel, Robert P. Subject: Municipal water in Walworth County

I vote NO to the SEWRPC, Municipal plan for Walworth County. I favor private wells and Not municipal water.

From: Mary Rush Sent: Monday, March 16, 2009 10:19 AM To: Biebel, Robert P. Subject: water-plan proposa

There is no need for a municipal water plan throughout every urbanized area in Walworth County. We are OPPOSED to any plan that forces us to pay for a water source tha we already have. Ours is a perfect water source-home owned well. All our area house owners (our neighbors) have excellent water source wells as well. Eugene and Mary Rush N 894 Daisy Drive Genoa City, WI 53128

virginia.wallerman Monday, March 16, 2009 10:35 AM Sent:

Subject:

Boxhorn, Joseph E.
Comment from Regional Water Supply Study Website Form

Submitted: 3/16/2009 10:30:17 AM Name: virginia wallerman.

E-mail: virginia wallerman.

Seaquistolosures.com

Organization: home owner - Sugar Creek

PO Box/Street: N6640 Laural Road

City: Elkhorn State: WI Zip: 53121

Comments: Without a public vote, by those who would be affected, this would be unconstitutional. There have been not public voting on this issue in my residentia

From: Didimurtha Sent: Monday, March 16, 2009 10:58 AM To: Biebel, Robert P. Subject: Water Plan

We are writing to voice our disapproval of the water plan we have recently been made aware of. We currently live outside of the town limits of Lyons and have our own well and septic system. We are against any attempt to convert us to city water and sever since we are more than happy with our current systems. Also, to undertake such a costly and currently unnecessary project as this and to place additional tax burden on the residents in this economic environment is unconscionable. To continue to spend money the county and township does not have to solve a problem that we do not have is irresponsible. This county government has shown little or no restraint in spending when it thinks "it is for the better good" of the county, and resorts to "why didn't you object at the time" when it pushes ahead with projects that had been passed for "sometime in the future". We object to passing this blank check proposal. Diane Murtha Barbara Ricker 5877 Alvin Howe Road Burlington, WI 53105

From: Czarkowski, Charles - DNR [mailto:Charles.Czarkowski@Wisconsin.gov]
Sent: Monday, March 16, 2009 11:41 AM
To: Biebel, Robert P.
Cc: Volz, Rhonda R - DNR; Helmuth, Jeffrey A - DNR
Subject: Comment on Vailidity of Private Wells

I am passing along (below) an email comment from a citizen (Butch Eucker) who feels that there is bias in the SEWRPC plans for municipal water even in the absence of problems with private wells. He believes the public will be "worried into an emotional decision" to adopt municipal water unless there is, at least, a more prominent statement in the plan saying something similar to your briefing notes...

"only if a local demonstrated need arose based upon groundwater quality or quantity issues and, if a local initiative was then undertaken to implement a municipal system. Such a local initiative typically includes a survey or other method of assessing to determine the local need and to determine the interest of the residents in a given area regarding the provision of municipal water supply. In the absence of such a need and initiative, the residents and businesses in these areas would be expected to remain on individual wells indefinitely.

I agree with Mr. Eucker and ask if a similar statement might be inserted into the Introduction or other appropriate section of the final preferred plan.

Chad Czarkowski Water Supply Specialist WDNR - Milwaukee 414 -263-8628 Charles.Czarkowski@wisconsin.gov

From: Butch Eucker Sent: Monday, March 16, 2009 10:44 AM To: Czarkowski, Charles - DNR Subject: Re: Pell Lake / Lake Como and SEWRPC Water Plan Chad;

Thank you for the email. I sincerely appreciate you taking the time

I disagree with this plan in so many areas

- 1. Thank you for confirming that Pell Lake & Lake Como did not have bacteria problems with the ground water. Those private wells there were fine.
 2. I disagree with your statement: "It often makes sense from a funding and utility trenching standpoint to install both sever and water together." Silver Lake, Delavan Lake, Twin Lakes, and many more areas put in sewer without water because it was more cost effective to just put in sewers and keep their good wells. But that attitude is changing in this era of big government. Consultants get a bigger percentage cut if the cost of the project is much bigger when it includes water. Little guys like the private water industry do not have the lobby power to push their agenda thru. I've been to many, many town and county meetings. Consultants push a self-serving agenda to get more consulting fees.
 3. I really like the statement from your email:

"only if a local demonstrated need arose based upon groundwater quality or quantity issues and, if a local initiative was then undertaken to implement a municipal system. Such a local initiative typically includes a survey or other method of assessing to determine the local need and

to determine the interest of the residents in a given area regarding the provision of municipal water supply. In the absence of such a need and initiative, the residents and businesses in these areas would be expected to remain on individual wells indefinitely."

** Here's my concern: The term "local initiative" is not well defined. Is that one person who wants this initiative? Is it one local board member? And will this local initiative be a board vote or a public vote? Pell Lake and Lake Como were board votes. I attended many of those meetings. In my opinion, it was a "done deal" even before the public hearings. The hearings were strickly formalities

Where will this statement be in the final water plan report? Up front in the recommendations section, or buried in the fine print?

Here's why I'm volunteering so much time to this issue. The Town of Salem is seriously considering municipal water. The word is out. They have hired an economic development person for nearly 6 figures per year to develop a business park. Inquiries have begun already about drilling costs for municipal wells. The few will tax the many, and the private water well industry will be pushed further out. I make no bones about my bias. I am a private water well contractor and feel that private wells in most areas are the answer to water needs. If this water plan goes thru as written, then it becomes the blueprint for every consultant to begin to push for bigger systems. At the Salem Board Town Meeting last week, the board did not know if it would be a public vote or board vote. I guarantee you it will be a board vote only. That is the only way these projects get approved.

Bottom Line: I would like to see the water plan updated to address the specific problems of SE Wisconsin, rather than the shotgun blast approach. Here's what I mean:

- Waukesha County does have water problems. Address Waukesha County by itself Most areas do not have water problems: say that up front, so the general public is not "worried into an emotional decision."
- 3. Include a broader aray of professionals on the advisory boards

I urge you to comment on the water plan to promote the use of private wells. The plan seems extremely biased toward municipal water.

I say Thank You again for confirming my gut feeling about Pell Lake and Lake Como

Sincerely, Butch Eucker

On Fri, 3/13/09, Czarkowski, Charles - DNR < Charles. Czarkowski@Wisconsin.gov>

Wrote:
From: Czarkowski, Charles - DNR <Charles.Czarkowski@Wisconsin.gov>
Subject: Pell Lake / Lake Como and SEWRPC Water Plan

Subject. Pell Lake / Lake Como and SEWRPC Water Plan
To: "butch/Service
Cc: "Shurilla, Kevin J - DNR" «Kevin. Shurilla@Wisconsin.gov>, "Volz, Rhonda R DNR" «Rhonda Volz@Wisconsin.gov>, "Biebel, Robert P."

<RBIEBEL@SEWRPC.org>, "Putra, Mark F - DNR" «Mark.Putra@Wisconsin.gov>,
"Helmuth, Jeffrey A - DNR" «Jeffrey, Helmuth@Wisconsin.gov>
Date: Friday, March 13, 2009, 1:21 PM
Dear Butch,

This is to answer your question about bacteria problems in Lake Como and Pell Lake. Mark Putra asked me to respond since I'm one of DNR's reps on the review committee for the SEWRPC plan.

You specifically asked if there were bacteria problems in either Pell Lake or Lake Como wells that lead to the installation of their municipal water utilities (this of course happened in the 1990's prior to SEWRPC's current plan). The answer is "no", according to Kevin Shurilla, DNR well inspector for the area at the time. Kevin says there were some noncomplying shallow drivepoint wells and unsafe springs being used. But he was not aware of widespread contamination of wells.

I believe the main reasons for developing these two utilities were numerous failing septic systems, overall density of development, and bacteria and nutrient problems in the lakes themselves from the septics. It often makes sense from a funding and utility trenching standpoint to install both sewer and water together.

SEWRPCs proposal for extending municipal water by 2035 was tweaked slightly by adding about a dozen water main extensions in areas that are now Special Well Drilling / Casing Areas or near landfills.

SEWRPC and DNR believe that private wells will remain a sensible, necessary and valid component of Wisconsin's water supply into the future. The decision to covert to municipal water will still be made locally based on conditions and needs. This is a statement from SEWRPC provided by Bob Biebel:

The potential new municipal utility areas listed are currently developed at urban densities and are served by private individual wells. These areas are designated as potential future municipal water supply service areas in order to assess the demands, added supply sources needed, and the effectiveness of the Regional and County water supply system if such municipal systems were developed. However, the development of municipal averter supply systems in these areas is envisioned only if a local demonstrated need arose based upon groundwater quality or quantity issues and, if a local initiative was then undertaken to implement a municipal system. Such a local initiative typically includes a survey or other method of assessing to determine the local need and to determine the interest of the residents in a given area regarding the provision of municipal water supply. In the absence of such a need and initiative, the residents and businesses in these areas would be expected to remain on individual wells indefinitely."

Chad Czarkowski Water Supply Specialist WDNR - Milwaukee 414 -263-8628 Charles.Czarkowski@wisconsin.gov

From: Butch Eucker Sent: Tuesday, March 10, 2009 4:05 PM To: Putra, Mark F - DNR Cc: rick Subject: SEWRPC Water Plan Mark;

Butch Eucker emailing from Elkhorn, WI.

I went to another SEWRPC (Southeastern Wi Regional Planning Commission) briefing last night on the new water plan for the 7-county SE regional area. The briefing was to the Salern Township Board in Kenosha County.

The briefer was Robert Biebel, PE, PH, Special Projects Environmental Senior Engineer. During

the briefing he cited the Peti Lake and Lake Como areas of Walworth County as examples of areas that were recently on well water and had converted to municipal water because of contamination issues. When asked by a member of the public at the meeting about what type of contamination, he replied, "Bacteria contamination."

I worked on dozens of wells in both those areas in the 90's and later years until the conversion to municipal water. I have direct knowledge of those wells as testing safe for bacteria, but no direct knowledge of there being a widespread bacteria problem in those areas. I do not believe there was ever a bacteria problem with the well water in those two areas, but wanted to check.

Key in this discussion is the fact that Pell Lake and Lake Como were not sewered at the time. The Town of Salem is mostly sewered already. The Town of Salem currently has no water issues that I know of

Before I go blasting this briefing. I would like to check first with you if there was such a bacteria problem in either Pell Lake or Lake Como. The comment period for this plan has been extended until March 16th, 2009, and I would like to submit a written comment.

I do not have Kevin Shurrilla's email, or I would have emailed him.

The SEWRPC water plan is at www.sewrpc.org on the internet. Please review the plan, meeting notes, etc. The plan calls for 132 new municipal wells to be drilled in SE Wisconsin to replace private wells. Here is the kicker: these municipal wells will be drilled in the exact same shallow aquifer that most private wells are currently located in and producting from just fine. Cost of the 4 options is between \$170 million and \$470 million dollars.

I estimate that this cost will be passed onto the well owners at about \$36,000 per household. In Pell Lake, many had to get 2nd mortgages to pay the hookup fees. So got 40-year loans.

While this plan is ambitious, and as briefed on Jan 22nd in Walworth County, and on Jan 29th in Kenosha County, "Is based upon a population growth of approximately 40%" thru the year 2035, it none the less is going to be a written plan. My goal is to get the written plan changed. Private wells are a very economical and prudent water source for single family homes. In our Republic today, most of these decisions are no longer decided by referundum vote. Rather, these big decisions seem to be more and more decided by a few. A \$470 million plan to essentially swap one water supply pipe for another at ten times the cost seems illogical, especially since the source is the same, the shallow aquifer.

Pell Lake had excellent ground water resources. Lake Como had good water also, but did have Fell Lake flad excellent glorid water resources. Lake Continue agood water all and so well are a lake to some tough areas for drilling. But overall, the water was safe there. I admit that I have a vester interest in this topic, but I am also an advocate for smaller government and a taxpayer. I would hope that SEWRPC would take some well driller/pump installer comments seriously.

Could you point me in the right direction as to find out if there was a bacteria problem in either of these two locations?

Thank you for your consideration, and I appreciate your help.

Sincerely, Butch Eucker Elkhorn, WI

From: tccarro Sent: Monday, March 16, 2009 1:17 PM To: Biebel, Robert P Subject: water plan

SEWRPC

SEWRPC, After reading Butch Eucker's column in the county paper, I must ask;
"What's the point of this plan?" To waste more water? To tighten the financial noose on tax payers? To waste more precious tax money? To just make it look
like you guys are doing something?

Ilive on the northside of Delavan Lake, and must say that our water is
just fine thank you. So unless you can refute Mr. Eucker's column and make it
sound sensible. I for one, am NOT for this plan.

Terry Carro Town of Delavan resident

From: Lynne McLernon Sent: Monday, March 16, 2009 1:36 PM To: Biebel, Robert P.

Just want to register our protests to this expensive water plan. Please let us enjoy retirement. Lynne/Larn

From: val zep Sent: Monday, March 16, 2009 1:15 PM To: Biebel, Robert P.

Subject: Pricey water plan proposal for Walworth County

Southeastern Regional Planning Commission

I woke up this morning to a phone call from a neighbor of mine telling some VERY DISTURBING news about your "water plan proposal" for my area. Let's cut to the chase, in my opinion and quite frankly in everyone elses opinion whom I've talked to about this....It's an UNNECESSARY and UNWARRANTED proposal!

As a Walworth County homeowner, I am appalled that an organization such as yours would tell me that I need to abandon my properly functioning private well which has served our water consumption needs for 10 years to some OVER PRICED water plan! Thanks but NO THANKS!! We are EXTREMELY HAPPY with our very own PRIVATE WELL!!

With the economy as it stands and the lost of my husband's job last year I can't imagine adding another BILL to our household budget! How do you expect hard working families already struggling to make ends meet to keep our houses from falling into foreclosure to pay for your \$40,000 WATER PLAN?! As a responsible citizen, I expect my GOVERNMENT TO BE RESPONSIBLE as well. This water plan you are proposing is NOT RESPONSIBLE, NOR REASONABLE!!!

It sounds to me as though this is yet another scheme for the government to piffer millions of dollars from the hands of hard working families without just cause! Please explain to me why you want to fix something that isn't broke? Why should I pay you for a municipal water system that I don't NEED or WANT?

Don't you think the we have enough GOVERNMENT SPENDING?!

I ENJOY my FREE PRIVATE WELL WATER!

Sincerely.

Valerie Zepezauer

Absolutely No.

I chant Absorb Expense J. Hostissons Lyons

MAR-16-09 02:19 PM S.HOPKINSON

Submitted: 3/16/2009 3:30:11 PM Name: Butch Eucker

Organization: Self PO Box/Street: N6637 County O City: Elkhorn State: WI Zip: 53121

Zip: 53121
Phone:
Comments: I wish to add one more comment to previous comments that I have made about this water study. At a Town Board meeting in the Town of Salem on Monday Night, March 9, 2009, Robert Biebel of SEWRPC briefed that the water study proposes municipal water systems like those recently installed in Pell Lake and Lake Como, both in Walworth County, because of contamination. When asked by a member of the audience what kind of contamination, Mr Biebel replied "bacteria." I checked with Mark Putra, of the Wisconsin DNR, about this statement. In an email back, it is confirmed that there were no bacteria contamination problems at either Lake email back, it is confirmed that there were no bacteria contamination problems at either Lake Como or Pell Lake wells. There seems to be no clear definition of the problem. It follows then that the proposed solutions are inconsistent. This water study needs serious review by experts from outside Wisconsin. This study is neither objective nor consistent with common sense. I call on SEWRPC to open up its meetings where serious debate about the merits of the technical aspects of this plan can be shown the light of day. Today is the last day of the comment period. If I would have had more of an opportunity to participate in this study since 2005 when the study started, I could have built a much more coherent alternative that could pass a common sense test. I, like most residents of SE Wisconsin, only learned in January 2009 that there was a water study being conducted. As the water study is currently written, such terms as local initiative, adequate water supply, and water quality are not clearly defined. Cost estimates are not detailed, defined, nor funding sources identified. The approval process is not outlined: does approval take a public referendum vote or just a board vole? This plan as presented at the public meetings are ripe for fraud and wasteful spending. I call again on SEWRPC to postopone its recommendation for a regional water plan. This plan needs further review by all parties involved in water issues, not just a select few. Sincerely, Butch Eucker Elkhorn, WI March 16th, 2009

Dear Sewrac. I am a 80 year old citizen of Lyang in the last-assessment - hard to keep up with basic government Taxes and Eees our water is Great & private Well > Tests good and Tastes good! We sure dark need more goverment Cantrol-I know there are area problems, but please don't use such a broad brush and paint the country realth Bill Grunewald

MAR-16-09 03:58 PM S.HOPKINSON

From: Duane and Marlen From: Duane and Mariene Sent: Monday, March 16, 2009 5:16 PM To: Biebel, Robert P. Subject: Municipal water systems

To whom it may concern

From: Mary Monks Sent: Monday, March 16, 2009 5:43 PM To: Biebel, Robert P. Subject: Water plan

My husband and I do not want water plan to go through. What we have now is fine!!! No municipal water. Thanks Mary Monks and Steve Monks

(Click here and type add

facsimile transmittal

To:	SEWRPC	Fax:	262-547-1103	
From:		Date:	3/16/2009	
	Diane Murtha, Barbara	Ricker		
Re:	Water Plan	Pages:	ı	
cc:	[Click here and type nar	ne]		
□ Unge	ent 🗆 For Review	Please Comment	☐ Please Reply	☐ Please Recycle
<u> </u>				

We are writing to voice our disapproval of the water plan we have recently been made aware of. We currently live counide of the rown limits of Lyons and have our own well and septic system. We are against any attempt to convert up to city suster and severt since we are more than happy with our current systems. Also, to undertake such a cordy and currently unnecessary project as this and to place additional car burden on the residents in this economic environment is unconscionable. To continue to spend money the country and township does not have to solve a problem that we do not have it interpossible. This country government has shown hitle or no restraint in spending when it thinks "its for the better good" of the country, and restorts to "why didn't you object at the time" when it puthes alread with projects that had been passed for "sometime in the finites". We object to passing this blank check proposal.

From: Marie Nelson Sent: Monday, March 16, 2009 7:43 PM To: Biebel, Robert P. Subject: Proposed Pricey Water Plan Importance: High

After reading for the first time the proposed water plan for south east Wisconsin , I am very upset Auter leading for the first time: the proposed water plan for south east Wisconsin, I am very upset to say the least! I personally have a well with wonderful safe water! Why fir our private wells are working just great, why in the world would I want to change to a less-efficient and much more expensive system? The municipal wells proposed for Walworth County would be drilled in the shallow aquifer, drawing from the same aquifer that our private wells use now in the proposed areas of expansion. I say NO to your proposed water plan for south east Wisconsin!

Marie Nelson Walworth County taxpayer

From: Cindy Beckett Sent: Monday, March 16, 2009 8:19 PM To: Biebel, Robert P. Subject: SEWRPC

Dear Mr. RBiebel.

I recently read an article by our community columnist in the Shopper paper that we get on Sunday I recently read an article by our community columnist in the Shopper paper that we get on Sunday This article was very upsetting and I do not want to have sewer and water brought into my area. I have been living in my home for many years and I am perfectly happy with my well water and septic system. I do not feet that a the plan that your are proposing will benefit me in any way. I do not want the new municipal water system installed on my property. The cost alone is good reason not to go through with this plan. There are many questions that need to be answered and unless you plan to visit every community that will be affected, it would seem to me to be illegal. I am sure there are many more people that have questions and would not want this plan to be implemented. If it is for the good of the people, maybe you should visit with the people that are having this forced upon them. I would think that more than one visit per community would be necessary.

From: Cindy Beckett Sent: Monday, March 16, 2009 8:22 PM To: Biebel, Robert P. Subject: SEWRPC

Dear Mr. RBiebel,

I recently read an article by our community columnist in the Shopper paper that we get on Sunday. I recently read an article by our community columnist in the Shopper paper that we get on Sunday. This article was very upsetting and I do not want to have sewer and water brought into my area. I have been living in my home for many years and I am perfectly happy with my well water and septic system. I do not feel that a the plan that your are proposing will benefit me in any way. I do not want the new municipal water system installed on my property. The cost alone is good reason not to go through with this plan. There are many questions that need to be answered and unless you plan to visit every community that will be affected, it would seem to me to be illegal. I am sure there are many more people that have questions and would not want this plan to be implemented. If it is for the good of the people, maybe you should visit with the people that are having this forced upon them. I would think that more than one visit per community would be necessary. Please do not force this plan through before considering the people that will have to live with it.

J. Lewis Town of Sugar Creek From: Gary Beckett Sent: Monday, March 16, 2009 8:41 PM To: Biebel, Robert P. Subject: Water Plan

Mr. Biebel,

It has come to my attention that you are working on a proposal to bring municipal sewer and water to all communities in Southeastern Wisconsin. I must say that I am against this proposal. I moved to my community so that I could have a private well and private sewer. I don't want to be part of a municipality controlling my sewer and water. I would think before this could be put into action, you would at least be courteous enough to meet with the home owners that would be affected by this move. A town hall meeting would be in order to hear the questions and comments for such a controversial plan. The cost seems prohibitive in these economic crisis times. I do not want this plan in my neighborhood or my community. There are reasons for living in the areas that people choose to move into and you are not taking this into consideration. I find your plan to be selfish. Leave the water and sewer alone, let the bigger communities solve their own problem instead of dipping into our pockets.

C. Beckett Elkhorn, WI Town of Sugar Creek From: Patricia S. Wiison [mailto:lazyw@charter.net] Sent: Monday, March 16, 2009 10:14 PM To: Biebb, Robert P. Subject: Recent water-plan proposal for southeast Wisconsin

I say "no" to the pricey water plan proposed. I have no interest in paying a huge up-front fee plus higher taxes and high monthly billings in perpetuity for something I neither want nor need.

Appendix A-3

WRITTEN COMMENTS MADE AT PUBLIC MEETINGS

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 12, 2009 HeartLove Place, Bethel/Empowerment Rooms 3229 N. Dr. Martin Luther King, Jr. Drive Milwaukee, Wisconsin

	Milwaukee, Wisconsin
Name AA	ES ROUEN
Affiliation 🌌	5
Mailing Address	3/67 M. Heltet Ace, Kalon-1 - 53211
Comment	I support suspending the Story and any
	Implementation of its recommendations
	until water supply planning is
	gavindy conditated with misery
	1 - to to 1 - to to 1 - to
	dougenou and the policies
	(OUER)
	pullan
	Joseph and con
Add	sitincely, I support suspending
He u	voter sopply plan and reconnections
12/11	41.
1	the Lord Osce Plan is recorition
70 M	Corporate, Car margani
as 60	thined in my first war
P.1.	othered in my first pougraph,
Fino	lly, & do not support the
her	e the Advisory Convited The representative of the
1.00	- The Acoes my Cornitro
4000 V	to representative of the
regen	is residents. The 32-rember
Canaci	then had not
[em	thee had only one beinady
10	entative; Len Ofican Auerton; egroups; but represented:
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from	hid hecens
1/1/1/20	Exercise for lar- ling hosekers - lot Enorgies Therens and the thomas
1000	Thereing and the Hone soi lders

 $Add\ sheets\ as\ needed\ and\ leave\ at\ the\ registration\ table\ or\ give\ to\ a\ SEWRPC\ staff\ member.\ Or,\ send\ by\ February\ 9,\ 2009,\ to:$

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

> > Thank you.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 20, 2009
Rotary Building, Frame Park
1150 Barker Street
Waukesha, Wisconsin
Name Keith Butter Field
Affiliation Mech Engr
Mailing Address 1604 Big Bend Rd
Waukesha, WI 53189

is Natural Water Collection Site
for Water, It should be used as
a natural reservoir for water supply,
Minimizing disturbance to surrounding
land area (by drilling wells) would
allow maximum natural recharge to
Lake Michigan, Surrounding aguifer
levels should be kept constant, so
natural sopply to Lake Michigan
Stays functional, Return of Sewage
water may end up creating a wheter
Add sheets as needed and leave at the degistration table of give to a SEWRPC stay member, of, send by
February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

> > Thank you.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 22, 2009 Government Center, Room 214 100 W. Waiworth Street Elkhorn, Wisconsin

Name_BUTZH EUCKER

Affiliation_ LOCAZ WATEN WELL PROFESSIONAL

Mailing Address N6677 CTY O

_ECKHONN, WI 5312/

Comment I totally dis Agree with this

STUDY. It is BASED ON

A VMIETY of un provey Assumptions
that do not lead to the

CONCLUSION PRESOND.

EXPORTE: Delayon WHE HAS MORE

QUAZITY GROUND LAKE HAS MORE

ANDA IN the WORLD!! I yet

This study vecommand of municipate

SISTEM. This is A TOMELY 1315562

STUDY IT NEEDS to be vericlas.

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9,2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 26, 2009 Ozaukee County Administration Center, Auditorium
121 W. Main Street
Port Washington, Wisconsin

Name David A.	Schwengel
Affiliation	· · · · · · · · · · · · · · · · · · ·
Mailing Address 174	Minz Park Circle #3
West	Bend, WI 53095
Comment The	Lake Michigan Expansion of Mater Ar
	egal use should include West Bend
	Newburg. Water hardness in West Bend
	in 24-26 grains. We are using too
much	self for so frening water and this
	+ is harming the piver.
	Total replacement of the present well
	- apply in West Bind with lake water
	not necessary to show improvement - Evra
a 5	0-50 blend of lake and wall water
	I be a great improvement.
	leave at the registration table or give to a SEWRPC staff member Or send by

February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive
P.O. Box 1607, Waukesha, Wisconsin 53187-1607
Fax: (262) 547-1103

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

COMMENT REGISTRATION FOR COURT REPORTER

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street

Name LIFERSA BREDICAN AMIliation AKE SHMGQI-CA RESIDENT
WE DO NOT WANT TO
Mailing Address 12/05/2/1917 AUC

RPICIPATE IN THIS PLAN,
SALEM TOWNSHIP

TO THE PLAN SALEM TOWN

Mailing Address 12 105 2 19 THE ARE REPORTED WE DO NOT WANT TO REPORT WE HAVE ARESIAN SPRING WATER, OUR WELL IS EXTREMELY Comments may be dictated to a court reporter or written and left at the registration table or given to a SEWRPC staff member. Written comment forms are available at the registration table or given to a SEWRPC staff member. Written comment forms are available at the registration table. Additional comments will be accepted through February 9, 2009, and may be sent to the SEWRPC offices: W239 N1812 Rockwood Drive, P.O. Box 1607, Waukesha, Wisconsin 53187-1607. Comments may also be submitted via fax, (262) 547-1103, e-mail to rbiebel@sewrpc.org, or online at www.sewrpc.org/water supply study. supply study.

Thank you.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street

, ¢	Bristol, Wisconsin
Name DIRGINIA F	1. WINKER
Affiliation 24709	825+
Mailing Address SALEM	Wi

Comment

Third in Kenosha (Municipal water) for many years. I feel when you have a sum water plan, you do not con sorve as you do whon you have your own well. When I lived in the city of didn't conserve water as I do how that for constantly reminded that my pung could go or my well could sale dry. I conserve water in all passible ways.	
a muni water plan you do not con serve as you do when you have your own well. When I lived in the any I didn't conserve water as I do how that for constantly reminded that my pung could go or my well could shin dry. I conserve water in all	I lived in Kerosha (municipal water)
a muni water plan you do not con serve as you do when you have your own well. When I lived in the any I didn't conserve water as I do how that for constantly reminded that my pung could go or my well could shin dry. I conserve water in all	for many years. I feel when you have
own well. When I lived in the day Said tonserve water as I do how that his constantly reminded that my pung could go or my well could him dry of conserve water in all	a mune water plan you do not con
Sdidn't conserve water as I do how that his constantly remended that my pung could go or my well could shin dry of conserve water in all	
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Then dry of conserve water in all	that his constantly reminded that
	my sums could to or my well could
passible ways.	Then dry of conserve water in all
<i></i>	passible ways.
	/

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

Name U ;	1/cam Winker
Affiliation	Alem Res dent
Mailing Address	24709 82Nd St.
Comment	Salem. Wisconsin 53168 I wonder if this is the to start such A high undertaking -

bist time , eccounically, People are Loosing jobs just the begongeries. Most people in our AMA have Adaguete wells that they have used & paid for own many years - I see All the problems they have with manicipal wills in Paddock LAKE of hope that wan't happen in Salem.

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street

	Bristol, Wisconsin
Name/	Michael Trocke
Affiliation	
Mailing Address	34020 Bassett Road
	Burlington, WI 53/05 (TOWN OF RANDAU)
Comment	I don't think the Randall/Twintakes
Comment	area should be included in municipal
	rates in this area are high
	Controlized governor control or well based
	water supplies will genefit only big commercial
	developers. The luge costs to home carrers
	are not justifiable. Where are the exact
	well points proposed for Kenosha county?
	Please include the potential impact of the proposed
Thelen	Gravel pit pumping and mining operation in Twin Calces/Randa
. (
Add sheets as n February 9, 2009	eeded and leave at the registration table or give to a SEWRPC staff member. Or, send by , to:
	Southeastern Wisconsin Regional Planning Commission
	W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607
	Fax: (262) 547-1103
	Regional Water Supply Plan
	E-mail to rbiebel@sewrpc.org
	Thank you.
	WRITTEN COMMENT
	PUBLIC INFORMATIONAL MEETING
	REGIONAL WATER SUPPLY PLAN
	January 29, 2009
	Kenosha County Office Building, Hearing Room
	19600 75th Street Bristol, Wisconsin
Name 90	ve // olan
Affiliation 6	Bandall Town Board Supervisor
Mailing Address	P. D. Box. 420
Maning Address	Que Suba (1)T 53159-04341
	Down () () () () () () () () () (
	100
Comment	I am offored within than
	weene of the concerno of
	the water tables waterquality.
	The people in Wankesha
	are now experiencing these
	Jablema par due to similion
	J Collins.
ATU:	(Stead pend) me a com
<i>N//</i>	The Quelling a copy of
~	mul Information
	Deport
Add sheets as no	eeded and leave at the registration table or give to a SEWRPC staff member. Or, send by
February 9, 2009,	to:
	Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive
	P.O. Box 1607, Waukesha, Wisconsin 53187-1607

Fax: (262) 547-1103

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

	hen Gutschiek SELF/CitizEN	
	s 40410-102ND STREET	
	GENOA CITY, WI 53128	
Comment	I ASKED FOR SPECIFIC PLANS	FORT

IE BWERS LAKE -BENEDICT-TOMBEN DISTRICT AND NONE WERE AVAILABLE. I ASKED FOR SPECIFICS, IN 5 OR 10 YEAR INCREMENTS, FOR ALL OTHER DISTRICTS AND NONE WERE AMILABLE. I SEE A MAP PREDICTING WATER MANAGEMENT STRATEGIES - LIKELY BE UNDORTAKEN BY 2035. I SHOULD BE LOOKING AT MAPS DEPICTING PLANNED CHANGES OVER THE
STUDY PERIOD, GIVE ME & MABTHAT WHAT THINGS WILL LOOK LIKE IN 2010, 2015, 2020, 2025 2030 AND THEN FINALLY ZOSS.

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

Regional Water Supply Plan

Thank you.

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

Name!/57	nes cross
Affiliation	NONE
Mailing Address _	11247 224th AVE
-	BRISTOL WI 53104
-	
Comment	UNNECESSARY DEVELOPMENT, NOT FOR THE BENEFIT
_	of people
-	TREMENDOUS EXPENSE, BOTH INITIAL AND ONGOING,
_	At A times of Economic CRISIS.
~	- DESTRUCTION of PRIVATE WELLS WHICH WONLD PESSULY
_	in mandatory book up to municipal water
_	- THE ONLY CONSUMABLE WATER I'VE SEEN POLLUTED
_	OR CONTAMINATED WAS MUNICIPLE,
_	- VERY POOR DISSEMINATION of MEETING INFORMATION
	PRIOR TO MEETING - PLANNED THAT WAY?
	- MURE GOIERNMENT REGULATION, LOSS of LIBERTY - ACAIN!
Add sheets as nee February 9, 2009, to	CWE NEED Authles Revolution - RON PHUL Style ded and leave at the registration table or give to a SEWRPC staff member/Or, send by 5:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive
P.O. Box 1607, Waukesha, Wisconsin 53187-1607
Fax: (262) 547-1103

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

Name ROBFRT G-ETRING
Affiliation TOWN OF RANDALL SUPERVISOR, KENOSHA CO
Mailing Address RO BOX 64 BASSETT,
COMMENTS MY OWN.

MYOWN Comment s

MORE WELLS CAN ONLY FURTHER DRAIN BOWN OUR WATER TABLE Causing RADON PROBLEMS, such as Wayboxe, Wandeshoo has SPINT HPRROX 10 to 15 MILLION DOLLARS, TRYING TO CORRECT RADON PROBLEMS IN THEIR WATER TRYING EPA STANDARDS. I comony may never require this many wells. Will this Economy recover? This is a first recession under a global Crisis

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by February 9, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607. Waukesha. Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

> > Thank you.

			Thu, Jan 29, 2009 at 3:27 PN
(no subject)	10816	2694 an	Trevar W, 53/79
	electa	V.	

Lam Linda Valentine, candidate for Town of Salem Chairman

I have a few questions and concerns..

WHO or which entity specifically asked for a study on municipal wells and where can we find the specific request that defined the scope of your work? Did all three of the Kenosha Representatives (and are they in the audience)

agree with this 'proposal' and WHEN did that agreement occur?

How were the locations of the well points determined?

What field work was done or from the physical location?

was this work done from a desk distant

I suggest that there has been no field work since it would be expected that people would have been asking about the people tresspassing and doing tests on their private properties.

Why hasnt the town of salem been given some information on this PRIIOR to involving all of their electors?

WHAT IF the elected officials of the tos determine that this will not advance the quality of life in the town for the monies they would be expected to expend and choose NOT TO PARTICIPATE in this program?

What if we ONLY wanted to advance MW for use in light industry, retail and

institutional purposes?

Lately testing has been done in TOS on deep water well potential because of a recent and REAL subdivision being considered which would have included a municipal well. I believe the water tested fine.

We certainly do not want a SHALLOW Municipal wells competing with my small homeowner shallow well. I cant imaginge anthling other than a deep well for municipal purposes.

tam also concerned about the level of the water in the new TWIN LAKES area THELANS pit which will need to be removed in order for them to mine. This will imact our homeowners. I am also concerned about the expense not only of installing hardware for municipal water but the removal of old hardware and permits and capping of wells on private lands. ANd I wonder just how many of these 13 wells will be for OTHE communities andnot solely for TOS electors. I have a concern, more and more lately, of filtering and additives to comsumables - water included. I have a concern for the cost of maintaining in terms of technical employment, equipment, buildings, ongoing testing and liability of the town for good, safe water from MW after telling people that they cant use their own good wells.

I have a concern about the streets that some have waited for years to be resurfaced and the losses of old trees that lend character to our town because of

I have a concern about the City of Kenosha using US as their safety net should they have any problems with the LAKE MICHIGAN water that they are entitled to and which we are NOT entitled to. . I would be more apt to want to work with a municipal well system closer to my area even R in ILLINOIS than to one 20 miles

shallow wells. I would think that perhaps their well isnt deep enough and perhaps a call to a local well driller (likely several in the audience) to correct their immediate problem and to control their own destiny. I would like to know why, they don't get 'good' water.
You may feel that my questions are in opposition to municipal wells.

That would not be an accurate assumption.

I am interested in OPEN communication with information as it is found not delivered via a simple 1 or 2 hour hearing when discussions and information halfbeen growing and developing over a several years span.
What you ARE hearing are SURPRISED QUESTIONS to a SURPRISE action

that could cost me significant funds and likely NO real benefit in my lifetime. I would have been MUCH more comfortable knowing that something has been developing AS IT DEVELOPED and not after 13 of 20 wells have been determined for one small 30 sq mile area

I would have been MUCH more comfortable knowing early on the reasons that 13 are being concentrated in TOS and why.

I will be listening to the other electors here and to the presenters and their answers and I will be expecting some information from the three KENOSHA respresentatives who allowed this to develop to this hearing stage in a less than favorable weather month.

I have asked Mike Hahn for details to be sent to me. If he is not in the postiion to send them, I am certain that he will make the person who CAN send them, aware of my interest.

Thank you...

WRITTEN COMMENT

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

February 2, 2009 Ives Grove Office Complex, Auditorium 14200 Washington Avenue Sturtevant, Wisconsin

Name Brisa	Peters			
Affiliation 2	e perdence Fir	ç+		
Mailing Address	540 5. 15+	54		
	Milwaukee	h:I	53204	

Comment

The plan Selected Should recognize other issues/needs that would be imparted by the water plan - suchas jobs, housing & land use patterns. It is the good of SEWAPE to have efficient land use, and usually this sequises higher density than suchet may compraities allow. SEWAPC should use benchmarks with communities - it they don't meet certain water conservation, transportation or housing goals, SEWARC went assist a planning of expension or new wells plants, etc. for people with disabilities transportation, & housing & jobs are important, & those are impacted by water availability /cost.

dd sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by March 16, 2009, to:

> Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> > Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

February 2, 2009

Ives Grove Office Complex, Auditorium
14200 Washington Avenue
Sturtevant. Wisconsin

Statevalli, wisconsta
Name GARY GARR
Affiliation COUNTRY ESTATES SAN VIST.
Mailing Address 1493 PARK 57.
BURLINGTON, 53105
Comment so the EPA increases the amount of
testing required to disclose additional contaminant
such as OVOC's, etc in deep web,
careful planning much be given to
long term woods demands
Goot analyon must balance 10.
questions involving deep & shallow wells
avile drawdown estimates applied

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by March 16, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

> > Thank you.

WRITTEN COMMENT

WATER-WISE PUBLIC INFORMATIONAL MEETING PRELIMINARY REGIONAL WATER SUPPLY PLAN

March 7, 2009 Carroll University CC Center Waukesha, Wisconsin

Name THOMAS BIRD

Affiliation CHAIRMAN TOWN OF VERNON WATER COME.

Mailing Address 567 W 24325 SKY LINE AU,

WAUK WIS 53189

Comment

BOB BIEBEL VERY INTERESTING.

THE RECOMMENDED WATER SUPPLY

PLAN NEEDS TO BE APPROVED

BY THE D.N.R. ESPECIALLY THE

IMPACT OF HIGH, CAP. WELLS. UPON

PRIVET EXISTING WELLS.

NEED MONITORING OF AREA

WHERE HIGH. CAP. WELL IS

PROPOSED BEFORE BEFORE HIGH CAP.

15 DRILLED 18AND COMISSIONED.

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by March 16, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

> > Thank you.

WRITTEN COMMENT

WATER-WISE PUBLIC INFORMATIONAL MEETING PRELIMINARY REGIONAL WATER SUPPLY PLAN

March 7, 2009
Carroll University CC Center
Wankesha Wisconsin

March 7, 2009 Carroll University CC Center Waukesha, Wisconsin

UIII Bedford

DO RAV 11

Appliation Tall Pines Cand Conservancy

Mailing Address	10 3/11
	Daisman WI 53118
Comment	
/.	/ Engurage saving
/.	remaining open space
/	In Was Edisha Coverty
	for recharge especially
\	the high t very lugh
\	
7	> Help find land preservation
•	activities at all governmental
	levels and local land twots.
•	

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by March 16, 2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

> Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

WRITTEN COMMENT

WATER-WISE PUBLIC INFORMATIONAL MEETING PRELIMINARY REGIONAL WATER SUPPLY PLAN

March 7, 2009 Carroll University CC Center Waukesha, Wisconsin

Name	Seiny
Affiliation U	Superior # 1 Town of Vernon
Mailing Address	A67 W24425 Skylin age.
	Wantenda, Wese. 53189
Comment	The passadation were vary impormation:
	dispinally for & Mr. Shafai and
	Done Withell Augustation well write
	holoning to applant both for
	taking question and sprinking Pulstantin
	anuf.

Add sheets as needed and leave at the registration table or give to a SEWRPC staff member. Or, send by March 16,2009, to:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607, Waukesha, Wisconsin 53187-1607 Fax: (262) 547-1103

Regional Water Supply Plan E-mail to rbiebel@sewrpc.org

Thank you.

Appendix A-4

ORAL COMMENTS MADE AT PUBLIC MEETINGS

05:49 1 05:49 2

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05:50 21

05:50 23

3

BROWN & JONES REPORTING, INC.

ORIGINAL TRANSCRIPT SEWRPC

PUBLIC INFORMATIONAL MEETING

REGIONAL WATER SUPPLY PLAN

January 12, 2009 HeartLove Place, Bethel/Empowerment Rooms 3229 North Dr. Martin Luther King, Jr. Drive Milwaukee, Wisconsin

APPEARANCES

Page

735 North Water Street, Suite M185 Milwaukee, WI 53202 (414) 224-9533 (800) 456-9531

TRANSCRIPT OF PROCEEDINGS

MR. McAVOY: I did this before, but I've -- more on the transportation stuff. But I think that the option, the preferred option, is not fully developed at this point in time. So the problem that I have with the existing approach and the process that SEWRPC has developed for the water supply study, is that it's too confined, it's too restrained, in part because it is reliant on the land use plan and some of the key assumptions there.

So what I would propose is that before the water supply study is finalized, that some of the key assumptions underlying it with the land use plan be reevaluated, and that the water supply study would be broadened to include other issues other than the ones that they are currently addressing in the water supply study. And that includes, as the SEWRPC Environmental Justice Task Force has recommended, that social economic impacts be included in the analysis. Moreover, I think the water supply study as it's currently conceived is not sustainable. It will not be able to address the water supply needs of communities beyond the immediate City of Waukesha environments, but also

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to include the full County of Waukesha and the other neighboring counties as part of the water supply study

The timeline also does not lend itself to be sustainable, and it is arbitrarily picked to be 2035, when I believe that we have within our power to actually set up a plan that would be sustainable for water use forever to meet the needs of the people that currently live in Waukesha and new residents in Waukesha in the future. But this plan, this study, does not do that.

I guess my organization, along with a number of other organizations, sent in a list of questions to Mr. Biebel, and we sent the questions to Mayor Nelson in Waukesha as well as to SEWRPC. And we would appreciate them, in conjunction with the City of Waukesha, addressing those questions before they move ahead. And my organization, along with the coalition of other conservation environmental groups, would be more than willing to work with them in developing a more appropriate approach that will put us on a sustainable water future here in the region.

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STATE OF WISCONSIN SS: COUNTY OF MILWAUKEE

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I. CAROLYN R. KINGSLEY a Notary Public in and for the State of Wisconsin, do hereby certify that the above Statement was recorded by me on January 12, 2009, and reduced to writing under my personal direction.

I further certify that I am not a relative or employee or attorney or counsel of any of the parties, or financially interested directly or indirectly in this action.

In witness whereof I have hereunder set my hand and affixed my seal of office at Milwaukee, Wisconsin, this 15th day of January, 2009.



Carolyn R. Kingsley

Notary Public In and for the State of Wisconsin

My Commission Expires: October 18 2009

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PUBLIC COMMENTS IN RE:
PUBLIC INFORMATIONAL MEETING ON
REGIONAL PLANNING COMMISSION'S
WATER SUPPLY STUDY.

Public Comments taken before

DANNIELLE COX, Notary Public in and for
the State of Wisconsin, at The United

Community Center, 1028 South 9th Street,
Milwaukee, Wisconsin, on January 13,
2009, commencing at 5:00 p.m. and
concluding at 7:00 p.m.

735 North Water Street, Suite M189 Milwaukee, WI 53202 (414) 224-9533 (800) 456-9531

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RICHARD GELDON: Well, I'm in favor of selling Milwaukee water to whoever can buy it. The only concern that I have is the return of water. I'd rather be in a fixed piping system and not discharged into creeks, and the reason for that is there would be more of a control, creation of jobs, environmental impact, flooding, and I would want Milwaukee Water Works to be the wholesaler and retailer of selling the water and not let other communities, such as South Milwaukee or Cudahy, get into this revenue generator for Milwaukee.

Also, on a health concern of water, which should be shared and not controlled by politics, there's other communities, such as Chicago, who sells their water more than 40 miles away from their lakeshore, and the idea of this Continental Divide being so close to Milwaukee and Lake Michigan, those communities just on the other side should receive Milwaukee water.

Also, by the fact that we receive water from the City of Muskego, which is their well water, which we treat and dump into Lake Michigan, so we're taking water from the other side of the Divide and not returning it, and the resistance of Milwaukee to sell water on the other side of that Continental Divide is

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just purely political, and on the health issue, again, $\ensuremath{\mathrm{I}}$ think we should be selling the water as quickly as we can.

(Proceedings concluded at 7:00 p.m.)

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STATE OF WISCONSIN)
COUNTY OF MILWAUKEE)

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the above Public Comm
January 13, 2009, and
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24 25 I, DANNIELLE K. COX, Notary Public in and for the State of Wisconsin, do hereby certify that the above Public Comments were recorded by me on January 13, 2009, and reduced to writing under my personal direction.

I further certify that I am not a relative or employee or attorney or counsel of any of the parties, or a relative or employee of such attorney or counsel, or financially interested directly or indirectly in this action.

 $In \ \mbox{witness whereof I have hereunder set}$ $\mbox{my hand and affixed my seal of office at Milwaukee},$ $\mbox{Wisconsin, this 21st day of January, 2009}.$

Notary Public In and for the State of Wisconsin

My Commission Expires: November 6th, 2011,

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CERTIFICATE

STATE OF WISCONSIN)

MILWAUKEE COUNTY)

I, RACHEL L. GWIDT, a Notary Public in and for the State of Wisconsin, do hereby certify that on January 14, 2009, at The Wauwatosa Public Library, 7635 West North Avenue, Wauwatosa, Wisconsin, for the Regional Planning Commission Water Supply Study, there were no statements taken.

Rachel L. Gwidt

RACHEL GWIDT
STARY PUBLIC
STATE OF WISCONSIN

BROWN & JONES REPORTING, INC.

	ORIGINAL TRANSCRIP
Proceedings before	ANDREA ZIBELL, a
Registered Professional Reporter a	nd Notary Public in :
for the State of Wisconsin, at Rot	ary Building, Frame
Park, 1150 Baxter Street, Waukesha	, Wisconsin, on Janu
20, 2009, commencing at 5:00 p.m.	and concluding at
7:15 p.m.	

735 North Water Street, Suite M185

PUBLIC INFORMATIONAL MEETING, 01/20/09

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APPEARANCES
        Southeastern Wisconsin Regional Planning Commission:
 2
 3
        Mr. Gary K. Korb,
Regional Planning Educator.
 4
        Mr. Michael G. Hahn,
Chief Environmental Engineer.
 5
 6
        Mr. Joe Boxhorn,
Senior Planner.
 7
        Mr. Ken Yunker,
Deputy Director.
 8
 9
        Mr. Bob Biebel,
Special Projects Engineer.
10
        Mr. Aaron Owens,
Environmental Planner.
11
12
13
14
                                 INDEX
15
16
        Statement By:
                                                                Page
       17
18
19
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24
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TRANSCRIPT OF PROCEEDINGS

MR. SCHULTHEIS: My name is William Schultheis. My mailing address is S46 W39028 Highway ZC, Dousman 53118.

After listening to the meeting here tonight, I think that there should be provisions made for acquisition purchase of recharge areas. I think it's quite critical that this is one of the steps to be done. Not offering -- to get recharge of the ground water and so forth, but also it will be multiple use, it will be park lands, park corridors and so forth, and I think it would be a great advantage to have a high quality area out in Western Waukesha to help preserve our quality of life. Thank you very much.

MS. BULL: My name is Peggy Bull, and I live at 223 Debbie Drive, Waukesha, Wisconsin 53189. As a member of the common council in Waukesha, I support the subalternative 2, where the City of Waukesha uses Lake Michigan water.

I have two concerns about the plan. One is the lack of specifics in the conservation plan and the challenge to new developers to use trends in building that include use of rainwater, cisterns, which is an old thing, and water-saving

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PUBLIC INFORMATIONAL MEETING, 01/20/09

fixtures.

My other concern is how to measure and control for trace elements of pharmaceuticals that may be present in the water, as we use it, and upon its return to the lake after we use it.

(Proceedings concluded at 7:15 p.m.)

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STATE OF WISCONSIN)
COUNTY OF MILWAUKEE)

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I, ANDREA ZIBELL, a Registered
Professional Reporter and Notary Public in and for the
State of Wisconsin, do hereby certify that the above
meeting was recorded by me on January 20, 2009, and
reduced to writing under my personal direction.

 $I \ \ further \ certify \ that \ I \ am \ not \ a$ relative or employee or attorney or counsel of any of the parties, or a relative or employee of such attorney or counsel, or financially interested directly or indirectly in this action.

 $In \ \mbox{witness whereof I have hereunder set}$ $\mbox{my hand and affixed my seal of office at Milwaukee},$ $\mbox{Wisconsin, this 26th day of January, 2009}.$

Andrary Public
In and for the State of Wisconsin

My Commission Expires: May 17, 2009.

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CERTIFICATE

STATE OF WISCONSIN)

)

MILWAUKEE COUNTY)

I, DANNIELLE COX, a Notary Public in and for the State of Wisconsin, do hereby certify that on January 21, 2009 at The Washington County Fair Park Pavilion, 3000 County Highway PV, Town of Polk, Wisconsin, for the Regional Planning Commission Water Supply Study, there were no statements taken.

ONNIELLE COX OTARY PUBLIC OF WISCONSIN Dunnello L. COK)
Dannielle Cox

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STATE OF WISCONSIN)

MILWAUKEE COUNTY)

I, KAREN HOWELL, a Certified Realtime
Reporter and Notary Public in and for the State of Wisconsin,
do hereby certify that on January 22, 2009 at The Government
Center, 100 W. Walworth St., Elkhorn, Wisconsin, for the
Regional Planning Commission Water Supply Study, there were
no statements taken.



Haren I. However

Karen Howel

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PUBLIC COMMENTS IN RE:

PUBLIC INFORMATIONAL MEETING ON

REGIONAL PLANNING COMMISSION'S

WATER SUPPLY STUDY.

Public Comments taken before

DANNIELLE COX, Notary Public in and for the State of Wisconsin, at the Ozaukee County Administration Center, 121 West Main Street, Port Washington, Wisconsin, on January 26, 2009, commencing at 5:00 p.m. and concluding at 7:00 p.m.

> 735 North Water Street, Suite M185 Milwaukee, WI 53202 (414) 224-9533 (800) 456-9531

CERTIFICATE

STATE OF WISCONSIN) SS:

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23 24 25 I, DANNIELLE K. COX, Notary Public in and for the State of Wisconsin, do hereby certify that on January 26th, 2009 at the Ozaukee County Administration Center, 121 West Main Street, Port Washington, Wisconsin, for SEWRPC: Regional Planning Commission's Water Supply Study, there were no statements taken.

Notary Public
In and for the State of Wisconsin

My Commission Expires: November 6th, 2011.

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ORIGINAL TRANSCRIPT

PUBLIC INFORMATIONAL MEETING ON REGIONAL PLANNING COMMISSION'S WATER SUPPLY STUDY.

JANUARY 29, 2009

Public Comments taken before KAREN L. HOWELL, Registered Professional Reporter and Notary Public in and for the State of Wisconsin, at the Kenosha County Office Building, 19600 75th Street, Bristol, Wisconsin, commencing at 4:54 p.m. and concluding at 7:43 p.m.

> 735 North Water Street, Suite M185 Milwaukee, WI 53202 (414) 224-9533 (800) 456-9531

* * * * * * I N D E X

Carole Dienethal	3
Virginia H. Winker	4
Linda Valentine	5
Tracy Moreno	9
Stephen Gutschick	9
James J. Schultz, Jr	9
Mark Schmitt	10
Bob Epping	12
John Bredican and Theresa Bredican	12
Butch Euker	13
Jerome Epping	15
David Rock	15

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

TRANSCRIPT OF CITIZEN COMMENTS

CAROLE DIENETHAL, 23408 124th Place, Trevor, Wisconsin, 53179:

I think that every homeowner should be notified directly through either mail or -- not by newspapers or TV, but directly -- about any of these important meetings that are going to affect our properties, our finances, and I think it's terrible that they only put it in the newspaper and hang it somewhere, and I really would like them to give me a response to

I would be willing to pay the 47 or whatever a stamp cost or whatever the postage is to be notified about everything that is going on because I don't like hearing this two days before by a neighbor who has paid more attention. I haven't seen it in the newspaper. Thank you.

I'd also like to know the authority that gives them this right to make us have the service. What authority over a private individual and private property does this have -- do they have? I'm really interested in that, because they never tell me that. Thank you. That's all.

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

VIRGINIA H. WINKER, 24709 87th Street, Salem, Wisconsin 53168:

I lived in the City of Kenosha for many years, and when you have municipal water, it's there. It's there, you know, and you don't conserve, and I never -- I used to brush my teeth and let the water run. I used to do a small load of laundry instead of a large one, and then we moved out to Salem where we have a well and a well pump and everything that goes with it -- a water softener, deionizer -- and I conserve because I know that the water from a well is not -- it's finite, it doesn't last forever, so I've conserved.

I save some of the water from my water to do another wash. I never let the water run. A lot of times we use cold water instead of hot water because our old-fashioned pipe takes a long time to get upstairs, so there are many ways that you can conserve, and you do because, you know, I might have to fix the well pump. I might have to drill another well. Ours is down a hundred feet, so maybe I would have to go 200 feet, 300 feet.

 $I \ \hbox{ just think if people have municipal} \\$ water, they are lazy about it. They just use, use, use because they know they are going to get a water bill, and I never had a water meter in town. We all just paid

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

the same thing. So that's my comment. I feel it would be bad for out here. I don't think you should fix it if it isn't broken.

LINDA VALENTINE, 10816 269th Avenue,

Trevor, Wisconsin, 53179:

I am Linda Valentine, candidate for Town of Salem Chairman. I have a few questions and concerns. Who or which entity specifically asked for a study on municipal wells, and where can we find the specific request that defined the scope of your work?

Did all three of the Kenosha representatives, and are they in the audience, agree with this proposal, and when did that agreement occur? How were the locations of the well points determined? What field work was done, or was this work done from a desk distant from the physical location?

 $I \ \ suggest \ that \ there \ has \ been \ no \ field$ work since it would be expected that people would have been asking about the people trespassing and doing tests on their private properties.

Why hasn't the Town of Salem been given some information on this prior to involving all of their electors? What if the elected officials of the Town of Salem determine that this will not advance the quality

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of life in the town for the monies they would be expected to expend and choose not to participate in this program? What if we only wanted to advance MW (municipal water) for use in light industry, retail and institutional purposes?

Lately testing has been done in the Town of Salem on deep water well potential because of a recent and real subdivision being considered which would have included a municipal well. I believe the water tested fine. We certainly do not want a shallow municipal well competing with my small homeowner shallow well. I can't imagine anything other than a deep well for municipal purposes.

 $I \ \mbox{am also concerned about the level of}$ the water in the new Twin Lakes area Thelans (phonetic) pit, which will need to be removed in order for them to mine. This will impact our homeowners.

I am also concerned about the expense, not only of installing the hardware for municipal water, but the removal of old hardware and permits and capping of wells on private lands, and I wonder just how many of these 13 wells will be for other communities and not solely for Town of Salem electors.

I have a concern more and more lately of filtering additives to consumables -- water included. I

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

have a concern for the cost of maintaining in terms of technical employment, equipment, buildings, ongoing testing and liability of the Town for good, safe water from MW after telling people that they can't use their own good wells.

I have a concern about the streets that some have waited for years to be resurfaced and the losses of old trees that lend character to our town because of new pipelines. I have a concern about the City of Kenosha using us as their safety net should they have any problems with the Lake Michigan water that they are entitled to and which we are not entitled to.

I would be more apt to want to work with a municipal well system closer to my area, even in Illinois, than to one 20 miles distant and in a totally different water program.

I will have to learn more about those individuals who have bad water out of shallow wells. I would think that perhaps their well isn't deep enough and perhaps a call to a local well driller, likely several in the audience, would be needed to correct their immediate problem and to control their own destiny. I would like to know why they don't get good water.

You may feel that my questions are in

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

opposition to municipal wells. That would not be an accurate assumption. I am interested in open communication with information as it is found, not delivered via a simple one or two-hour hearing when discussions and information have been growing and developing over a several years span.

What you are hearing are surprised questions to a surprise action that could cost me significant funds and likely no real benefit in my lifetime. I would have been much more comfortable knowing that something has been developing as it developed and not after 13 of 20 wells have been determined for one small 30-square-mile area.

I would have been much more comfortable knowing early on the reasons that 13 are being concentrated in the Town of Salem and why. I will be listening to the other electors here and to the presenters and their answers, and I will be expecting some information from the three Kenosha representatives who allowed this to develop to this hearing stage in a less than favorable weather month.

 $I \ \ \text{have asked Mike Hahn for details to be}$ sent to me. If he is not in the position to send them, $I \ \text{am certain that we will make the person who can send}$ them aware of my interest. Thank you.

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

TRACY MORENO, 28608 107th Street,

Trevor, Wisconsin, 53179:

I would like to keep my well unless they tie into Lake Michigan somehow, which I don't think is going to be able to happen according to the way it looks on their charts and stuff. That's all that I have to say. I don't think that the plan that they have is actually going to help for the future.

STEPHEN GUTSCHICK, 40410 - 102nd Street, Genoa City, Wisconsin, 53128:

I asked for specific plans for the Powers Lake - Benedict - Tombeau district, and none were available. I asked for specifics in five or 10-year increments for all other districts, and none were available. I see a map predicting water management strategies likely to be undertaken by 2035. I should be looking at maps depicting planned changes over the study period. Give me maps that show what things will look like in 2010, 2015, 2020, 2025 and 2030 and then finally 2035.

JAMES J. SCHULTZ, JR., 23640 123rd Street, Trevor, Wisconsin:

I appreciate the expertise in their $% \left(1\right) =\left(1\right) \left(1\right) \left($

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analysis and study. Very well done. My objection isn't with the organization who put on the presentation, but I am very disappointed for a second time in under three years that the representatives of the County in which this is occurring is absent from the meeting and not participating on my behalf.

I could go further and tell you a horror story of the County and the Highway 83 project widening that went much like what is going on here tonight, and that absence in being at the meeting when the preliminary study and analysis of the Route 83 corridor was put in.

 $I \ was asked by the County individuals at that time to write up an amendment for them to have a closed-door session hearing instead of a public hearing to amend zoning law to allow the Route 83 corridor to occur and prevent condemnation of residential and commercial properties on the Route 83 corridor. That is illegal and unethical, and again I say for a second time, I am very insulted that they are not here. I am outraged.$

MARK SCHMITT, 35913 Geneva Road, Burlington, Wisconsin 53105:

I am opposed to the requirement of

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

municipal water for western Kenosha County, specifically west of the Fox River. Ground levels continue to rise. Most have their independent sewer systems, which in and of itself, acts as a natural recycling of the water without diminishing the agua filter.

During the presentation it was mentioned that there were no issues and probably would not be issues with this area of the County. However, in case something would develop, there was something that would be covered within the plan. When pressed for the reasons of what could come up, what could present as a problem, none were given.

It appears to me as though the only reason for including western Kenosha County is to obtain grant money which borders on the deceptive side since there is no true need for the proposal for this area. If what is at stake is obtaining federal funds for infrastructure, I would rather see the County and the State invest in wind turbines along Lake Michigan rather than waste needed resources for a problem that does not exist.

Recently the overflow on the old KD pit developed problems as a result of the rising water level. Wheatland has seen record floods annually rather than once every hundred years. There is no water level

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

problem here. Therefore, I want western Kenosha County removed from the SEWRPC proposal.

BOB EPPING, 30621 52nd Street, Salem, Wisconsin 53168:

I am a landowner that has several parcels, over a thousand acres total, and in all my acreage the water table seems to be coming up. In the last three years I've never had as much water in all my ponds, lowlands, and I'm kind of under the same opinion when you use the water that comes out of the well and it comes back into the septic, it does a circle and goes right back into the ground, so I don't see a need for deep wells when I've got more water than I know what to do with in the last couple years. We do not want to be a part of the plan the way it is explained to me, that we are running short of water, because I do not see surface water running short.

JOHN BREDICAN and THERESA BREDICAN, 12105 219th Ave., Bristol, Wisconsin 53104:

We do not want to participate in this plan. We have Artesian spring water. Our well is extremely deep.

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

BUTCH EUKER, N6637 County 0,

Elkhorn, Wisconsin, 53126:

This \$900,000 study is flawed because it is based on numerous assumptions and a push to expand utility influence. To put more wells in the shallow aquifer for municipal use would be to use the same water in a municipal pipe that the people are already using in current systems. Why pay 10 times the amount for the same water? The answer? To generate more government funds.

Technically, municipal systems lose

11 percent of their water to leakage. Private wells
lose virtually none. This system -- correction, this
study -- assumes that the growth will happen at the
current rate. It will not. Economic situations dictate
that growth will slow significantly in southeast
Wisconsin. The shallow aquifer is in great shape, and
there is plenty of shallow water with no need for
municipal systems.

Deep wells affect northern Illinois, and northern Illinois affect our deep wells in southeast Wisconsin. That influence is not addressed by this study. An example of the folly of this study occurred several years ago in Paddock Lake. Local officials said that they needed municipal water to get a Walgreen's

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Walgreen's is now there, and they don't have municipal water to that end of town.

Another reason this study is flawed is the fact that existing Lake Michigan water treatment plants are less than 50 percent of capacity. There is a political push to utilize those plants more.

In the '90s, the City of Milwaukee had 100 deaths directly attributed to their water supply. The cryptosporidium outbreak was directly resulting from the municipal water supply.

Private wells have a great track record and should be considered modern. Too many people feel well systems are not modern. They should look at the new well pumps available that are constant pressure and use three phase energy, which are environmentally safe and efficient.

Common people should be part of this process. The group tonight exemplified the fact that the common Joe was not consulted in this study. Thank you for your time.

Also, Delavan Lake, for example, has higher water levels than they have had in years. The quality and quantity of water there is tremendous and the best in the free world. We recommend that they continue on with their wells.

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

JEROME EPPING, 29000 -75th Street,

Salem, Wisconsin, 53168:

 $I \ \ \text{feel that this is an ill-conceived plan} \\ for the communities of the western Kenosha County. \ I \\ feel that if there becomes a need for community well \\ systems, our communities will address this need as it \\ arises. \ I'm totally against this plan as it stands.$

DAVID ROCK, Rockwell Well & Pump Service,
4720 S. Beaumont Avenue

4/20 S. Beaumont Avenue,

Kansasville, Wisconsin, 53139:

I think that the \$12 per person price to implement this system is extremely misleading. They are telling us it is going to cost \$300 per person to implement when in actuality it is going to cost \$10,000 per property owner.

Kenosha County has an extremely high abundance of very high quality ground water. This water needs to be respected. It is being respectfully drawn out of the aquifers with private wells as of current

To be implementing thousands of gallon per minute wells is going to greatly change the characteristics of our groundwater. I have seen it happen around gravel pits when they put in large

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SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

de-watering wells. Water movement around local wells' properties is greatly affected, not for the better.

I would have to say I probably do not support this plan, not just due to the fact that it is going to affect my livelihood, but because of the fact that the way the water is being removed from the ground right now does seem to be the more cost effective option for people, specifically since people are not being told the real price.

(Proceedings concluded at 7:43 p.m.)

735 North Water Street, Suite M185 Milwaukee, WI 53202 (414) 224-9533 (800) 456-9531

SEWRPC KENOSHA COUNTY MEETING, 01/29/2009

STATE OF WISCONSIN) SS:

I, KAREN L. HOWELL, a Registered Professional Reporter and Notary Public in and for the State of Wisconsin, do hereby certify that the above transcript was recorded by me on January 29, 2009, and reduced to writing under my personal direction.

 $I \ \ further \ certify \ that \ I \ am \ not \ a$ relative or employee or attorney or counsel of any of the parties, or a relative or employee of such attorney or counsel, or financially interested directly or indirectly in this action.

In witness whereof I have hereunder set my hand and affixed my seal of office at Milwaukee, Wisconsin, this 6th day of February, 2009.

NOTARY PUBLIC NO

My Commission Expires: June 27, 2011.

735 North Water Street, Suite M185 Milwaukee, WI 53202 (414) 224-9533 (800) 456-9531

	BROWN & JONES REPORTING, INC.	2
1	APPEARANCES	
2	Mr. Joseph Boxhorn,	
3	Senior Planner.	
4	Mr. Gary K. Korb, Regional Planning Educator.	
5	Mr. Bob Biebel, Special Projects Engineer.	
6	Special Projects Engineer.	
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BROWN & JONES REPORTING, INC. 414-224-9533

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BROWN & JONES REPORTING, INC.
       STATE OF WISCONSIN ) SS:
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                          I, KAREN RENEE, Notary Public in
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       and for the State of Wisconsin, do hereby certify that
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       on February 2nd, 2009, at Ives Grove Office Complex,
9
       14200 Washington Avenue, Sturtevant, Wisconsin for
10
       SEWRPC: Regional Planning Commissioner's Water Supply
11
       Study, there were no statements taken.
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                            Notary Public
In and for the State of Wisconsin
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       My Commission Expires: March 11, 2012
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Appendix B

ATTENDANCE RECORDS OF PUBLIC INFORMATION MEETINGS HELD JANUARY 12, 2009 THROUGH FEBRUARY 2, 2009

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ATTENDANCE RECORDS FOR PUBLIC INFORMATIONAL MEETINGS HELD JANUARY 12, 2009, THROUGH FEBRUARY 2, 2009

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 12, 2009 HeartLove Place, Bethel/Empowerment Rooms 3229 N. Dr. Martin Luther King, Ir. Drive Milwaukee, Wisconsin

Name	Address	Representing
Paul Bous	1841 W 59th Milate	Block! Vake
PETER MANOY	1377 5 CESAN CHANGZ	16"ST Comm Hand a
	DRIVE MILWAULE	
Bill, 2: ppel	1219 E Burleigh St Milwarder	Afred lenesch & Co.
Nik forac	1129 E Conta St	City of Milvanter
Steve traggiost	3258 W. Shop on D. Av.	mm50
Steve Adams	1733 N. 17th ST	CDMP
Kate Madison	1931 N. Oct HH Ave	Center for Econone Ball
VIXIDE Merel Schuttle	1300 N. Frathey St.	C:/1200
STEVE CLAIL	STOVENS PUNT KI	AEcom
Jin Rowten	3104 M. Hackett AR	Sell

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 13, 2009
United Community Center, Conference Rooms 1 & 2
1028 S. 9th Street
Milwaukee, Wisconsin

Name	Address	Representing	
RiveGeldon	9316 w. Park HILL AVE.		
Barb Eisenberg	2661 A North Fraincy St	League of Wenen Vines	
Alga Huguin	1633 N. Prospect fre. # 14B	Luv	
Down Shapmen	1673 N. Prospect 14B	LWV	
Jason Schroelyn	3117A N Douseen St. Milwelse		
Mary BOTH Driscoll	3015 2 Wenter-T Wilw		
Trisle Silletti	200 F. WIM St	Mysk Bernett	

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 14, 2009 Wauwatosa Public Library, Fireffy Room 7635 W. North Avenue Wauwatosa, Wisconsin

Name	Aildress	Representing
I'm Woscetowicz	7725 W Nones Are	WARWARDS WOTER USING
Marc Dettmanso,	2820 From Hill Ct Browtheld Block	- Self
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STEVE Schultz	SUS WELLS BEENE HED	RudkerT / MIEIKE
Jennifer Hill	8129 N LOWST ST MKE	Grandwork MKE
Break Hill	8149 W Lough ST AVE	Se/F
Moke Kan	431 N. 49-51, MKE	2.50
Gerard McMullen	4917 W. Synnyside Dr. M. W 53208	
Chenge Nevan	2400 N S8T # MEE S3210	Milworkel PNUMBER
Mark Bu bel	2021 N. 701 st.	Whylesters, WT
MARTY WALL	STOT W. TRAINTON TR	Midue.

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 20, 2009 Rotary Building, Frame Park 1150 Baxter Street

Name	Address.	Representing
Garage Mace	Wantesta County	->
Person Brill	223 Debby Dr. 53/89	
Keil Bullerfield	1604 Big Bend Rd 53189	5 elf-
At Perssel Evans	519 WAGSI Combin Recharde	453118
DANIES DEMOIRE	115 Delalield St Wastesha 53188	Wakesha Water Unling
Parid White	235 Hickory Tewanker 5301	Village of Pewante
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Janemueller	N80 W24/38 Phinview R45308	City of Powarker to
LINEA ME AIRINE	WHUKE'M FREEMAN	
& GLATEGGER		ALCHOCE FOR THE GREAT
Vonna Bothan	24518 Santyfort St. Willet	
Mike berowe	537W22246 CRESTURN	SOLF - FIRST WELL
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Steve Schmile	96	WEAL

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 21, 2009 Washington County Fair Park Pavillon, Room 112, 3000 County Highway PV Town of Polk, Wisconsin

Name	Address	Representing
STEVE MUSINSKY	3328 LAKE DR. HARTEORD .	WI. SELE
Gara Casper	4677 54 to RY 144 Share or	\$ 53086 YESHINE L
TERRANCE RICKHASTER	251 MoviciOA) Dr. West Bandwis	3095 - Citat Wat Board
John Behrens	3 V BZ Courty they NIV. West Board w	53095 - situarland son the
USSTZ W CHOT	5834 W. LAKE Dr WE	SerF
AL VANDERIKIBENI	WITE NIISE FOSEWERE G TOWN	
John Janson	5939 WasaheeRd WB	Citizen.
HRT ZABEL	N97W15737 BURRDAKKO	
Dantel Wis	NII6 WIGOTT Main St	
tay Backhaus	925 Leveral + West Brol	50/F
MERK Protrowice	City of West Bead	Dept of Commerity Dev
PAUL SERVAIS	4140 DRY BYLLH, JACKSON	
Dong Greekings	1740 Sterewy Ct	Richfield -
May Kompingh	W209 N11065 Spring Ill Jane	Demostown
Henry Deling	6423 Hy & Hartford, Wis.	Jour Hartford
The owert	NIB WZDGGZEDGEWOOD	GERMAN TOWN
MICHAEL BECH	WHIEN 13751 PLEASANT VIOW DR	GERMANTON
DAN KNOOL	WIDI WHYTS FYGEFIELD CT	Grown WI
Bolg Retky	3270 center Rd Calorbung 1st	citizen
Angi Centes,	9190 Luy Rd wat Bed, UI GREG	T. J. PAK
the Haponis	353 E. Washington St	Wish Co.
Anh Mass	333 E. Washington Str	Worken

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 22, 2009 Government Center, Rosen 214 100 W. Walworth Street Elkhorn, Wisconsin

Name	Address	Representing
Joney Bentwered	1432 Ames + Lypus	andry ESTATE
Dean Fischer	PO Box 178 Whitegater, WISSED	Con 1 Whitewater
Fay Amerson	Walnorth Courte	Win works Coce
Michael Lotter	100 V. Wallatt Elle DUISIDI	Welvor Grety
Steve Schultz	543 WEEZS BEENE 4 20 53/87	Rocker - Mierke
Robert David	W3324 Condy Road Albert	Self.
Pea Reedy		Sell
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PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 26, 2009

Oznakee County Administration Center, Auditorium
121 W. Main Street
Port Washington, Wisconsm

Name	Address	Representing
AND Y HOLICHOPEH	Pa Box 779 Past maldenies	de co Law . water me
viale Sidott	POBOX 994, FORT WAS higher	UMEY OL. CO.
Work Grams	100 W. Grant NE ho.Cor	or 145 OF Port
Dan Buce	100W Grand	Part Wishests
ANDREW STRACK	121 W. MAIN ST , FORT WASHINGTON	DE Co. PUNITAGE & PACKS D
Lesley Brokowski	Po Box 73030 Catorburg in	Cadarburg Science, 16c
Day Butter	7715 Mary Eller Place	Cobartury Science, LLC Furkert of Hielke Int
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David A Schwager	174 mare last Cirts w Good w	self 1
Dale Bist	5207 Hay W, Fort WASK WI 530	M Northern Environmental
RICH KLEIN	1107 Rolling Martons C.	4ECOM.

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kenosha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

Name	Address	Representing
MARK HALVEY	39002 89Th PL	Powers LK.
ROSE NOLAN	38904 92NO ST	POWERS LAKE
ROBERT GEHRING	8432- 359Th	RANDALL
Londa Valentine	A STATE OF THE STA	105
derlet of Wieller	1143-359 the PoBot 2	True de 53119
Chris Gustafson	24001-11946 St Trous	
Cale Dunetful	23408 /244 Place Treum	
Jarband Jem Bors	11247 224 THAVE BUSTOL	Sect
David Rock	(1700 S. Bearing Aug	
DAVID FRANKEY	21828 12157 Brish 53101	Sall
WALTER TASZKOWSKI	21818 /21 PLACE BRISHLES	104 SELF
ROYCE KENUEDY	9916 278 TH AVE.	UILLAGE SILVER LA
Margarett mark	10969 264th Que	Trevor W. 530
Ronald mark	10969 264th are	Trever W. 530
Dincel mulewoods	27001 - 47Th ST.	TREVOR WI 53175
Billian Dirginia Winker	24709 83 AM ST.	Salem 53168
Marie Sugardand	26823 1091051	Trevor WIT 53/79
STANE Bryset	23919 7574 57	Sala 47 53166
Patricia J BABRUS	6422 241 Ave Paddick	Lake WI 53168
Brema Julish	1402 240th Ave Form	KLAKe . W. 5316
DoRine Watson.	11110 235thAve, KEVOR	to treation details
John Tense Bredinen	12105 219th AVE. BRISTOL	Sielf /
Bill Menhan	1101 131TH AVE UNSON LANCE	WES FORMING WATE
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25 Hinlow	11425 259Thave Treval	Self
Mary ELLEW CLOSE	7140 216" AVE SALEM	- 0
WARREN CLEST	10 41	4
Dawe Cousins	9795 214+L TREVOT	Solfi
Mary Morero	28608 107 19+ Travel	Se/K
DeborAh McGraar	1150) 270 AVE	TRIVE W. 5317
Stephen Outschick	40410-102nd ST Genuality 53128	Self

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

January 29, 2009 Kennsha County Office Building, Hearing Room 19600 75th Street Bristol, Wisconsin

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LAVID JACOBE	10341 278th ADD	TREVOR
DANIEL J. GAGE	25013 113th ST.	TREVOR
LOW SCHOPPEL	12412 23474 806 -	TANOR
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Quila Trache	34020 Basiett Level Bookyton	
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J. Barninglam	21716 11th St. Bristol, WE	SALE
D. Danilla	20811-1816 St. Wain Gran UT	Dairy Farmer
Penny Roebvar	10:05 Loke Shore Dr. 11-1A	Alterman lote Geren
Mark Schmitt	259 B Baren Rd, who way 5	110
Bil Enay	30671 52 a St Salena	
Do Brad Swith	22230, -75th st Selon	SETT
Todd Hiemann	3960x both St Bylongton A	Solf
TerryFlores	+flores & Kenahanan com	Kenosha News
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HOAN BRAIG	4707-84 ST KENDSHA	SEL P
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Jen Epp	29000 75 el the Souls	Self

PUBLIC INFORMATIONAL MEETING REGIONAL WATER SUPPLY PLAN

February 2, 2009

Ives Grove Office Complex, Auditorium

[4200 Washington Avenue

Sturtevant, Wisconsin

(Name (a)	Address	Representing
Norma Tillare D.	the HS18 Sandy Paid of	Wid Lake W 53185
JULIE ANDERSON	14200 WASHINGTON AV STUZZENA	
GARY CARR	1493 PARK BURL	CESD SAN DIST
grey Belly	1493 PARK BURK	and Rue keet Mielke, I
Ogleha Gerschke	1817 Carroll (+ Su. M. la	of Calling Engr. Ise
Porran Peters	1029 Budged Ct. Ruine	ic Incharature Frist

REGIONAL WATER SUPPLY PLANNING UPDATE WATER WISE CONFERENCE, 2009

March 7, 2009 Carroll College

Carroll College Waukesha, Wisconsin				
	NAME	REPRESENTING		
Į.	Bob Tallingen	Town of Wantersha		
2.	Jesse Junten	UW-Milwaukee		
3.	Lisa Contey	Ochund		
4.	Brian Genzilisti	Waukresha		
5.	Jill Glehzinstri			
6.	Heather Mullel	WLCV		
7.	Andy Yencha	UWEX+EUS.ON		
8.	Keith Butterfield	Wavkesha		
9.	FRE NETSCHEET	Value = OF SUSSEX		
10	awayne Block	6conomowoc		
11.	Rex Krueger	Waukesha		
12.	Lavid Block	Carroll University		
13.	Law Late	WEAL		
14.	Kothanne Brenner	Brackfield		
15.	VILL BEDFORD	OCONOMOWOC TALL PINES		
16.	STELL TOMASINI	university LAKE SCHOOL		
17.	Alexis Gassenhuber	w/ Milw. Conty Sup. Patricia Jursik		
18.	Puss Evens	, ,		
19.	Thomas BIRD	JERNON		
20.	The Therety	Town of Vernon		
21.	Shk Schlotte	u In 4		
22.	Claus Dunkelborg	WATON Courcil		

Appendix C

NEWSPAPER ARTICLES AND EDITORIALS CONCERNING THE REGIONAL WATER SUPPLY PLAN

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Waukesha may face radium fines

City missed water upgrade deadline

By <u>Darryl Enriquez</u> of the Journal Sentinel

Posted: Jan. 1, 2009

Waukesha - The state Department of Justice likely will fine the City of Waukesha for failing to completely rid its drinking water of potentially cancer-causing radium, Mayor Larry Nelson said.

The fine amount is being negotiated between the state and the city attorney's office, Nelson said. It likely will be a single fine and not an amount that accumulates each day the city is non-compliant, he said.

The state Department of Natural Resources in October asked the attorney general's office to fine Waukesha and Fond du Lac for failing to rid community drinking water of radium after the municipalities missed the deadline to complete the work by two years.

At the time, the DNR said fines could be as high as \$5,000 a day.

Each community is working on massive water improvement projects. Waukesha had hoped to persuade state prosecutors to waive any fines.

Although they are pursuing fines, state officials indicated last fall that the penalties would not hinder the local financing of radium- reduction plans.

A recent story in the Fond du Lac Reporter newspaper says that city also will be fined, but the amount was being negotiated.

Forty-two water utilities in Wisconsin had until December 2006 to bring radium levels into compliance with federal safe drinking water standards.

Deep wells at fault

Radium, a radioactive chemical element, occurs naturally in water drawn from deep wells that tap aquifers where the water interacts with sandstone. Continuous exposure to radium is cited as a cause of bone cancer.

Many utilities became compliant by finding new water sources or equipping problem wells to filter out radium, but 29 of the larger utilities had to take on more expensive projects.

Waukesha is expected to spend at least \$13.5 million to develop radium-free wells and for equipment that rids water of the substance. Fond du Lac is in the midst of a \$32.4 million water upgrade that includes \$13 million in radium-abatement projects.

Waukesha now says it meets radium safety standards much of the year, except during peak water demand, usually in the summer.

At times, city radium levels were twice the federal safety standards.

Water purchase pursued

While it is acquiring new water sources, Waukesha is also pursuing an agreement to purchase Lake Michigan water, possibly from the City of Milwaukee.

To decrease radium, Waukesha is blending radium-free water from new wells with the city's older water supply.

Waukesha is in a condemnation proceeding to acquire an area south of the city where it can tap a shallow aquifer as a new water source.

Author: City has 'valid case' for Great Lakes water

Annin predicts high bar to hurdle for access

- Linda McAlpine, Freeman Staff

Peter Annin, a former Newsweek correspondent, is the author of "The Great Lakes Water Wars," which has been called the definitive work on the water diversion controversy surrounding the massive freshwater resource. It includes a chapter about Waukesha's pursuit of Lake Michigan water, entitled "Waukesha Worries."

Annin, 46, is the associate director for the Institute for Journalism and Natural Resources in Madison, a nonpartisan, nonprofit organization that prepares educational fellowships for environmental journalists.

THE FREEMAN: How did you get interested in writing about water as an issue? PETER ANNIN: When I was at Newsweek in 1998, that is when the Nova proposal to divert pristine Lake Superior water to Asia came about and that captivated my attention. I covered the very emotional hearings before the International Joint Commission about the proposal, where people came from all walks life to protest it and spoke in defense of protecting Great Lakes water. That planted the seed in the back of my head that this is a fascinating issue with global repercussions. As the controversy continued and the Great Lakes Compact started marching along, I thought it was a natural book, but it had to be done quickly or it wouldn't come out in time to inform the public about one of the most important public policy issues in the Great Lakes region in our lifetime.

FREEMAN: In the chapter of your book entitled "Waukesha Worries," you tell the story of city residents taking up arms in 1892 to prevent the shipping of Waukesha's world famous spring water to Chicago.Why?

ANNIN: Waukesha has one of the most fascinating water histories of any community in the Great Lakes basin. More than 100 years ago it was a water destination because of its bountiful springs and people came from all over the nation as they believed the springs had incredible healing powers. Now, ironically, Waukesha has changed from a water destination to a water beggar, which is a fascinating historical turn of events. I think there are lessons in water sustainability in that, not only for Waukesha and the Great Lakes region, but beyond. FREEMAN: You characterize Waukesha as "pugnacious, irascible and unreasonable" in the early years of the water debate. Has that changed and why?

ANNIN: One reason it changed, I think, is because the old methodology wasn't working and Waukesha wasn't really getting anywhere. Also, the political establishment has changed. Mayor Nelson, in particular, has a different philosophy about how to go about these things and I think the consultants Waukesha has hired have tried to steer the city in a different direction. So now what you have is a kinder, gentler Waukesha that realizes it needs to be diplomatic to make its case for water. Waukesha is in a very privileged position to even be able to request Lake Michigan water because anyone beyond a straddling county doesn't have even have that right. FREEMAN: Do you think Lake Michigan the best alternative to solve Waukesha's water problems for the long term?

ANNIN: I'm a journalist and so I don't take a position on that. I am not an advocate. But I can say that water is so tense in southeastern Wisconsin that no matter where Waukesha goes, whether it's for regional water or Lake Michigan, it will run into friction. That is just the state of water in southeastern Wisconsin, which I consider the front line in the Great Lakes water war. FREEMAN: If Waukesha does make an application for a water diversion from Lake Michigan under the Great Lakes Compact, do you foresee it being approved?

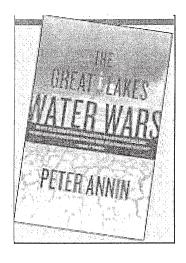
ANNIN: Because it would be the first community under the straddling county exception of the compact, I think Waukesha can expect to have a really high bar to cross with its application. It will be the one future applicants look to as one who did things right or did things wrong. It will need the approval of all eight Great Lakes governors. The approach will have to be twofold, as it will have to convince local environmentalists and the state's Department of Natural Resources that it has a viable application. Then it will have to convince the seven other Great Lakes governors. Michigan, in particular, is always tough because water diversion is an extraordinarily emotional issue there. The timing is fortunate for Waukesha, though, because Michigan has a term limit on their governor. The current one has two years left in office. If a new governor were seated, I think he or she would be less inclined to approve an application, so there is a window of opportunity for Waukesha.

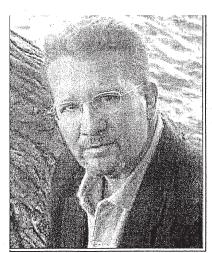
FREEMAN: Do you foresee a timeline for Waukesha getting Lake Michigan water? Are we talking two, five or 10 years out?

ANNIN:That's a good question. We really don't know because this would be the first application. I get the sense Waukesha will submit one by mid-summer, maybe sooner. There will probably be some vetting by the DNR and maybe some going back and forth before it gets submitted to the governor. It will be fascinating to see how the process works. Waukesha has a valid case. It has a public water supply that is naturally contaminated with a radioactive element and that is a very serious health situation. I think that is seen as a very worthy cause in many people's eyes.

FREEMAN: Some see Waukesha's quest for Lake Michigan water as just a regional issue. Do you agree?

ANNIN: We have to remember that the Great Lakes are an international waterway. We live next to a globally significant resource and sometimes I think we fail to appreciate that fact. I think that will change as we head into the next century.





Peter Annin

Waukesha Freeman January 10, 2009

[&]quot;The Great Lakes Water Wars," written by Peter Annin, a former correspondent with Newsweek, contains a chapter dealing with Waukesha's water woes. The book contends the war for water is just beginning and it focuses on the issues and people who will be at the front of future water diversions. Annin will make a presentation to the Waukesha common council at its Tuesday meeting.



Patrick McIlheran

Of course Waukesha gets water

Posted: Jan. 10, 2009

Waukesha soon will ask, formally, to get water from Lake Michigan, drink it, clean it and send it back. People who fret on such things sent Waukesha's mayor some questions.

Has the city, wondered the questioners, sufficiently priced alternatives? Has it formally notified neighbors? Does it know exactly where its return pipe will go?

They're worthwhile questions. Dan Duchniak, who heads Waukesha's water utility, says he's got answers, thanks to years of studies.

They're supplemental, however, to the really important answer, which is: Yes, Waukesha should get lake water, or a "diversion," as law calls it. Every other answer is just supporting detail.

Thanks to falling water tables and changing radium rules, Waukesha needs something other than wells. Its strangulation, should it be either unable to get new water or to afford it, would be inconceivably harmful to greater Milwaukee. So while the questions seem premised on it being possible that Waukesha could be allowed to dry up, that isn't an option.

"We're not against diversions, per se," said one of the questioners, Peter McAvoy, a Milwaukee attorney who for years has generally promoted skepticism about lake water for Waukesha. He said the questioners, mainly environmental activists, want to make sure that whatever's done is sustainable.

OK, though for a metropolis that boasts of its great lake, it seems pretty economically unsustainable to tell its fast-growing part it must shut down for lack of water. That's a good way of sending growth to some more rational metropolis while Milwaukee starts looking like well-watered, dying Buffalo.

But should Waukesha grow? The Great Lakes compact allows cities like it to get lake water if they haven't other "reasonable" supplies. Whether they can get enough water to *grow*, said McAvoy, "is going to be a big issue." Said Val Klump of UW-Milwaukee's Great Lakes WATER Institute, "There's going to be a lot of sentiment against doing just that."

If that's so, you have to ask whether the compact is sustainable. "The compact is not in place to restrict growth," argues Duchniak, and it when it was being sold, Waukesha was soothed by the pact's backers with reassurances that it wouldn't cut off the city.

Now, however, the questioners are fudging, telling Waukesha to go slow lest other states exercise a veto. "I can tell you, a lot of other states aren't going to welcome this application," said McAvoy.

But if Waukesha can't limbo under the bar, who could? The city's been a model of conservation. It inverted its rates to discourage water gluttony. It pays people to replace old toilets. You can water your lawn twice a week, at night. You can't pressure-wash your truck. It has cut its water use by a third with such rules.

What's more, while Waukesha water is often portrayed as fueling sprawl, the place is a genuine, born-in-1846 city with sidewalks, rentals and factories. Of course it's growing, as healthy cities do. But territory to which water service would be extended if needed would match what regional planners have marked for future sewer service, says Duchniak. That's territory that already has houses - spread out, with wells and septic systems. The city's prepared to run lines if such places fill in with denser, more urban development.

If all that conservation and urbanity don't suffice, what would? The lakes compact, then, would be a thoughtless barrier that uniquely cuts metro Milwaukee off from its major direction of growth. Remember that under the compact, regulators also hope to dramatically increase the control they exert over the water used *inside* the watershed line. If Waukesha finds no flexibility, how could Milwaukee expect any?

In the end, the matter of whether Underwood Creek gets four inches deeper because of treated sewage - cleaner than the creek, by the way - shouldn't stand in the way of human needs. You supply people and do it as cleanly as practicable. You don't let creeks, compacts or tangents derail a city. That would be, as they say, unsustainable.

Milwaukee Journal Sentinel-JSOnline January 10, 2009

Environmentalists question Waukesha water proposal

By Darryl Enriquez of the Journal Sentinel

Posted: Jan. 11, 2009

Environmental leaders are questioning how Waukesha's proposal to dump 9 million to 24 million gallons of treated wastewater daily into Underwood Creek would affect the quality of Milwaukee waterways and millions of dollars of flood-control and stream restoration projects.

In a meeting last week with Journal Sentinel reporters and editors, the group asked that the \$60 million proposal to ship Lake Michigan water via pipelines to Waukesha be slowed to allow time for more dialogue and study about the potential effects.

The group has submitted questions to Waukesha Mayor Larry Nelson that delve into technical details and show concern over the role of the state Department of Natural Resources in approving Waukesha's application to get lake water.

If Waukesha is allowed to receive lake water, it must return a like amount in the form of treated sewage to the lake, under new federal legislation that generally bans diverting Great Lakes water to areas outside their basins.

The group included Doug Cherkauer, a geoscience professor at the University of Wisconsin-Milwaukee; Val Klump, director of the UWM Great Lakes WATER Institute; Steve Schmuki, president of the Waukesha County Environmental Action League; Jodi Habush Sinykin, a lawyer for Midwest Environmental Advocates; Cheryl Nenn, executive director of Milwaukee Riverkeeper; and Peter McAvoy, a vice president for the Sixteenth Street Community Health Center.

Waukesha is contemplating depositing its returned wastewater into Underwood Creek, near the Milwaukee County Grounds, largely because it would be less costly than building a return pipe to the lake.

That plan contains an important detail as yet unanswered by Waukesha, Cherkauer said: If Waukesha's design to return wastewater to the creek encounters problems, who pays to correct them?

And Nenn raised questions about the impact the dumping would have on restoration efforts in Underwood Creek and the downstream Menomonee River.

"We are also concerned about what the impacts will be on aquatic and natural resources," she said.

Nenn warned about the risk of compromising expensive restoration projects.

The Milwaukee Metropolitan Sewerage District is spending \$100 million to build a tunnel and detention basin to prevent flooding and to remove concrete to naturalize the creek near the Milwaukee County Grounds. MMSD is also spending \$48 million on flood-control measures around Hart Park in Wauwatosa.

Goal to improve creek

Waukesha Water Utility Manager Dan Duchniak said the city's goal is to improve and enhance Underwood Creek with its return flow. The increased flow would improve water quality in the usually low-flowing creek, he said.

During high flow or flooding, Waukesha would stop sending wastewater to Underwood Creek, diverting it to the Fox River, he said.

Duchniak said he had reviewed the questions and would respond. Most were answered during the city's application development, which will be a public record, he said.

The city now averages about 8 million gallons of water use daily, going as high as 10 million gallons during peak demand periods. Duchniak projects that by 2035, the city's peak demand would be about 20 million gallons daily, with a daily average of about 12 million gallons.

Todd Ambs, the DNR's water division administrator, said his agency was ready to accept and review applications for water diversions.

Ambs said the Great Lakes compact already details in depth what is and is not acceptable, and the DNR would follow those guidelines.

Habush Sinykin said much of the compact is vague and needs to be fleshed out with more precise language before a diversion application should be allowed for review or to move forward.

Sinykin questioned how the other Great Lake states - all eight must approve Waukesha's request - would respond when some still lack their own legal measures for diversion inquiries.

Regardless of the concerns, Nelson, the Waukesha mayor, said he would press forward with the application. The Waukesha Common Council and Water Utility Commission must approve the application and financing for the project.

Nelson has said Waukesha would submit an application that could be used as a model for communities around the Great Lakes.



Waukesha FYI

Reporter Darryl Enriquez offers behind-the-scene info about this growing burg

Do Waukesha residents really want Lake Michigan water?

By Darryl Enriquez of the Journal Sentinel Jan. 14, 2009

Ald. Emanuele Vitale publically asked the question that a number of townies have asked privately: Do Waukesha residents really want Lake Michigan water, especially if it's coming from Milwaukee?

Vitale raised the question at a meeting last night in which aldermen heard talks from water experts about past use and abuse of the Great Lakes and the "brutal process" the city may encounter to get water from the big pond.

Vitale said he's constantly heard about MMSD sewage overflows being dumped into the lake and the failures of the deep tunnels. He also noted the cryptosporidium disaster several years back. He called it all "a big problem."

"And we're going to be drinking this stuff?" he stated in the form of a question.

He scolded Shaili Pfeiffer of the DNR, saying that the agency should "come down hard" on MMSD instead of bothering people about their lake piers. Vitale was referring to a much-publicized DNR effort a couple of years ago to reduce the size of piers on inland lakes.

Pfeiffer was there to talk about the process the city will have to follow to get its application for lake water approved. Although sewage overflow is not her specialty area, Pfeiffer told Vitale that the number of those incidents has dropped dramatically.

Mayor Larry Nelson and his water chiefs are expected this spring to apply to the DNR for permission to divert lake water to Waukesha. They will have to convince a raft of local and state officials and governors from seven other Great Lake states that a diversion of water - a project with a \$60 million price tag - is the best way for the city to get a new supply of drinking water.

The first group to convince will be rank-and-file aldermen, many of whom during budget time count the number of paper clips each city department is requesting. If it passes muster with those folks, it will have to run the gauntlet of regional and national officials, according to Peter Annin, another presenter to aldermen and author of the book "The Great Lakes Water Wars."

Many in the city don't think there's anything wrong with the local water, despite state and federal water quality agencies that say levels in the water of naturally occurring radium, which can cause cancer, are too high.

Former Mayor Carol Lombardi, a grand dame of the city, has consumed the water her entire life and she will unflinchingly offer a glass of the wet stuff, complete with ice cubes, to house guests.

Nelson told Vitale that the question of water quality would be addressed at later meetings, but he reminded the aldermen that Milwaukee's water treatment and filtration system "had greatly improved" following the crypto outbreak.

It's assumed that Waukesha will get its water from Milwaukee Water Works, but options are still open to get water from utilities in Oak Creek and Racine.



Vitale



Annin

Panel sees Lake Michigan water in city's future Study shows diversion for Waukesha feasible

By Linda McAlpine Freeman Staff

Milwaukee Journal Sentinel-JSOnline January 21, 2009

WAUKESHA – More than a dozen people Tuesday heard that in the future, Waukesha should turn to Lake Michigan as a source of drinking water – and they didn't hear it from city officials.

Members of the Southeastern Wisconsin Regional Planning Commission held a public hearing here on its regional water supply plan, which suggests an expansion of communities served by Lake Michigan water.

Waukesha has been pursuing solutions to its short- and longterm water supplies

In the short term, the city needs new shallow wells so it can blend the water from them with that of its deep wells, which is contaminated with radium that exceed federal standards.

For the future, the city has been eyeing Lake Michigan and now that the Great Lakes Compact was approved and signed last year by President Bush, it may decide to submit an application requesting a water diversion

Bob Biebel, special projects engineer for SEWRPC, said the water study considered a number of options, including maintaining the existing water sources; doing a limited expansion of Lake Michigan water that would include Elm Grove, parts of Brookfield, New Berlin and Muskego; limited expansion of lake water with groundwater recharge; and lastly, switching Waukesha, Menomonee Falls and City of Pewaukee to water from Lake Michigan.

"I am intensely interested in water," said Waukesha native Donna Boxhorn, after the meeting. "We squander so much of it and take it for granted.

"I recall a story a teacher friend of mine told about a student from China who was in her class. The school overlooked some water, and one day, the student said the didn't think Americans knew how rich they were. She said we were rich because we had water."

Boxhorn said she was glad she attended the meeting to hear all the alternatives for the future.

She said she thought Waukesha getting water from the lake and then returning the treated wastewater was a good idea.

William Schultheis of Dousman said he was concerned that Waukesha, after getting the lake water, could start to annex its neighbors and then ask for an increase in the water diversion.

The study is on the commission's Web site, www.sewrpc.org. The commission is taking written, fax and e-mail comments until Feb. 9. The address is SEWRPC, W239-N1812 Rockwood Drive, Waukesha, WI 53187. The email address is sewrpc@sewrpc.org and the fax number is 547-1103.

Published January 26, 2009 | 12:09 a.m.

Make your voice heard on water issues

People utilizing perfectly good and free private drinking water wells who do not want to have to help pay for new municipal water wells can make their public comment heard and be counted.

Attend the Regional Water Supply Plan for Southeastern Wisconsin, Jan. 29, 5-7 p.m.; Kenosha County Office Building, Hearing Room; 19600 75th St., Bristol.

This is a public informational "open house" formatted meeting of a generalized plan for communication between entities and others to individually answer questions and provide information. The Southeastern Wisconsin Regional Planning Commission study staff will be making a brief presentation at 6 p.m. Find out more about the 20 new proposed municipal wells in western Kenosha County and the 13 proposed for the town of Salem alone.

The town of Caledonia in northwestern Racine County in the early 1990s, in a failed attempt to have the village of Pleasant Prairie's prosperity, told private water well owners including rentals it would be mandatory for them to pay for and connect to a proposed Lake Michigan water supply line at a cost between \$12,000 and \$15,000 each plus and additional \$3,000.\$4,000 to dig a trench to connect. That proposal lost to Wisconsin's tradition of "Home Rule" when the former elected person pushing it was voted out of office.

There is a saying that some things are so probable that it would be a miracle if it did not happen. For those who choose to do nothing, that may be.

Christine Gustafson

Kenosha News February 10, 2009

Plan lays out local water use for future

BY DENEEN SMITH dsmith@kenoshanews.com

A long-term plan for southeastern Wisconsin's water supply will get a hearing in Kenosha County Thursday.

The Southeastern Wisconsin Regional Planning Commission hearing will be 5 to 7 p.m. at the Kenosha County Building at highways 50 and 45 in Bristol.

At the meeting, residents can listen to an overview of preliminary recommendations and comment on the issue.

Bob Biebel, special project engineer for the planning commission, said the organization was asked several years ago by counties in the region to create an advisory plan for community water supply in the coming decades.

The preliminary plan looks out to 2035.

Communities in the region wanted a plan to use as a road map as the population of the area increases, to determine which areas would be most suited to changing over to Lake Michigan water in the future. The plan also will help communities plan for a future when falling aquifer levels could make private wells less effective.

The plan also outlines possible conservation efforts, forecasts water demand and identifies areas that should be protected to allow groundwater recharge.

In Kenosha County, the preliminary recommendations show that Kenosha, Pleasant Prairie and Somers, already served by a Lake Michigan water system, are unlikely to need water system upgrades in the coming decades.

The preliminary plan does show possible upgrades in areas of Salem, Bristol, Silver Lake and Twin Lakes. Those recommendations call for the creation of municipal wells and water storage facilities, most of them concentrated in Salem.

Those recommendations have sparked some concern from residents, Biebel said.

But he stressed that the recommendations in the plan are only guidelines, and that each community would have to decide individually if they wanted to pursue the improvements in the future.

"It is an advisory plan," Biebel said.

Biebel said most homes in western Kenosha County are served by private wells, with only part of Paddock Lake and an older, central area of Bristol served by municipal wells.

In the future, Biebel said, more suburban communities like Salem that have relatively densely developed neighborhoods may look to create municipal systems relying on deep wells.

If they do, he said, the regional plan offers a road map,

"We just wanted to make sure the plan would work," he said.

Kenosha News January 28, 2009

Flood of concerns pour out over wells

BY TERRY FLORES tflores@kenoshanews.com

BRISTOL — A preliminary plan for water use in the state's southeast region was inundated Thursday night by a flood of concerns from residents of Salem and Trevor demanding to know what the future might hold for their wells.

Many of the nearly 40 people who attended a public hearing at the Kenosha County Center said they were unaware of the extent to which the Southeastern Wisconsin Regional Planning Commission had already preliminarily mapped out the future of the region's water supply.

Communities, including those in Kenosha County, are relying on the commission's findings to plan for water distribution, including areas that could be served with water from Lake Michigan through 2035, as the area's population grows.

According to Bob Biebel, special project engineer for the commission, preliminary recommendations in the plan take into account Somers, Kenosha and Pleasant Prairie — three communities which already have systems that draw water from the lake. They would not need upgrades in the near future

An "initially preferred plan" being recommended by the commission also shows the possibility of municipal well and reservoir storage facilities — including elevated water tanks — in Salem, Bristol, Silver Lake and Twin Lakes.

Town of Salem resident Linda Valentine said she was concerned about a number of issues including the lack of information disseminated to residents whose wells could be directly affected by a future municipal water system. In the preliminary plan the concentration of such facilities are in Salem

Valentine wondered why those representing the county's interests in the regional planning commission were not present at the meeting. Local representatives include County Board Supervisor Anita Faraone, Adelene Greene and Robert Pitts.

"My biggest concern is that we're going to be a secondary (water) service for the city of Kenosha," Valentine said. She said she did not want the water coming out of the town to be "used by a city that couldn't reciprocate."

Others in the audience wondered whether they would be able to keep their wells viable in the future if water was being drawn on aquifers they rely on for well service.

Chris Gustafson of Trevor said it all comes down to local control. The majority of town of Salem residences are served by wells and, from an economic standpoint, many homeowners are concerned about the costs associated with municipal water.

"People who are here want a special meeting under the statutory power of towns," she said. "If we put wells in, we want to be able to help decide that."

Biebel said one of the reasons for having Thursday's public meeting was to find out what residents had to say about the preliminary water plan.

"If everybody in the town says they don't want to be part of this, we want to know about it," he said.

Kenosha News January 29, 2009

Waukesha cuts water use 11%, seeks more restrictions

By Darryl Enriquez of the Journal Sentinel

Posted: Jan. 29, 2009

Waukesha - Water use in Waukesha dropped more than 11% in a three-year water conservation push, and the city is seeking state permission for further rate-structure changes to penalize high-use residential water customers.

Conservation and rates are important to Waukesha for two reasons. The city needs costly reductions of radium levels in its water supply; and to eventually receive Lake Michigan water as a new clean source, Waukesha needs to have effective conservation measures in place.

Customers most affected by rate charges would be owners of single-family homes and duplexes. The new rate structure could be in place as early as April 1, Waukesha Water Utility General Manager Dan Duchniak said.

Residential customers now pay \$1.95 per 1,000 gallons when quarterly usage is 30,000 gallons or less. Surpass that threshold, and the rate rises to \$2.20 per 1,000 gallons.

The utility wants to slash the quarterly threshold for the higher rate in half to 15,000 gallons, Duchniak said.

Residential customers, on average, use 22,000 gallons per quarter, said Nancy Quirk, the utility technical services manager.

The residential base is the heaviest water user, surpassing industrial and commercial, which follow different rate structures, Duchniak said.

The rate system, dubbed a conservation rate structure, is the opposite of the typical utility, which generally charges a lower rate as use rises.

The state Public Service Commission is studying the request, and public hearings will be held later. The price of water for each 1,000 gallons also will be set by the commission.

The utility is considering rewarding customers who keep quarterly usage to 15,000 gallons or below by reducing the price to less than the current bottom tier of \$1.95 per 1,000 gallons, but that benefit cannot be determined until the commission completes its study, Quirk said.

The price of water for those exceeding 15,000 gallons likely will go up, she said.

"Probably, the majority of our customers will see a slight increase because we're still paying for radium compliance," Quirk said.

The utility will spend \$13.5 million to reduce radium, a naturally occurring substance that's linked to cancer and is found in older deep wells. The utility hasn't brought drinking water into total compliance with federal safe-water standards and likely will face a fine from the state.

The radium is a major reason Waukesha is pursuing lake water. Proof of working water conservation measures is important in getting approval of all eight governors from Great Lakes states to divert water to a community outside the Lake Michigan basin.

Utility figures show that water use in Waukesha stood at about 3 billion gallons in 1999. The nearly 12% drop between 2005 and 2008 - from about 2.84 billion gallons to about 2.5 billion - coincided with lawn sprinkling restrictions enacted in 2005.

Water use between May 1 and Sept. 30, when sprinkling is restricted, dropped 16% in 2008 compared with the same period in 2005.

"This shows me that people are really watching when they are using water," Duchniak said.

Duchniak said he hopes that summer usage continues to drop. The utility is aiming for a 20% drop in overall use by 2020.

Your Opinions

Posted: Feb. 2, 2009

WATER

Cities and suburbs and sources of water

In response to the debate sparked by Ekan Heider in the Jan. 15 letter "At what price" about selling Lake Michigan water to Waukesha, I believe there is a misconception about so-called white flight to the suburbs. Most families that move to Waukesha move to the subdivisions. They have to drill their own private wells for water and install septic systems.

Most of the public water goes to the older businesses and older homes in the city of Waukesha that have been there for many decades and even a century or more. This is why the wells are old and need to be redone. I'm sure there are some newer subdivisions and businesses that are in and around the city limits, but they are in the minority. Drive out and see for yourself.

So, you see, refusing water to the City of Waukesha from Milwaukee mostly will be hurting people who've lived here their whole lives.

I also would like to add that people move to Waukesha County for many different reasons, not just to flee certain conditions in Milwaukee. I moved to a subdivision more than 15 years ago, with private well and septic, to be closer to my relatives and because my husband received a job in Hartford. I hope this will clear a few things up.

Christine Amy Muellenbach Hartland

Milwaukee Journal Sentinel-JSOnline February 2, 2009

Walworth water plan all wet

I recently happened upon a small notice in the paper about a Southeast Regional Planning Commission (SEWR-PC) water-plan meeting to be held at the Walworth County Courthouse Jan. 22. I attended the meeting, and I was quite surprised by the plan SEWRPC presented. After reviewing it, I strongly urge the Walworth County Board to reject it immediately.

Here are the highlights and a few questions:

- The cost of the plan, which would replace private wells with municipal wells, build storage tanks and expand water-treatment plants throughout southeast Wisconsin, is estimated to be \$170 million to \$470 million. In Walworth County, the recommended plan would cost an estimated \$28.6 million, not including \$317,000 in annual maintenance costs. Do we get to vote on this? Where will this huge chunk of money come from?
- What exactly is the problem with water in Walworth County? No problem is defined in the papers handed out at the meeting, nor were specifics addressed during the question-andanswer period.
- The plan calls for numerous "shallow aquifer" municipal wells to be drilled to approximately 200 feet to replace private wells. Why would we recommend big, new municipal wells to draw out the same water that our current, paid-for, private wells use?
- The public comment period ends Monday, just seven days after the last public meeting. Why such a short comment period?

BUTCH EUCKER ELKHORN



I must admit that I am biased when it comes to groundwater. I am a well driller and pump installer and work all over southeastern Wisconsin on private wells and water systems. But I am a taxpayer as well, and an advocate for smaller government. There is no such thing as a free lunch. Here are some additional observations:

- Walworth County has some of the very best groundwater in the entire world. The quantity and quality of our water is of the highest caliber.
- Our private wells and well pumps are some of the best systems technology has to offer. Locally based Pentair Water in Delavan is a world leader in the industry. Their products give outstanding service to customers.
- Chances are, your well is currently paid for and costs you about \$4 per month for electricity to run your pump.

The Walworth County Board has to act immediately to stop this plan, ... Why spend almost \$500 million in tax dollars on something that "ain't broke?" Why throw away this resource in favor of municipal systems at 10 times the cost?

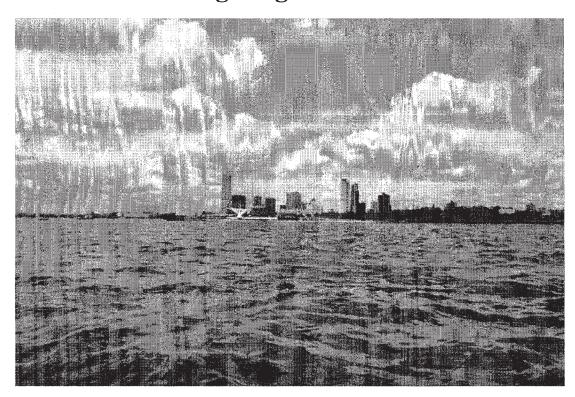
- Pell Lake converted to municipal water a few years ago at a very high cost to homeowners. Some had to get 40-year loans to pay for the municipal system when their private wells were working just fine.
- The plan calls for new municipal systems for these areas: the towns of Delavan, Linn, Walworth and Geneva; Lyons, Delavan Lake, and Potter's Lake. It's not mandatory, but residents of those areas should get your wallets out.
- SEWRPC spent a self-reported \$900,000 on this study over a threeyear period. I believe the conclusions were predetermined before the study even began.

The Walworth County Board has to act immediately to stop this plan. I spoke with the County Administrator Dave Bretl, and at his office's recommendation, I sent a letter to the county board urging it to reject the plan.

The Web site to review the big-spending plan is located at www.sewrpc.org. I urge all Walworth County residents to check out the plan and then contact your county board representative. Why spend almost \$500 million in tax dollars on something that "ain't broke?"

Butch Eucker of Elkhorn is a state Department of Natural Resourceslicensed well professional and former secretary for the DNR Advisory Council on Well Drilling and Pump Installing.

'Water is worth fighting over'



Journal Sentinel Files

Hurrying to give water to Waukesha ignores key questions

By Barbara Miner

Posted: Feb. 14, 2009

Let's put some historical perspective on the controversy over Waukesha's request for Lake Michigan water.

Less than 100 years ago, Waukesha was known as "Spring City," a tourist attraction famous worldwide for its naturally occurring and sweet-tasting spring water. In the 1880s, 25 trains a day in the summer came from Chicago alone.

Waukesha fiercely protected its water. At one point, residents armed themselves with shotguns, revolvers, axes and even a ceremonial cannon to turn back Chicago interests who, under cover of a Saturday night, hoped to build a pipeline to siphon off Waukesha spring water to be sold at Chicago's upcoming World's Fair.

Today, Waukesha's springs have all but disappeared, victims of development and growth. Only one is visible and open to the public, Hobo Spring in Frame Park. A sign explains the city's Springs Era and ends with a caution: "Water is unsafe for consumption."

Rather than homage to a glorious past, the story of Waukesha's springs is a cautionary tale. The moral? Use water wisely or lose it.

In coming months, the City of Waukesha is expected to apply for Lake Michigan water. Because Waukesha lies outside the Great Lakes watershed, returning the water to Lake Michigan, as required, necessitates some fancy engineering footwork to circumvent the laws of nature. (Now don't you wish you had paid attention during science class?)

Understanding the engineering, environmental and political complexities of the debate is, for most of us, akin to naming all 44 U.S. presidents. Doable, but difficult.

If you want to steep yourself in discussions of MGD (millions of gallons a day) or I&I (infiltration and inflow), more power to you. If not, here are some basic guidelines.

- •&enspTake the long view.
- •&enspDon't rush into a decision.
- •&enspHope for the best, but prepare for the worst.

Taking the long view is a perspective that, because it is so essential, might be overlooked. But we do so at peril, not just to southeastern Wisconsin.

The Great Lakes were forged more than 10,000 years ago, allowing Wisconsin to be part of a rare and precious resource containing almost 20% of the world's and 90% of North America's fresh surface water. Whether you look at droughts in California, dried-up lakes in the southeast or the 1.2 billion people worldwide who lack access to potable water, water is the oil of the 21st century.

Most discussions about Waukesha's request center on that city's growth and water needs in the next 25 years or so. That's shamefully shortsighted, little different than developing a national economic stimulus plan lasting only a week and focusing on only one state.

We have a responsibility to safeguard the Great Lakes for generations to come. Waukesha's diversion and return of Lake Michigan water will set a precedent not just for the region but the entire Great Lakes. If the fight over Waukesha's proposals seems so intense, it's because the stakes are so high. We should welcome the controversy.

Which leads to the second guideline: Don't rush into a decision.

Too often, discussions around Waukesha's water proposals boil down to this: Waukesha is growing and needs water, Lake Michigan has plenty of it, give Waukesha some water and the city will return it in an environmentally sound way. No problem.

But that sidesteps important questions. And we should take the time needed to answer all questions. For instance:

Are decisions being made on the basis of short-term costs or long-term sustainability? On the basis of statistics and analyses provided by interested parties or by independent scientists? What are the implications of decisions not just for southeastern Wisconsin but the entire Great Lakes region?

Just because a solution is cheaper doesn't mean it's better, especially when you look at hidden costs. Waukesha, for instance, says it prefers to return water to Lake Michigan by dumping millions of gallons of wastewater a day into Underwood Creek and the Menomonee River near the Milwaukee County Grounds in Wauwatosa. It cites a cost of about \$60 million, vs. higher costs for a pipeline all the way to Lake Michigan.

Yet around \$150 million already is being spent on flood-control measures in the Wauwatosa area. If Waukesha's water return increases flooding, who will pay to fix the problem? Similarly, who will pay for the long-term environmental impact of Waukesha's wastewater, which will include salt, phosphorous and pesticides? Are such issues figured into a proposal's cost?

We are lucky to have the University of Wisconsin-Milwaukee Great Lakes WATER Institute, the only major aquatic research institution on Lake Michigan and the largest U.S. institution of its kind in the Great Lakes region. We should pay attention when Doug Cherkauer, a scientist with the institute, warns: "In the 18th and 19th and 20th centuries, we learned we could move water around the globe and take it from where it occurred naturally to where we wanted it to be. But in virtually every instance, it had disastrous side effects."

Which leads to the third guideline: Hope for the best, but prepare for the worst.

Who would have predicted that floods would divert traffic along I-94 last summer between Milwaukee and Madison, not for mere days but weeks? Or that Lake Delton would disappear in a matter of moments?

If you combine global warming and chaotic weather patterns with the indisputable importance of the Great Lakes to the world's supply of fresh water, there's only one sane approach: Don't dismiss worst-case scenarios and err on the side of the safest, most sustainable proposal.

It's OK if the debate gets heated and feathers get ruffled. Or if the controversy lasts unbearably long. Just make sure all questions and all contingencies are considered.

As Mark Twain put it, "Whisky is for drinking; water is worth fighting over."

Salem will borrow for sewer

Rates may rise to ease overflows
BY DENEEN SMITH

dsmith@kenoshanews.com

SALEM — The Town Board Monday approved a bond issue to fund an ongoing project to prevent sewer backups during heavy rains.

The town approved the sale of up to \$4.9 million in general obligation bonds to fund construction of "wet weather flow equalization facilities" — holding tanks or ponds for wastewater. The bonds will carry an interest rate of 2.68 percent, and will be repaid over the next 20 years using funds from residents' sewer fees.

The state has pushed Salem to build a system to prevent sewer backups after the community had problems with overflows during heavy rains in recent years. The project, which is already under construction, will allow the town to pump wastewater into a system of holding tanks or ponds during heavy rains. When the rains ease, the wastewater would be pumped back into the treatment system.

Last year, Salem approved a sharp hike in its sewer rate to fund improvements to the sewer treatment system, raising the rate from \$84 each quarter to \$108. The first of those higher bills will go out to residents in April.

The board was warned by a financial consultant handling the bond sales it would likely need to raise the sewer rate again over the next two years.

Administrator Patrick Casey said preliminary estimates show rates may be increased by 6 percent in each of the next two years, then raised in subsequent years to match the pace of inflation. Casey said rates would need to be increased to pay for ongoing maintenance of the sewer treatment system for the town.

Several residents at the meeting complained about fee increases, including a new stormwater utility fee. "This economy is the pits, people are losing their jobs, they're losing their homes," one woman said.

Chairman Diann Tesar said for several years the town could fund utility maintenance from connection fees and other revenue growth from new home construction. But with construction of new homes down sharply, that source of revenue is no longer available.

"I know it is coming at an unfortunate time," Tesar said of the rate increase.

n In other business, the board listened to a presentation from Bob Biebel, special projects engineer with the Southeastern Wisconsin Regional Planning Commission, on its "Year 2035 Regional Water Supply Plan for Southeastern Wisconsin." The plan looks at projected water needs and community strategies for meeting them.

For Salem, currently served by private wells, Biebel said there are no immediate problems. But the plan states that as many as eight municipal wells may be needed to serve densely populated neighborhoods if the population grows substantially in coming decades.

About 20 residents attended the meeting, many of them concerned that the plan was a mandate for a water system. Biebel stressed any future move to create a municipal water system would be made by individual communities.

Kenosha News March 10, 2009

Suburbs thirst for comprehensive water plan

By Darryl Enriquez of the Journal Sentinel

Posted: Dec. 26, 2008

Meeting Schedule

Here's a list of public hearings on the new water quality management plan proposed by the Southeastern Wisconsin Regional Planning Commission. All the meetings are at 6 p.m.

> On Jan. 13 the meeting will. be at the United Community Center at 1028 S. 9th St., Milwaukee.

On Jan. 14 it will be at the Wauwatosa Public Library, 7635 W. North Ave.

On Jan. 20 it will be at the Rotary Building in Frame Park in Waukesha, 1150 Baxter St.

On Jan. 21 it will be at the Washington County Fair Park Pavilion, 3000 County Hwy. PV, Town of Polk.

On Jan. 22 it will be in the Government Center, 100 W. Walworth St., Elkhorn.

On Jan. 26 it will be in the Ozaukee County Administration Center auditorium, 121 W. Main St., Port Washington.

On Jan. 29 it will be in the Kenosha County Office Building, 19600 75th St., Bristol.

The final meeting will be Feb. 2 at the Ives Groves office complex, 14200 Washington Ave., Sturtevant.

Shipping Lake Michigan water from Milwaukee to suburban communities - including Waukesha, Germantown, Thiensville, Mequon and Muskego - could cost up to an estimated \$352 million in construction expenses, including the installation of 53 miles of new water pipe, a report from area planners says.

The pipes would connect to water mains in Milwaukee, Wauwatosa, Greenfield and Oak Creek and pass through Hales Corners and West Allis as they snake underground to water hookups south, west and north of Milwaukee

The huge public works project, in which Lake Michigan would become the regional water source, is a concept devised by a study panel of the Southeastern Wisconsin Regional Planning Commission.

The agency is in the midst of a study on the future use and supply of drinking water for the Milwaukee area. The plan is the result of several years of study that relied on the expertise of hydrogeologists, engineers and urban planners from universities, private firms and government. The lake water option is the preferred one of four scenarios laid out in the plan.

The plan calls for numerous communities to abandon their wells as main water sources and switch to Lake Michigan water.

The Milwaukee Water Works is being eyed as the primary supplier. The utility has the capacity to provide much of the lake water, planners say.

Local environmentalists are reserving comment on the plan, but they likely will express concerns at upcoming public information and input hearings.

They've said in the past that making lake water more widely available would allow suburban expansion and prevent sustainable water use. Many want communities to use only their locally available water, which could limit expansion and force strict water conservation goals.

Bob Biebel, the planning commission's chief environmental engineer, says the lake plan is favored over other water supply alternatives because it would restore the depleted deep aquifer, replace radium-contaminated wells, reduce water softener use and prevent wells that tap shallow aquifers from draining streams and lakes.

The plan projects that the annual operation and maintenance costs of lake use could be up to \$8.5 million, but the savings in eliminating water softeners and the salt needed to treat hard and mineral-rich water from aquifers could exceed \$8.7 million.

Biebel said the environment would benefit if salt is not dumped into local waterways - because it's not filtered out of treated waste water.

A major influence on the study has been Waukesha's desire to get lake water to replace its wells that draw from a depleted deep aquifer that's contaminated with radium, a naturally occurring radioactive substance that is linked to bone cancer.

Recently enacted federal legislation to protect the Great Lakes not only prevents lake water from being shipped to thirsty communities far outside their basin - it also allows municipalities such as Waukesha and Germantown to import lake water, provided a like amount is returned.

Waukesha is proposing to return its lake water through a pipe buried beneath the existing bike trail on a former east-west railroad right-of-way south of W. Greenfield Ave.

At issue is where Waukesha would dump its treated return flow. Will it be allowed to use the shortcuts of Underwood Creek or the Root River, both of which flow into the lake, accepting its used water? Or will it be required to take the longer and more expensive route of sending return flow to the lake at a shore site between St. Francis and Cudahy?

That issue will be addressed by the state Department of Natural Resources, when the city submits an application to the agency for permission to divert lake water into its municipal water system.

Biebel said the water supply plan contains an alternative in which Waukesha and other outlying communities improve water supplies by using available local resources. The cost for that alternative is a much-lower \$277 million, but negates the environmental benefits of using less salt, restoring the depleted aquifer and ridding communities of radium-tainted wells, he said.

Hearings planned

The first public hearing on SEWRPC's water quality management plan is **Jan. 12**, with a plan presentation at 6 p.m. at HeartLove Place, 3229 N. King Drive. **Hearings continue until Feb. 2** throughout southeast Wisconsin.

To view the report, visit $\underline{www.sewrpc.org}$ or call (262) 547-6721 for information.

Milwaukee Journal Sentinel-JSOnline
March 13, 2009

Just say no to pricey water plan

Many of you do not know about a recent water-plan proposal for southeast Wisconsin. Let me bring you up to date. The plan calls for many new municipal water systems to be installed where your private wells currently are serving your water needs. The Southeastern Regional Planning Commission (SEWRPC) is proposing a \$170 million to \$470 million plan to "attain an adequate, sustainable, water supply for the region."

Their conclusion: bigger is better and everyone must pay. I disagree with their conclusion, and invite you, the taxpayer, to check it out for two reasons — it will cost you a lot of money if this plan is approved, and it will save you a lot of money if the plan is rejected. The water plan and its three-year history can be viewed online at www.sewrpc.org. Please look it over. Here are the facts as I see them:

• Existing Lake Michigan water-treatment plants are operating at only 50 percent capacity. It does not take a rocket scientist to figure out that Milwaukee, Racine and Kenosha want to sell more water. The proposed water plan is estimated to cost between \$170 million and \$470 million and calls for 132 municipal wells to be drilled.

This, approximately, is how the math works out: 132 big wells at 1,000 gallons each would replace 13,200 private wells at 10 gallons each. The \$470 million, divided by 13,200 well owners, is approximately \$36,000 per owner. Add in the cost to connect, maintain and service the municipal system, and you are at approximately \$40,000 per well owner. What government program ever went down in cost?

• False assumption: this plan is only "advisory." We've all heard the joke about the camel getting his nose in the tent on a cold night in the desert. That is what SEWRPC is doing here. They make an "advisory" plan that is being slipped through the system with little or no attention. Not much interest, because who really cares about 15 years down the road, right? But the bureaucratic process starts as a small snowball, and then becomes a full avalanche.

This plan was developed by a

BUTCH EUCKER ELKHORN



group that is not representative of the community. Look at the Web site. Read the minutes of the meetings. These were not meetings where debate took place; rather, the meetings were more like briefings to a committee of like-minded members. It is my opinion that the plan recommendations were predetermined before the study ever started. To think this plan is only "advisory" is not the way the political and bureaucratic realities of our republic operate today.

· Technical problems with the plan. Did you know that 11 percent of municipal water is "lost" in the system? During the Jan. 22 meeting, Robert Biebel, special projects engineer for SEWR-PC, said that 11 percent of the potable, municipal water pumped is leaked away and not accounted for in the billing cycle of municipal systems. Would you still keep your checking account at a bank that lost 11 percent of your money? But, with water systems, once you make the change away from private wells, there is no going back.

If our private wells are working just fine, why in the world would you change to a less-efficient, much more expensive system? The municipal wells proposed for Walworth County would be drilled in the shallow aquifer, drawing water from the same aquifer that our private wells use now in the proposed areas of expansion. Technically, you are replacing one pipe for a bigger pipe that does the exact same job for 10 times the cost. This does not pass the commonsense test.

Other points to consider:

- Southeast Wisconsin has some of the best groundwater resources in the world.
- Nearly all of these areas proposed for municipal water have municipal sewers already. There is no immediate environmental threat. Why municipal water now?
- A few areas of SEWRPC do have local water issues. Those

issues should be handled on a local basis. There's no need to lump 147 communities into one basket.

- SEWRPC expects Walworth County to grow by more than 40,000 residents, and that 15 square miles of farmland will be converted to urban sprawl by 2035. These assumptions are highly suspect in light of the current economic recession.
- The plan received very little media coverage.

I admit that I have a vested interest in this plan. I am a well driller and pump installer. I earn a living by working on private water wells in seven southeast Wisconsin counties. But, I am also a taxpayer and advocate for small government. Currently, there is no need for municipal water throughout every urbanized area in Walworth County. The county has some of the very best groundwater supplies, in both quantity and quality, in the entire world. If our current groundwater supply were so bad, why would this expensive plan call for municipal systems to use this same exact source - the shallow aquifer?

I urge Walworth County taxpayers to comment on this plan. The comment period has been extended, thanks to my letter to the Walworth County Board last month. You have until Monday to send your comments via email to rbiebel@sewrpc.org; by fax to (262) 547-1103; or by mail SEWRPC, P.O. Box 1607, Waukesha, WI 53187-1607.

After my previous column, dozens of residents contacted me. To a person, everyone agreed with my opinion. If the response had been different, I guarantee you I would not be putting so much of my volunteer time into this effort.

But I believe in my heart this plan is flawed. If you agree, spend the 42 cents to let SEWR-PC know. Once municipal water comes to your house, the result is high taxes and high monthly billings in perpetuity.

Butch Eucker of Elkhorn is a state Department of Natural Resourceslicensed well professional and former secretary for the DNR Advisory Council on Well Drilling and Pump Installing.

Minimal impact for water plan

In two recent columns, Butch Eucker of Elkhorn sounded an alarm about a draft water-supply plan prepared by the Southeastern Wisconsin Regional Planning Commission (SEWRPC). The plan recently was released for public review. In so doing, Mr. Eucker, a well driller and pump installer, raised a number of questions about the tentative plan, and urged the Walworth County Board to summarily reject its recommendations.

Let's look at the facts, and address Mr. Eucker's questions and statements:

- SEWRPC's job is to help local communities in the sevencounty region address developmental and environmental issues. The water-supply plan was requested by several county boards and addresses emerging water-supply issues — falling water levels in the deep aquifer, groundwater radium contamination and Lake Michigan diversion, among others. Moreover, Wisconsin's new groundwatermanagement law mandates the preparation of a water-supply plan for the southeastern Wisconsin region, including Walworth County.
- The good news for Walworth County is the planning found that there are no severe water-supply problems in the foresee-able future. This does not mean, however, that Walworth County residents will not face water-supply infrastructure expenditures between now and 2035, the design year of the plan. By that time, Walworth County's population is expected to increase by about 40,000 people, and water demand by nearly 6 million gallons per day.

Walworth County's 16 existing public water utilities currently serve about 60 percent of the county's population, and can be expected to face about \$23 million in expenditures for wells and storage facilities during that period to provide new facilities to help meet the increased demand. The local officials who have responsibility for the water utilities will determine if and when such expenditures are to be made.

• From time to time, new public water utilities are created to address emerging, at times compelling, water-supply needs. During the past 50 years, more than 30 new public water-supply utilities have been created in southeastern Wisconsin to serve urban development that was initially put in place with private water-supply wells. Why? Sometimes serious contamination of groundwater occurs, and the state orders utility creation.

KENNETH YUNKER WAUKESHA



In most cases, however, local communities make decisions to not only address whatever individual well problems might exist, but at the same time, provide the basis for a far better system of fire protection.

Indeed, residents in communities with public water-supply systems not only have greater peace of mind when it comes to potential household fires, but also enjoy significant annual savings in casualty insurance on their homes. In recent years, this transformation has occurred in Walworth County in the Pell and Como lakes areas. The regional plan identifies potential additional utilities in other areas of Walworth County, helping to give those who might be interested in such a transformation to understand what the supply costs might be. Nothing in the plan or state law, however, would require that the local officials make such decisions. If new public water utilities are created, you can be sure that local officials are only responding to local demands, concerns and

• Mr. Eucker's comments have greatly exaggerated the extent and the intent of the plan recommendations. Here are the facts related to Walworth <u>County</u>: The plan identifies only three new areas, and limited areas immediately adjacent to existing municipal service areas, which are currently served by private wells and were identified as "potential future municipal-service areas." Here is what the plan really states about those areas. To quote:

"These areas are designated as potential future municipal water-supply service areas in order to assess the demands, added supply sources needed, and the effectiveness of the Regional and County water-supply system if such municipal systems were developed. However, the development of municipal water-supply systems in these areas is envisioned only if a local demonstrated need arose based

6 5

We agree with Mr. Eucker that the Walworth County water-supply system "ain't broke." Let's keep it that way. to implement a municipal system. Such a local initiative typically includes a survey or other method of assessing to determine the local need, and to determine the interest of the residents in a given area regarding the provision of municipal water supply. In the absence of such a need and initiative, the residents and businesses in these areas would be expected to remain on individual wells indefinitely." It should be noted that in total, these areas encompass fewer than 5 square miles, or

upon groundwater quality or

quantity issues and, if a local

initiative was then undertaken

fewer than 5 square miles, or about 1 percent of the county. Given the above recommendations, only a portion of the area under consideration would be converted to a municipal service area by 2035, and the remainder will continue to be served by private wells. Thus, the vast majority of the residents of Walworth County will be unaffected by the recommendation. A large majority of the comments received by residents of the county with concerns about not being able to use their private wells were from people whole live in areas where the plan recommends continued reliance on private wells.

• In response to comments by Mr. Eucker and others in the region, the formal public comment period was extended to March 16. SEWRPC will not hurry the completion of this plan, and wants to incorporate in the final plan comments from all parties concerned. It will be mid-2009, at best, before work on this plan is done.

There always will be a need for individual water-supply systems in southeastern Wisconsin, just as there always will be a need for public water utilities to collectively deliver water to those communities that desire such an approach.

We agree with Mr. Eucker that the Walworth County water-supply system "ain't broke." Let's keep it that way. Let's also recognize, however, that Walworth County will continue to grow, that there will be a need to invest in water-supply infrastructure to meet the demands created by that growth, and that there may arise situations where local communities in Walworth County, now reliant on individual wells, choose to transform their water-supply systems to public utilities.

Kenneth R. Yunker is executive director of the Southeastern Wisconsin Regional Planning Commission in Waukesha. He can be reached at (262) 547-6721.

Walworth County Sunday March 29, 2009 (This page intentionally left blank)

Appendix D

COMMISSION ANNOUNCEMENTS OF PUBLIC INFORMATION MEETINGS HELD IN JANUARY AND FEBRUARY 2009 AND SUMMARY MATERIALS DISTRIBUTED AT PUBLIC INFORMATION MEETINGS

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MATERIALS ANNOUNCING THE NINE PUBLIC INFORMATION MEETINGS AND SUMMARY MATERIALS DISTRIBUTED AT THOSE MEETINGS

REGIONAL WATER SUPPLY PLAN STUDY PUBLIC INFORMATIONAL MEETINGS

A series of public informational meetings has been scheduled throughout southeastern Wisconsin in January and early February 2009. The purpose of these meetings is to brief residents of the Region on the preliminary recommended regional water supply plan and to provide an opportunity for comment. Persons may choose to attend any of the meetings they find most convenient. Staff will be available in an "open house" format from 5:00 p.m. to 7:00 p.m. to individually answer questions and provide information. A brief presentation of the plan will be made by study staff at 6:00 p.m. Written comments may be submitted throughout the meetings, including via dictation to a court reporter.

The meeting schedule is shown below; and detailed information on the study may be seen at the Commission's website: www.sewrpc.org/watersupplystudy.

Date	Building/Room	Location
January 12, 2009	HeartLove Place, Bethel/Empowerment Rooms	3229 N. Dr. Martin Luther King, Jr. Dr., Milwaukee
January 13, 2009	United Community Center, Conference Rooms 1-2	1028 S. 9th Street, Milwaukee
January 14, 2009	Wauwatosa Public Library, Firefly Room	7635 W. North Avenue, Wauwatosa
January 20, 2009	Rotary Building, Frame Park	1150 Baxter Street, Waukesha
January 21, 2009	Washington County Fair Park Pavilion, Room 112	3000 County Highway PV, Town of Polk
January 22, 2009	Government Center, Room 214	100 W. Walworth Street, Elkhorn
January 26, 2009	Ozaukee County Administration Center, Auditorium	121 W. Main Street, Port Washington
January 29, 2009	Kenosha County Office Building, Hearing Room	19600 75th Street, Bristol
February 2, 2009	Ives Grove Office Complex, Auditorium	14200 Washington Avenue, Sturtevant

Following these meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan.

Persons with special needs are asked to contact the Commission offices at (262) 547-6721 a minimum of 48 hours in advance of the meeting date so that appropriate arrangements can be made. Affected may be site access and/or mobility, materials review or interpretation, or active participation, including the submission of comments.

In addition to providing comments at the public meetings, written comments may also be submitted through February 9, 2009. To obtain a paper copy of the recommended plan chapter or a detailed newsletter (also online), to ask questions, or to submit written comments on the preliminary Regional Water Supply Plan, please contact:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, Wisconsin 53187-1607
Phone: 262-547-6721 Fax: 262-547-1103
e-mail: rbiebel@sewrpc.org

Milwaukee Journal Sentinel January 8, 2009

REGIONAL WATER SUPPLY PLAN STUDY PUBLIC INFORMATIONAL MEETINGS

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<u>Date</u>	Building/Room	Location
January 12, 2009	HeartLove Place, Bethel/Empowerment Rooms	3229 N. Dr. Martin Luther King, Jr. Dr., Milwaukee
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January 14, 2009	Wauwatosa Public Library, Firefly Room	7635 W. North Avenue, Wauwatosa

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Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, Wisconsin 53187-1607 Phone: 262-547-6172 Fax: 262-547-1103 e-mail: Figlebel@sewprc.org

Milwaukee Times January 8, 2009

Estudio del Plan de Suplemento de Agua Regional

Una serie de reuniones de información pública se ha agendado en el sureste de Wisconsin para los meses de enero y principio de febrero del 2009. El propósito de estas reuniones es el de informar a los residentes de la región sobre el plan premilinar regional de suplemento de agua recomendado y el de proveer una oportunidad para realizar comentarios. Las personas interesadas pueden asistir a cualquiera de las reuniones que les sea más conveniente. Habrá personal disponible en un formato de "casa abierta" de las 5 p.m. a 7 p.m. para responder preguntas individuales y proveer información. Una pequeña presentación del plan será impartida por personal del estudio a las 6 p.m. Comentarios por escrito pueden ser recibidos durante las reuniones incluyendo por medio de dictado a un reportero de la corte.

Las reuniones locales se muestran abajo, y el set completo de reuniones, así como información en detalle del estudio pueden ser vistos en la página de internet www.sewrpc.org/watersupplystudy.

Edificio/Cuarto	Dirección
HeartLove Place,	3229 N. Dr. Martin Luther King
Bethel Empowerment Roo	ms Milwaukee
United Community Center, Conference rooms 1-2	, 1028 S. 9th St., Milwaukee
Wauwatosa Public Library	, 7635 W. North Avenue, Wauwatosa
	HeartLove Place, Bethel Empowerment Roo United Community Center Conference rooms 1-2

Siguiente a las reuniones, un récord de los comentarios del público será proveido al Comité de Consejo del Suplemento de Agua Regional y a la Comisión para revisión en preparación del plan final de recomendación.

Personas con necesidades especiales se les pide contactar las oficinas de la Comisión al (262) 547-6721 con un minimo de 48 horas antes para realizar los cambios necesarios. Pueden ser afectados el sitio de acceso, materiales de revisión o interpretación, o participación activa, incluyendo el entregar comentarios.

Además de proveer comentarios en las reuniones públicas, comentarios por escrito pueden ser recibidos hasta el 9 de febrero del 2009. Para obtener una copia del capítulo del plan recomendado o un periódico detallado (también disponible por internet), para preguntar, o para enviar comentarios por escrito sobre el plan, por favor contacte:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607
Waukesha, Wisconsin 53187-1607
Phone:262-547-6721 Fax: 262-547-1103
e-mail: rbiebel@sewrpc.org

El Conquistador January 9, 2009

REGIONAL WATER SUPPLY PLAN STUDY PUBLIC INFORMATIONAL MEETINGS

A series of public informational meetings has been scheduled throughout southeastern Wisconsin in January and early February 2009. The purpose of these meetings is to brief residents of the Region on the preliminary recommended regional water supply plan and to provide an opportunity for comment. Persons may choose to attend any of the meetings they find most convenient. Staff will be available in an "open house" format from 5:00 p.m. to 7:00 p.m. to individually answer questions and provide information. A brief presentation of the plan will be made by study staff at 6:00 p.m. Written comments may be submitted throughout the meetings, including via dictation to a court reporter.

Local meetings are shown below; and the full set of meetings, as well as detailed information on the study, may be seen at the Commission's website: www.sewrpc.org/watersupplystudy.

Date	Building/Room	Location
January 12, 2009	HeartLove Place, Bethel/Empowerment Rooms	3229 N. Dr. Martin Luther King, Jr. Dr., Milwaukee
January 13, 2009	United Community Center, Conference Rooms 1-2	1028 S. 9th Street, Milwaukee
January 14, 2009	Wauwatosa Public Library, Firefly Room	7635 W. North Avenue, Wauwatosa

Following these meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan.

Persons with special needs are asked to contact the Commission offices at (262) 547-6721 a minimum of 48 hours in advance of the meeting date so that appropriate arrangements can be made. Affected may be site access and/or mobility, materials review or interpretation; or active participation, including the submission of comments.

In addition to providing comments at the public meetings, written comments may also be submitted through February 9, 2009. To obtain a paper copy of the recommended plan chapter or a detailed newsletter (also online), to ask questions, or to submit written comments on the preliminary Regional Water Supply Plan, please contact:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607
Waukesha, Wisconsin 53187-1607
Phone: 262-547-6721 Fax: 262-547-1103
e-mail: rbiebel@sewroc.org

El Conquistatador January 9, 2009

REGIONAL WATER SUPPLY PLAN STUDY PUBLIC INFORMATIONAL MEETINGS

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The scheduled Waukesha meeting is shown below; and the full set of meetings, as well as detailed information on the study and how to submit comments online, may be seen at the Commission's website: www.sewrpc.org/watersupplystudy.

Date Building/Room

January 20, 2009 Rotary Building, Frame Park 1150 Baxter Street, Waukesha

Location

Following the public informational meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan.

Persons with special needs are asked to contact the Commission offices at (262) 547-6721 a minimum of 48 hours in advance of the meeting date so that appropriate arrangements can be made. Affected may be site access and/or mobility, materials review or interpretation, or active participation, including the submission of comments.

in addition to providing comments at the public meetings, written comments may also be submitted through February 9, 2009. To obtain a paper copy of the recommended plan chapter or a detailed newsletter (also online), to ask questions, or to submit written comments on the preliminary Regional Water Supply Plan, please contact:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, Wisconsin 53187-1607 Phone: 262-547-7217 Fax: 262-547-1103 e-mall: rbiebal@sewrpc.org

> Waukesha Freeman January 13, 2009

Oconomowoc Enterprise January 15, 2009

Waukesha Freeman Lake Country January 17, 2009

REGIONAL WATER SUPPLY STUDY PUBLIC INFORMATIONAL MEETINGS

A series of public informational meetings has been scheduled Inroughout southeastern Wisconsin in January and early February 2009. The purpose of these meetings is to brief residents of the Region on the preliminary recommended regional water supply plan and to provide an opportunity for comment. Persons may choose to attend any of the meetings they find most convenient. Staff will be available in an "open house" formst from 5:00 p.m. to 7:00 p.m. to individually answer questions and provide information. A brief presentation of the plan will be made by study staff all 60 p.m. Written comments may be submitted throughout the meetings, including via dictation to a court reporter.

Local meetings are shown below, and the full set of meetings, as well as detailed information on the study and how to comment online, may be seen at the Commission's website: www.sewrpc.org/watersupplystudy.

Date Building/Room Location

January 21, 2009 Washington County Fair Park Pavilion, 3000 County Highway PV, Town of Polk

Room 112

January 26, 2009 Ozaukee County Administration Center, 121 W. Main Street, Port Washington

Auditorium

Following these meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan

Persons with special needs are asked to contact the Commission offices at (262) 547-6721 a minimum of 48 hours in advance of the meeting date so that appropriate arrangements can be made. Affected may be site access and/or mobility, materials review or interpretation, or active participation, including the submission of comments.

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Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.D. Box 1807 Waukesha, Wisconsin 53187-1607 Phone: 262-547-6721 Fax: 262-547-1103 e-mail: rbiebbi@sewrpc.org

> Insider News January 15, 2009

REGIONAL WATER SUPPLY STUDY PUBLIC INFORMATIONAL MEETINGS

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Local meetings are shown below, and the full set of meetings, as well as detailed information on the study and how to comment online, may be seen at the Commission's website; www.sewrpc.org/watersupplystudy,

late Building/Room Location

January 21, 2009 Washington County Fair Park Pavillon, Room 112 3000 County Highway PV. Town of Polk January 26, 2009 Ozaukee County Administration Center, Auditorium 121 W. Main Street, Port Washington

Following these meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan.

Persons with special needs are asked to contact the Commission offices at (282) 547-6721 a minimum of 48 hours in advance of the meeting date so that appropriate arrangements can be made. Affected may be site access and/or mobility, materials review or interpretation, or active participation, including the submission of comments.

In addition to providing comments at the public meetings, written comments may also be submitted through February 9, 2009. To obtain a paper copy of the recommended plan chapter or a detailed newsletter (also online), to ask questions, or to submit written comments on the preliminary Regional Water Supply Plan, please contact:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607
Waukesha, Wisconsin S3187-1607
Phone: 262-547-721 Fax: 262-547-1103
e-mail: rbiebel@sewrpc.org

West Bend Daily News January 16, 2009

Ozaukee News Graphic January 20, 2009

REGIONAL WATER SUPPLY STUDY PUBLIC INFORMATIONAL MEETINGS

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The scheduled Walworth County meeting is shown below; and the full set of meetings, as well as detailed information on the study and how to submit comments online, may be seen at the Commission's website: www.sewrpc.org/watersupplystudy.

<u>Date</u> <u>Building/Room</u> <u>Location</u>

January 22, 2009 Government Center, Room 214 100 W. Walworth Street, Elkhorn

Following the public informational meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan.

Persons with special needs are asked to contact the Commission offices at (262) 547-6721 a minimum of 48 hours in advance of the meeting date so that appropriate arrangements can be made. Affected may be site access and/or mobility, materials review or interpretation, or active participation, including the submission of comments.

in addition to providing comments at the public meetings, written comments may also be submitted through February 9, 2009. To obtain a paper copy of the recommended plan chapter or a detailed newsletter (also online), to ask questions, or to submit written comments on the preliminary Regional Water Supply Plan, please contact:

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607
Waukesha, Wisconsin 53187-1607
Phone: 262-547-6721 Fax: 262-547-1103
e-mail: rbiebel@sewrpc.org

CSI Community Shopper (Walworth County Sunday) January 18, 2009

REGIONAL WATER SUPPLY STUDY PUBLIC INFORMATIONAL MEETINGS

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Local meetings, which are the last two in the series, are shown below. Detailed information on the study, and how to comment online, may be seen at the Commission's website: www.sewrpc.org/watersupplystudy.

Building/Room

Location

January 29, 2009 Kenosha County Office Building, Hearing Rm. 19600 75th Street, Bristol

14200 Washington Avenue, Sturtevant

Following these meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan.

Persons with special needs are asked to contact the Commission offices at (262) 547-6721 a minimum of 48 hours in advance of the meeting date so that appropriate arrangements can be made. Affected may be site access and/or mobility, materials review or interpretation, or active participation, including the submission of

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> Fronteras de la Noticia January 21, 2009

REUNIONES INFORMATIVAS PÚBLICAS DEL ESTUDIO REGIONAL DE **ABASTECIMIENTO DE AGUA**

Una serie de reuniones públicas informativas se han agendado en todo el sureste de Wisconsin en enero e inicios de febrero de 2009. El propósito de estas reuniones es el de informar a los residentes de la Región sobre el plan preliminar de abastecimiento de agua regional recomendado y proporcionar una oportunidad para comentar. Las personas pueden elegir acudir a la reunión que les resulte más conveniente. El personal estará disponible en formato de "open house" de 5:00 p.m. a 7:00 p.m. para responder preguntas y proporcionar información individualmente. Una breve presentación del plan será realizada por el personal de estudio a las 6:00 p.m. Comentarios escritos pueden ser enviados en toda por el personal de estudio a las 6:00 p.m. Comentarios escritos pu nes, incluyendo por medio de un dictado al reportero de la corte.

Las reuniones locales, que son las últimas dos en las series, son mostradas abajo. La información detallada del estudio y las instrucciones para hacer comentarios en linea, pueden verse en el sitio web de la Comisión: www.sewrpc.org/watersupplystudy.

Edificio/Sala

Ubicación

29 de enero 2009 Kenosha County Office Building, Hearing Rm. 19600 75th Street, Bristol

2 de febrero 2009 Ives Grove Office Complex, Auditorium

14200 Washington Ave., Sturtevant

El seguimiento de estas reuniones y un histórial de comentarios públicos serán reunidos y proporcionados al Comité Consultivo de Abastecimiento de Agua Regional y a la Comisión para las deliberaciones en preparación del plan final recomendado.

A las personas con necesidades especiales se les hizo la petición de contactar las oficinas de la comisión al (262) 547-6721, un mínimo de 48 horas antes de la fecha de la reunión para poder hacer los arreglos apropiados. Puede ser afectado el acceso y/o la movilidad, la revisión o interpretación de materiales, o la participación activa, incluyendo la sumisión de comentarios.

En adición a los comentarios proporcionados en las reuniones públicas, pueden también ser enviados comentarios por escrito antes del 9 de febrero de 2009. Para obtener una copia de un capítulo del plan recomendado o una carta detallada (también en línea), para hacer una pregunta o para enviar comentarios por escrito sobre el Plan de Abastecimiento de Agua Regional preliminar, por favor contacta:

> Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, Wisconsin 53187-1607 Teléfono: 262-547-6721 Fax: 262-547-1103 Correo electrónico: rbiebel@sewrpc.org

> > Fronteras de la Noticia January 21, 2009

REGIONAL WATER SUPPLY STUDY PUBLIC INFORMATIONAL MEETINGS

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January 29, 2009 February 2, 2009 Building/Room

Kenosha County Office Building, Hearing Rm.

Location

19600 75th Street, Bristol

ives Grove Office Complex, Auditorium

14200 Washington Avenue, Sturtevant

Following these meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a final recommended plan.

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Waukesha, Wisconsin 53187-1607 Phone: 262-547-6721 Fax: 262-547-1103 e-mail: rbiebel@sewrpc.org

> Kenosha News January 25, 2009

REGIONAL WATER SUPPLY STUDY PUBLIC INFORMATIONAL MEETINGS

A series of public informational meetings has been scheduled throughout southeastern Wisconsin in January and early February 2009. The purpose of these meetings is to brief residents of the Region on the preliminary recommended regional water supply plan and to provide an opportunity for comment. Persons may choose to attend any of the meetings they find most convenient. Staff will be available in an "open house" format from 5:00 p.m. to 7:00 p.m. to individually answer questions and provide information. A brief presentation of the plan will be made by study staff at 6:00 p.m. Written comments may be submitted throughout the meetings, including via dictation to a court reporter.

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January 29, 2009 Kenosha County Office Building, Hearing Rm. 19600 75th Street, Bristol February 2, 2009 Ives Grove Office Complex, Auditorium

14200 Washington Avenue, Sturtevant

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Racine Journal Times January 25, 2009

REGIONAL WATER SUPPLY PLAN FOR SOUTHEASTERN WISCONSIN



NEWSLETTER 3 DECEMBER 2008

This newsletter is the third in a series of newsletters reporting progress in the regional water supply planning program. The first newsletter provided an overview of the scope and content of the planning program, the planning area, the water supply planning objectives and their attendant standards formulated to guide the design and evaluation of alternative and recommended water supply plans, trends in regional water use, and existing sources of water supply. The second newsletter provided regional economic, demographic, and water use forecasts, and described planned land use development to the year 2035, and presented the findings and conclusions of an evaluation of potential effectiveness of water conservation measures; findings and conclusions of a study of water supply law; and the conceptual water supply plan alternatives initially proposed for consideration and evaluation.

This newsletter presents:

- a description of the initial water supply plan alternatives developed for consideration and evaluation;
- the findings and conclusions of a comparative evaluation of these alternatives with respect to the water supply planning objectives;
- a description of a preliminary recommended plan incorporating the best components of the initial water supply plan alternatives for further consideration; and
- information regarding opportunities to provide comments on the preliminary recommended plan.

CONSIDERATION OF ALTERNATIVE REGIONAL WATER SUPPLY PLANS

As part of the planning process, a number of problems and issues related to water supply within the Region were identified and characterized. Examples of these problems and issues include the available quantity of groundwater, the sustainability of groundwater sources, groundwater quality, underutilization of existing Lake Michigan water treatment plant capacities, impacts of land use development on groundwater recharge, and the ability of existing water supply system infrastructure to meet existing and forecast water demands. Four

STUDY PUBLIC INFORMATIONAL MEETINGS

A series of public information meetings has been scheduled to be held throughout the Region in January and early February 2009. The purpose of these meetings is to brief residents of the Region on the preliminary recommended regional water supply plan and to provide an opportunity for comment. The table below provides information on the dates and locations of the upcoming meetings. Persons may choose to attend any of the meetings they find most convenient. Staff will be available in an "open house" format from 5:00 p.m. to 7:00 p.m. to individually answer questions and provide information about the regional water supply plan. A brief presentation of the plan will be made by study staff at 6:00 p.m. Written comments may be submitted throughout the meetings, including via dictation to a court reporter.

Persons with special needs are asked to contact the Commission offices a minimum of 72 hours in advance so that appropriate arrangements can be made. Contact information may be found on the back page of this newsletter. The comment period on the preliminary recommended plan extends through February 9, 2009, with comments accepted via U.S. mail, fax, and email.

Date	Location
January 12, 2009	HeartLove Place, Bethel/ Enpowerment Rooms 3229 N. Dr. Martin Luther King, Jr. Drive Milwaukee
January 13, 2009	United Community Center Conference Rooms 1 and 2 1028 S. 9th Street, Milwaukee
January 14, 2009	Wauwatosa Public Library Firefly Room 7635 W. North Avenue, Wauwatosa
January 20, 2009	Rotary Building Frame Park 1150 Baxter Street, Waukesha
January 21, 2009	Washington County Fair Park Pavilion Room 112 3000 County Highway PV, Town of Polk
January 22, 2009	Government Center Room 214 100 W. Walworth Street, Elkhorn
January 26, 2009	Ozaukee County Administration Center Auditorium 121 W. Main Street Port Washington
January 29, 2009	Kenosha County Office Building Hearing Room 19600 75th Street, Bristol
February 2, 2009	Ives Grove Office Complex Auditorium 14200 Washington Avenue, Sturtevant

Following these meetings, a record of public comments will be assembled and provided to the Regional Water Supply Advisory Committee and to the Commission for deliberations in preparing a recommended plan.

Table 1
SELECTED CHARACTERISTICS OF ALTERNATIVE REGIONAL WATER SUPPLY PLANS

Alternative Plan	New Components	2035 Groundwater Pumpage Amounts	2035 Lake Michigan Supply Amount
Alternative Plan 1: Design Year 2035 Forecast Conditions Under Existing Trends and Committed Actions	110 wells (eight deep, 102 shallow) 77 storage tanks 17 radium treatment systems 2 water plant expansions	106 mgd, an increase from 77 mgd in 2005 67 mgd from shallow aquifer, an increase from 42 mgd in 2005 39 mgd from deep aquifer, an increase from 35 mgd in 2005	214 mgd, an increase from 206 mgd in 2005
Alternative Plan 2: Design Year 2035 Forecast Conditions With Limited Expansions of Lake Michigan and Shallow Groundwater Aquifer Supplies	138 wells (all shallow) 98 storage tanks 2 water treatment plant expansions 6 Lake Michigan supply connections	93 mgd, of which 72 mgd is from the shallow aquifer and 21 mgd is from the deep aquifer	227 mgd
Alternative Plan 3: Design Year 2035 Forecast Conditions with Groundwater Recharge Enhancement	138 wells (all shallow) 98 storage tanks 2 water treatment plant expansions 6 Lake Michigan supply connections 83 rainfall infiltration sites 4 wastewater treatment infiltration system 9 deep aquifer injection wells	93 mgd, of which 72 mgd is from the shallow aquifer and 21 mgd is from the deep aquifer	227 mgd, plus 9 mgd used for deep aquifer recharge
Alternative Plan 4: Further Expansion of Lake Michigan Supply	102 wells (all shallow) 91 storage tanks 2 to 4 water treatment plant expansions or new water treatment plant development, depending upon the subalternative selected 16 Lake Michigan supply connections 2 or 3 water treatment plant expansions, depending upon the subalternative selected Lake Michigan return flow component	65 mgd, of which 50 mgd is from the shallow aquifer and 15 mgd is from the deep aquifer	255 mgd

Source: SEWRPC.

alternative regional water supply plans were developed and considered to address these problems and issues and to meet the water supply objectives and supporting standards. Selected characteristics of these alternative plans are presented in Table 1.

Alternative Plan 1—Continuation of Existing Sources of Water Supply

This alternative plan, as shown on Map 1, would maintain the existing sources of water supply utilized by the Region's water utilities: groundwater for those now using groundwater and Lake Michigan water for those now using Lake Michigan water. For those groundwater-based utilities largely dependent upon the deep aquifer experiencing water quality problems, treatment of the deep aquifer groundwater was assumed. In the Kenosha area, Lake Michigan water would continue to be provided west of the subcontinental divide by the City of Kenosha Water Utility to portions of the Village of Pleasant Prairie, the Town of Somers, and the Town of Bristol, as well as portions of the City itself, recognizing longstanding inter-municipal agreements, investment in Lake Michigan water supply infrastructure, and provision for return flow already in place.

Alternative Plan 2—Limited Expansion of Lake Michigan and Shallow Groundwater Aquifer Supplies

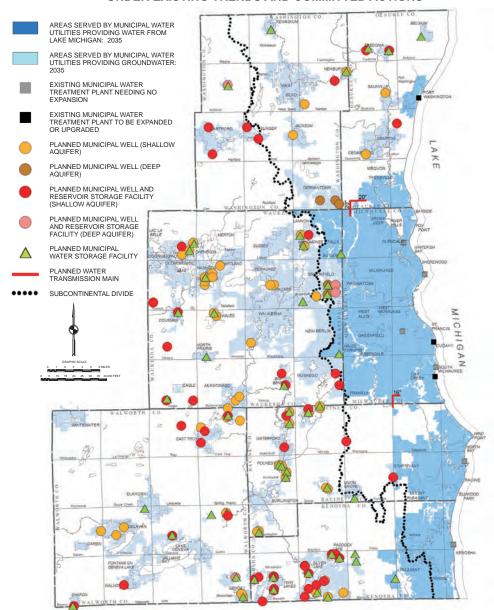
This alternative plan, as shown on Map 2, would shift the source of supply of a limited number of communities from groundwater to Lake Michigan water in order to reduce drawdowns in the deep aquifer and address water quality issues associated with use of that aquifer. Under this alternative plan, four communities located east of the subcontinental divide—the Villages of Germantown and Elm Grove, the eastern portion of the City of Brookfield, and a portion of the Town of Yorkville—and two communities which straddle the subcontinental divide—the central portion of the City of New Berlin and the City of Muskego—would be converted from groundwater to Lake Michigan water as the source of supply. These communities already have return flow to Lake Michigan in place. In addition, for those groundwater-based utilities with deep aquifer water quality problems, shallow aquifer groundwater sources would replace deep aquifer groundwater.

Alternative Plan 3— Limited Expansion of Lake Michigan and Shallow Groundwater Aquifer Supplies with Groundwater Recharge Enhancement

This alternative plan would be the same as Alternative Plan 2, but would also include groundwater aquifer recharge measures for both the shallow and deep aquifers. Locations of the systems that would provide these measures are shown on Map 3. Shallow groundwater aquifer recharge measures would include identification and protection of the remaining most significant groundwater recharge areas within the Region either through preservation or development in a manner which would preserve their natural hydrology and rainfall infiltration, enhancement of rainfall infiltration through bioengineering of about four square miles of open space at sites selected to minimize the impacts of groundwater use on lakes, streams and wetlands, and the development of systems for the further treatment and discharge of wastewater treatment plant effluent into the shallow aguifer at selected locations. The latter systems may violate current State regulations and policies regarding groundwater management, and would require changes to, or variances from, those regulations and policies. Deep aquifer groundwater recharge measures would involve replenishment of the deep aquifer through a series of groundwater injection wells utilizing treated Lake Michigan water from existing Lake Michigan water treatment facilities. These injection wells would be located

Map 1

ALTERNATIVE PLAN 1-DESIGN YEAR 2035 FORECAST CONDITIONS UNDER EXISTING TRENDS AND COMMITTED ACTIONS



Source: Ruekert & Mielke, Inc. and SEWRPC.

east of the subcontinental divide. Such injection wells would also require changes to, or variances from, State regulations and policies.

Alternative Plan 4—Further Expansion of Lake Michigan Supply

This alternative plan, as shown on Map 4, would further expand the use of Lake Michigan as a source of water supply—replacing groundwater as the source of supply—beyond that proposed in Alternative Plan 2, including expansion to communities located east of the subcontinental divide, communities straddling the subcontinental divide, and non-straddling communities in counties straddling the subcontinental divide. The additional communities using Lake Michigan water located east of the subcontinental divide would include: the City of Cedarburg and the Villages of Fredonia, Grafton, and Saukville, all in Ozaukee County. The additional communities using Lake Michigan water straddling the subcontinental divide would include: the western portion of the City of Brookfield, the western portion of the Village of Menomonee Falls, the Town of Brookfield, all in Waukesha County, and the Village of Union Grove in Racine County. The non-straddling communities using Lake Michigan water in counties straddling the subcontinental divide would include: the Cities of Pewaukee and Waukesha,

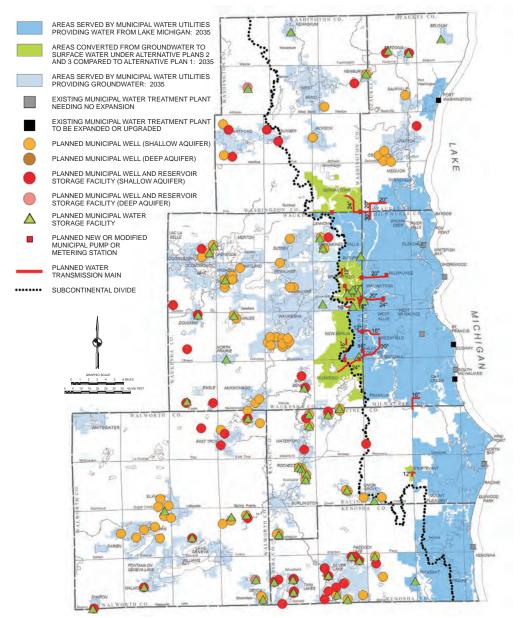
and the Villages of Lannon, Pewaukee, and Sussex, all in Waukesha County. For all communities converting from groundwater to Lake Michigan water, return flow of treated wastewater would be provided. Three options for return flow were considered pending more detailed second level environmental assessments. These options were return flow to Underwood Creek, a tributary to the Menomonee River which flows to Lake Michigan; discharge to the Root River, a tributary to Lake Michigan; or discharge directly to Lake Michigan.

Evaluation of Alternative Plans

Table 2 summarizes the projected impacts of the alternative water supply plans on the groundwater and surface water systems of the Region. Under Alternative Plan 1 conditions, drawdown of the deep aguifer is expected to continue over most of the Region, although the rate of drawdown is expected to slow significantly. By contrast, Alternative Plans 2, 3, and 4 are expected to result in drawups in the deep aguifer over most of the Region. Figure 1 shows that the amount of drawup and the geographical extent of the drawups differ among these alternative plans. The differences in the results from these three alternative plans show that higher drawups and more widespread drawups in the deep aquifer could be achieved by either providing enhanced recharge to the deep aquifer or by shifting more

Map 2

ALTERNATIVE PLAN 2-DESIGN YEAR 2035; FORECAST CONDITIONS WITH LIMITED EXPANSION OF LAKE MICHIGAN SUPPLY



Source: Ruekert & Mielke, Inc. and SEWRPC.

water utilities from using the deep aquifer to using Lake Michigan or the shallow aquifer as their source of water supply. The results of the analyses as presented in Figure 1 indicate that Alternative Plans 2, 3, and 4 would all provide for sustainable use of the deep aquifer.

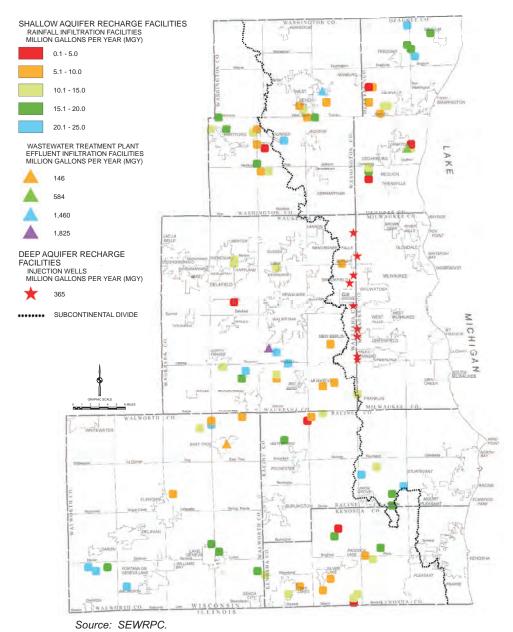
Table 2 summarizes the impacts of the four alternative water supply plans on the shallow aquifers and surface water systems. Localized impacts in water levels in the shallow aquifer may be expected to occur around community wells under any of these alternative plans. The average drawdowns on a county-wide basis which may be expected to result under the alternative plans would be one foot or less, with localized maximums of less than 80 feet. Some reduction in groundwater-derived baseflow to surface waterbodies would occur under each of the four alternative plans. While the average reduction would be small, some localized impacts would be significant. The analyses indicate that higher reductions in groundwater-derived baseflow would accompany greater reliance upon the shallow aquifer as a source of water supply. The analyses also indicate that lower reductions in groundwater-derived baseflow could be achieved by either providing enhanced recharge to the shallow aquifer or by shifting more water utilities from use of the shallow aquifer to use of Lake Michigan as their source of water supply.

Table 3 summarizes the estimated costs of the four alternative water supply plans. The costs presented represent those associated with all new, expanded, or upgraded facilities. Capital costs of the alternative plans range from about \$170 million for Alternative Plan 1 to about \$470 million for Alternative Plan 4. The higher capital costs within this range result from some alternative plans requiring the construction of major facilities to support shifting the source of water supply for some communities from the deep aquifer to the shallow aquifer or Lake Michigan, to provide return flow to Lake Michigan, and to provide for enhanced groundwater recharge. The operations and maintenance costs given in the table represent the net amount arrived at by combining the operations and maintenance costs of the proposed new facilities and the reductions in costs resulting from the proposed replacement of existing facilities, and the elimination of individual residential water softener or other water treatment devices. Equivalent annual costs range from about \$6.2 million for Alternative Plan 2 to about \$14.3 million for Alternative Plan 4.

A comparative evaluation of the alternative plans was conducted by comparing the performance of each plan with respect to attainment of the water supply planning objectives and their attendant standards (see page 7).

Based upon the comparative evaluation of the four alternatives considered, the following conclusions were drawn:

Map 3 ALTERNATIVE PLAN 3-DESIGN YEAR 2035 GROUNDWATER RECHARGE FACILITIES



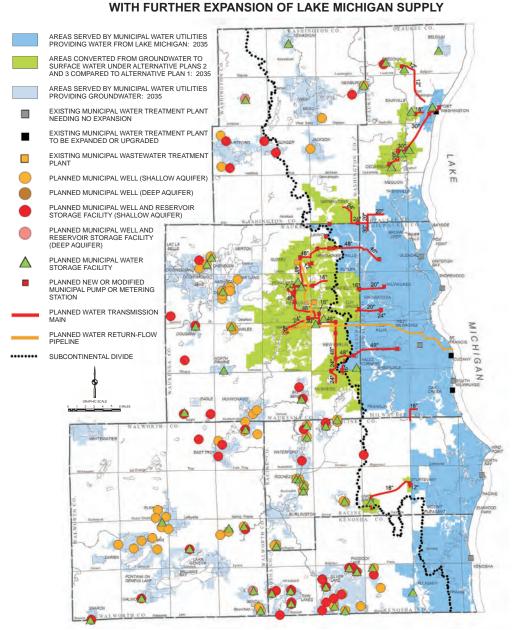
- Recovery of the deep groundwater aquifer could be achieved through a relatively limited shifting of utilities from use of the deep groundwater aquifer to Lake Michigan as a source of supply and by placing greater reliance on the shallow groundwater aquifer as a source of water supply. This would result in sustainable use of the deep aquifer,
- Although artificial recharge of the deep groundwater aquifer through injection wells would result in a greater rebound in water levels, such recharge is not needed in order to achieve sustainability. In addition, the additional cost, potential impacts on groundwater quality, and regulatory issues associated with this alternative make it an undesirable as well as unnecessary way to achieve sustainable use of the deep groundwater aquifer,
- Shifting the source of water supply from the deep groundwater aquifer to the shallow groundwater aquifer would result in reductions in groundwater-derived baseflow to some surface waters in the Region; however, many of the streams

that would experience reductions receive supplements to baseflow from the discharge of wastewater treatment plant effluent. Other streams, lakes, and wetlands would experience augmentations to baseflow,

- Infiltration of treated wastewater treatment plant effluent into the shallow groundwater aquifer could supplement localized recharge of the shallow groundwater system; however, the level of treatment required in order to permit infiltration would make this an expensive option. In addition, significant groundwater quality concerns and regulatory issues are associated with this option,
- Rainfall infiltration systems could also supplement localized recharge of the shallow groundwater system. In some circumstances, such systems may mitigate the effects of pumping from the shallow groundwater aquifer,
- Shifting the source of water supply from groundwater to Lake Michigan would permit the abandonment of point-of-use water softening systems and result in less chloride being discharged to the environment,

Map 4

ALTERNATIVE PLAN 4-DESIGN YEAR 2035; FORECAST CONDITIONS



Source: Ruekert & Mielke, Inc. and SEWRPC.

- Delineation of groundwater recharge areas indicate that a high degree of protection of the best groundwater recharge areas in the Region would be achieved through implementation of the adopted 2035 regional land use plan, specifically, about 65 percent of the highly rated groundwater recharge areas and about 83 percent of the very highly rated recharge areas may be expected to be maintained by inclusion in the environmental corridors, isolated natural areas, and prime and other agricultural areas identified for preservation in the adopted land use plan and in rural residential areas. Careful design of new residential development, for example by using cluster and conservation subdivision design, and the use of selected stormwater management practices would be expected to increase this amount.
- Continued reliance upon the shallow and deep ground water aquifers as sources of supply for communities located west of the subcontinental divide is viable with respect to the quantities required and available. This option, however, is associated with a greater loss of baseflow to surface waters and higher chloride discharges to surface waters.

Table 2

GROUNDWATER AND SURFACE WATER IMPACTS OF ALTERNATIVE REGIONAL WATER SUPPLY PLANS

	Groundwater Level Impacts		
Alternative Plan	Deep Aquifer	Shallow Aquifer	Surface Water Baseflow Impacts
Alternative Plan 1: Design Year 2035 Forecast Conditions Under Existing Trends and Committed Actions	Significant slowdown in the drawdown of the deep aquifer Average drawdown by county of 10 to 22 feet Maximum drawdown of 64 feet. No drawup	Localized impacts around community wells Average drawdown by county of one foot or less Maximum drawdown of 76 feet	Average 4.5 percent reduction in groundwater-derived baseflow Average base flow change by county of 0.0 to 7.4 percent reduction 19 of 100 sensitive sites have reduction of 10 percent or more
Alternative Plan 2: Design Year 2035 Forecast Conditions With Limited Expansions of Lake Michigan and Shallow Groundwater Aquifer Supplies	Drawup in the deep aquifer Average drawup by county of eight to 92 feet Maximum drawup of 237 feet No significant drawdown	Localized impacts around community wells Average drawdown by county of one foot or less Maximum drawdown of 76 feet	Average 5.3 percent reduction in groundwater-derived baseflow Average baseflow change by county of 2.0 percent augmentation to 10.4 percent reduction 23 of 100 sensitive sites have reduction of 10 percent or more
Alternative Plan 3: Design Year 2035 Forecast Conditions with Groundwater Recharge Enhancement	Drawup in the deep aquifer Average drawup by county of 14 to 212 feet Maximum drawup of 368 feet No significant drawdown	Localized impacts around community wells Average drawdown by county of one foot or less Maximum drawdown of 76 feet	Average 1.7 percent reduction in groundwater-derived baseflow Average baseflow change by county of 3.1 percent augmentation to 3.9 percent reduction 16 of 100 sensitive sites have reduction of 10 percent or more
Alternative Plan 4: Further Expansion of Lake Michigan Supply	Drawup in the deep aquifer Average drawup by county of 35 to 136 feet Maximum drawup of 270 feet No significant drawdown	Localized impacts around community wells Average drawdown by county of one foot or less Maximum drawdown of 51 feet	Average 0.7 percent reduction in groundwater-derived baseflow Average baseflow change by county of 14.9 percent augmentation to 4.5 percent reduction 13 of 100 sensitive sites have reduction of 10 percent or more

Source: SEWRPC

WATER SUPPLY PLANNING OBJECTIVES

Objective No. 1—Support of Existing Land Use Patterns and Support and Direction of Planned Land Use Patterns

A regional water supply system which, through its capacity and efficiency, will effectively serve the existing regional land use pattern, promote the implementation of the regional land use plan, and identify any constraints to development in subareas of the Region which may require refinement of the regional land use plan.

Objective No. 2—Conservation and Wise Use of the Surface Water and Groundwater Supplies

A regional water supply plan which conserves and wisely utilizes the surface water and groundwater supplies of the Region so as to sustain those supplies for future, as well as existing needs.

Objective No. 3—Protection of Public Health, Safety, and Welfare

A regional water supply system which protects the public health, safety, and welfare.

Objective No. 4—Economical and Efficient Systems

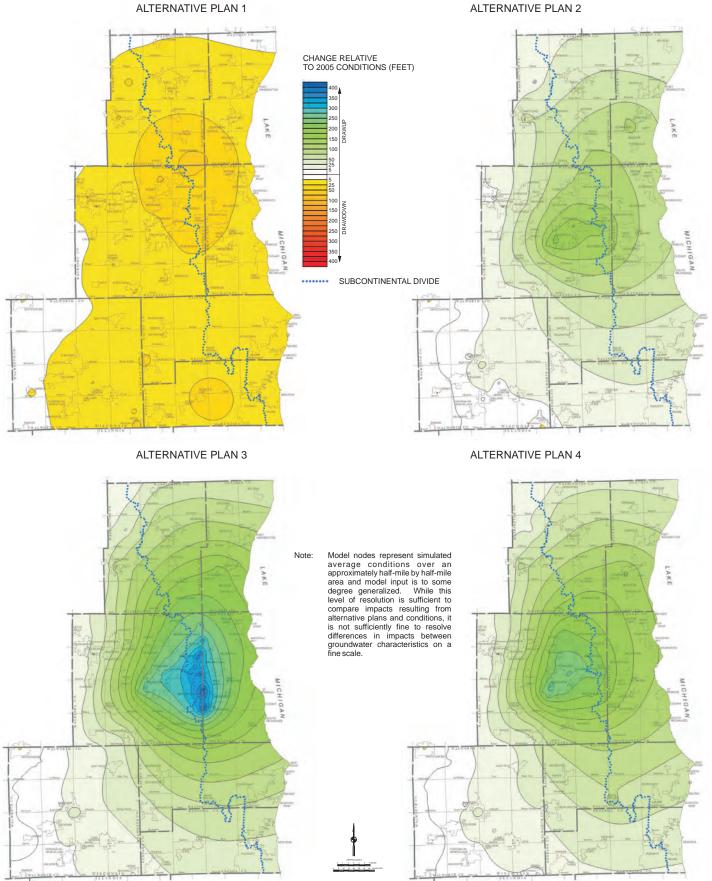
The development of water supply facilities, operational improvements, and policies, that are both economical and efficient, best meeting all other objectives at the lowest practical cost, considering both long-term capital and operation and maintenance costs.

Objective No. 5—Responsive and Adaptive Plans

The development of water supply systems, operations, and policies which are flexible and adaptive in response to changing conditions.

Figure 1

CONDITIONS IN THE DEEP AQUIFER ASSOCIATED WITH ALTERNATIVE WATER SUPPLY PLANS: 2035



Source: U.S. Geological Survey.

D-12

These findings indicated that each alternative plan considered contained sound components that merit consideration for inclusion in a recommended plan. It was therefore concluded that a carefully constructed composite plan incorporating the best components of the alternative plans considered would be capable of meeting the planning objectives more fully than any of the four alternative plans initially considered.

DEVELOPMENT OF A PRELIMINARY RECOMMENDED REGIONAL WATER SUPPLY PLAN

Elements of the Preliminary Recommended Plan

The preliminary recommended plan—a composite plan combining the best elements of the alternative plans considered—includes the following elements:

- For the vast majority of water utilities required to serve existing and planned water supply service areas, the existing sources of supply—generally Lake
 - areas, the existing sources of supply—generally Lake Michigan, the shallow aquifer, or a combination of shallow and deep aquifers underlying the Region were determined to be adequate. Therefore, the plan proposes that these utilities continue to utilize their existing sources of supply. The utilities concerned are shown in Table 4.

• The plan proposes that over time four utilities—the City of Delavan Water and Sewage Utility, the City of Elkhorn Water Utility, the City of Hartford Water Utility, and the Town of Bristol Utility District No. 1—place greater reliance on use of the shallow groundwater aquifer as a source of water supply either by replacing existing deep wells with shallow wells or by supplementing pumpage from existing deep wells with pumpage from shallow wells as new wells are constructed.

- The plan proposes the conversion to Lake Michigan as a source of water supply of existing utility service areas, or portions of utility service areas, which currently have return flow to Lake Michigan in place. Seven of these—(1) the eastern portion of the City of Brookfield Municipal Water Utility service area, (2) the City of Cedarburg Light and Water Commission, (3) the Village of Elm Grove, (4) the Village of Germantown Water Utility, (5) the Village of Grafton Water and Wastewater Commission, (6) the Village of Saukville Municipal Water Utility, and (7) the Town of Yorkville Utility District No. 1—are located east of the subcontinental divide. Two—the central portion of the City of New Berlin Water Utility service area and the City of Muskego Public Water Utility—serve communities that straddle the divide. These last two are within the Milwaukee Metropolitan Sewerage District sanitary sewer service area and, therefore, have existing return flow.
- The plan proposes that certain areas of existing urban development that are currently served by private, onsite wells be provided by municipal water supply either through the extension of service by existing utilities or in some cases by the creation of new utilities. Such conversion is proposed only when need is demonstrated and at the option of the affected utilities. Absent a demonstrated need, residents and businesses of the areas would remain on individual wells indefinitely. Potential new utilities that would be required are listed in Table 5.
- The plan envisions that the existing, self-supplied water systems serving residential communities and most of the systems serving commercial, institutional, and recreational land uses located within the planned municipal water supply service areas will be connected to the municipal systems by the plan design year 2035. Under the plan, a number of private, self-supplied water supply systems generally located beyond planned municipal water supply service areas would remain. These include self-supplied residential, industrial, commercial, institutional, recreational, agricultural, irrigation, and electric-power generation uses.
- The plan recommends the implementation of comprehensive water conservation programs, including both supply side water supply efficiency measures and demand side water conservation measures. The scope and content of these conservation programs are recommended on a utility-specific basis to reflect the source of supply and existing infrastructure. Expected reductions in demand vary from 4 to 10 percent on an average daily demand basis and from 6 to 18 percent on a maximum daily demand basis.

Table 3

COSTS OF ALTERNATIVE REGIONAL WATER SUPPLY PLANS

Alternative Plan	Capital (dollars)	Annual O&M (dollars) ^a	Equivalent Annual (dollars)
Alternative Plan 1	170 million	5.1 million gross 5.1 million net	11.2 million
Alternative Plan 2	219 million	3.2 million gross -3.3 million net ^b	6.2 million
Alternative Plan 3	368 million	8.6 million gross 2.1 million net ^b	12.9 million
Alternative Plan 4	470 million	7.3 million gross -14.4 million net ^c	14.3 million

^aGross operation and maintenance cost represents the operation and maintenance costs of new upgraded and expanded facilities. Net operations and maintenance costs includes a credit for reduced household water softening costs.

Source: SEWRPC.

^bIncludes a credit of \$6.5 million for reduced household water softening costs.

[°]Includes a credit of \$21.7 million for reduced household water softening costs

- The plan includes a groundwater recharge area protection component directed at preserving existing groundwater recharge areas classified as having a high or very high recharge. This component may be expected to be largely achieved through the implementation of the adopted design year 2035 regional land use plan, since that plan recommends preservation of the environmental corridors, isolated natural areas, prime and other agricultural areas of the Region that facilitate recharge. The areas concerned are shown on Map 5. About 65 percent of the highly rated and about 83 percent of the very highly rated recharge areas may be expected to be preserved by inclusion in the environmental corridors, isolated natural areas, and prime and other agricultural areas identified for preservation in the adopted land use. Careful design of new residential development and the use of selected stormwater management practices would be expected to increase this amount.
- The plan includes a stormwater management component which recommends the implementation of available stormwater management practices, including treatment and infiltration systems, which—to the extent practicable—will maintain the natural recharge of new residential and selected nonresidential land use developments.
- The plan includes provisions related to the siting of all new high-capacity wells and for the analysis and monitoring of impacts of such wells in the shallow aquifer. These provisions specify the measures that should be taken in the early stages of locating sites for high capacity wells in the shallow aquifer to develop the necessary understanding of the hydrogeological system associated with each candidate site and its surrounding area and to assess the likelihood of impacts of proposed wells upon nearby existing wells and surface waterbodies. These components also provide for monitoring of water levels in the vicinity of new high capacity wells in the shallow aquifer, both during the test well phase of placement and during operation of the well.
- The plan includes a provision encouraging the installation of enhanced rainfall infiltration systems in areas where evaluations conducted in conjunction with siting of high capacity wells in the shallow aquifer indicate probable reductions in baseflow to nearby surface waterbodies that are likely to affect streamflows or water levels in lakes or wetlands due to installation and operations of these wells.

These last four components of the preliminary recommended plan are intended to form the basis of a process to minimize the negative impacts to surface water systems associated with high-capacity well development.

Subalternatives to the Preliminary Recommended Plan

As part of the development of the preliminary recommended plan, two subalternatives were considered. Table 6 summarizes their characteristics. The two subalternatives differ only with respect to the source of water supply for the City of Waukesha. Under Subalternative 1, the City of Waukesha would continue to utilize groundwater as a source of supply, with the supply being obtained by about an equal use of the shallow and deep aquifers. This subalternative is summarized on Map 6. Under Subalternative 2, it is envisioned that the City of Waukesha would be connected to a Lake Michigan supply and would provide a return flow to Lake Michigan. This subalternative is summarized on Map 7. Return flow could be provided by returning treated wastewater either to Lake Michigan or to streams tributary to Lake Michigan. Examples of return flow options are shown on Map 8. Subsequent detailed planning and engineering would be required to determine the best means of providing this return flow.

Evaluation of Subalternatives to the Preliminary Recommended Plan

Table 7 summarizes the projected impacts of the subalternatives to the preliminary recommended water supply plans on the groundwater and surface water systems of the Region. Both subalternatives to the preliminary recommended plan are expected to result in drawups in the deep aquifer over most of the Region. Figure 2 shows that the amount of drawup and the geographical extent of the drawups differ between these two subalternatives. The analyses indicate that higher and more widespread drawups—or rises—in the deep aquifer could be achieved by utilizing Lake Michigan water as the source of supply for the City of Waukesha than could be achieved by continuing to utilize groundwater as a source of supply. These analyses also indicate that the deep aquifer in a large area comprised of portions of Kenosha, Racine, and Walworth Counties may be expected to experience drawdowns in excess of five feet under Subalternative 2 conditions with lesser drawdown amounts and less extensive drawdown areas under Subalternative 1 conditions. These drawdowns would most likely result from the combined effects of pumping from the deep aquifer in the affected area and groundwater flow related to pumping in more distant areas including Waukesha and northern Illinois.

Table 7 also summarizes the impacts of the two subalternatives to the preliminary recommended plan on the shallow aquifers and surface water systems. Localized impacts in water levels in the shallow aquifer would be expected to occur around municipal water utility wells under either of these subalternatives. The average drawdowns on a county-wide basis expected to result under the subalternatives would be two feet or less, with localized maximums of less than about 71 feet. Some reduction in groundwater-derived baseflow to surface waterbodies would occur under both of the subalternatives. While the average

Table 4

UTILITIES CONSIDERED TO HAVE ADEQUATE EXISTING SOURCES OF WATER SUPPLY UNDER THE PRELIMINARY RECOMMENDED REGIONAL WATER SUPPLY PLAN

County and Utility	Source of Supply
Kenosha County	11.2
City of Kenosha Water Utility	Lake Michigan Self-Supplied
Village of Paddock Lake Municipal Water Utility	Groundwater Shallow Aquifer
Village of Pleasant Prairie Water Utility	Lake Michigan Purchased Supply
Town of Bristol Utility District No. 3	Lake Michigan Purchased Supply
Town of Somers Water Utility	Lake Michigan Purchased Supply
Milwaukee County	
City of Cudahy Water Utility	Lake Michigan Self-Supplied
City of Franklin Water Utility	Lake Michigan Purchased Supply
City of Glendale Water Utility	Lake Michigan Purchased Supply
City of Milwaukee Water Utility	Lake Michigan Self-Supplied
City of Oak Creek Water and Sewer Utility	Lake Michigan Self-Supplied
City of South Milwaukee Water Utility	Lake Michigan Self-Supplied
City of Wauwatosa Water Utility	Lake Michigan Purchased Supply
City of West Allis Water Utility	Lake Michigan Purchased Supply
Village of Brown Deer Public Water Utility	Lake Michigan Purchased Supply
Village of Fox Point Water Utility	Lake Michigan Purchased Supply
Village of Greendale Water Utility	Lake Michigan Purchased Supply
Village of Shorewood Municipal Water Utility	Lake Michigan Purchased Supply
Village of Whitefish Bay Water Utility	Lake Michigan Purchased Supply
We Energies-Water Services	Lake Michigan Purchased Supply
Ozaukee County	
Village of Belgium Municipal Water Utility	Groundwater Shallow Aquifer
We Energies-Water Services	Lake Michigan Purchased Supply
Racine County	
City of Burlington Municipal Waterworks	Groundwater Deep Aquifer
City of Racine Water and Wastewater Utility ^a	Lake Michigan Self-Supplied
Village of Caledonia West Utility District ^b Oak Creek	Lake Michigan Purchased Supply
Village of Caledonia West Utility District ^b Racine	Lake Michigan Purchased Supply
Village of Caledonia East Utility District ^c Oak Creek	Lake Michigan Purchased Supply
Village of Caledonia East Utility District ^c Racine	Lake Michigan Purchased Supply
Village of Waterford Water and Sewer Utility	Groundwater Deep and Shallow Aquifers
Village of Wind Point Municipal Water Utility	Lake Michigan Purchased Supply
North Cape Sanitary District	Groundwater Shallow Aquifer

County and Hillity	Source of Supply
County and Utility Walworth County	Source of Supply
City of Lake Geneva Municipal Water Utility	Groundwater Shallow Aquifer
City of Whitewater Municipal Water Utility	Groundwater Deep Aquifer
Village of Darien Water Works and Sewer System	Groundwater Deep and Shallow Aquifers
Village of East Troy Municipal Water Utility	Groundwater Deep and Shallow Aquifers
Village of Fontana Municipal Water Utility	Groundwater Deep and Shallow Aquifers
Village of Genoa City Municipal Water Utility	Groundwater Deep and Shallow Aquifers
Village of Sharon Waterworks and Sewer System	Groundwater Deep and Shallow Aquifers
Village of Walworth Municipal Water and Sewer Utility	Groundwater Shallow Aquifer
Village of Williams Bay Municipal Water Utility	Groundwater Deep and Shallow Aquifers
Country Estates Sanitary District	Groundwater Deep Aquifer
Town of Bloomfield Pell Lake Sanitary District No. 1	Groundwater Deep Aquifer
Town of East Troy Sanitary District No. 3	Groundwater Deep and Shallow Aquifers
Town of Geneva Lake Como Sanitary District No. 1	Groundwater Deep Aquifer
Town of Troy Sanitary District No. 1	Groundwater Shallow Aquifer
Washington County	
City of West Bend Water Utility	Groundwater Shallow Aquifer
Village of Jackson Water Utility	Groundwater Shallow Aquifer
Village of Kewaskum Municipal Water Utility	Groundwater Shallow Aquifer
Village of Slinger Utilities	Groundwater Shallow Aquifer
Allenton Sanitary District No. 1	Groundwater Deep Aquifer
Waukesha County	
City of Delafield Municipal Water Utility	Groundwater Deep and Shallow Aquifers
City of New Berlin Water Utility (east)	Lake Michigan Purchased Supply
City of Oconomowoc Utilities	Groundwater Deep and Shallow Aquifers
Village of Butler Public Water Utility	Lake Michigan Purchased Supply
Village of Dousman Water Utility	Groundwater Deep and Shallow Aquifers
Village Eagle Municipal Water Utility	Groundwater Shallow Aquifer
Village of Hartland Municipal Water Utility	Groundwater Shallow Aquifer
Village of Menomonee Falls Water Utility (east)	Lake Michigan Purchased Supply
Village of Mukwonago Municipal Water Utility	Groundwater Deep and Shallow Aquifers
Village of Sussex Public Water Utility	Groundwater Deep and Shallow Aquifers

a Includes the Village of Sturtevant Water Utility which was purchased by the City of Racine Water and Wastewater Utility in 2007 and is now served by the City Utility on a retail basis.

b Includes the former Caddy Vista Sanitary District and the Former Caledonia Sanitary District No. 1 which were consolidated in 2007 to form the Caledonia West Utility District.

^cIncludes the former Crestview Sanitary District and the former North Park Sanitary Districts which were consolidated in 2007 to form the Caledonia East Utility District. Source: SEWRPC.

reduction would be small, there are significant localized impacts. The analyses indicate that higher reductions in groundwater-derived baseflow would accompany greater reliance by the City of Waukesha upon the shallow aquifer as a source of water supply.

Table 8 summarizes the estimated costs of the two subalternatives to the preliminary recommended water supply plan. The costs presented represent those associated with all new, expanded, or upgraded facilities. Capital costs of the preliminary recommended plan range from about \$276 million for Subalternative 1 to between \$324 million and \$352 million for Subalternative 2, depending upon which option for return flow would be found best for the City of Waukesha. The gross annual operation and maintenance costs of new facilities under the two subalternatives are about \$5.4 million for Subalternative 1 and range between \$8.0 million and \$8.5 million for Subalternative 2, depending upon which option for return flow would be found best for the City of Waukesha. It is anticipated that under the plan there will be less need for water softening in those areas proposed for conversion to a Lake Michigan water supply. It is expected that this will result in a reduction of costs to the public related to use and operation of residential water softener or other point-of-use water treatment devices ranging from \$9.4 million under Subalternative 1 to \$16.7 million under Subalternative 2. When the expected reductions in cost due to the potential elimination of individual residential water softener or other point-of-use water treatment devices are included, Subalternative 1 would result in a net annual savings to the public of about \$4.0 million, and Subalternative 2 would result in a net annual savings to the public of between about \$8.2 million and about \$8.7 million. Equivalent annual costs are estimated to be about \$9.9 million for Subalternative 1 and to range between about \$8.3 million and \$10.5 million for Subalternative 2, depending upon which option for return flow would be found best for the City of Waukesha.

A comparative evaluation of the subalternatives to the preliminary recommended plan was conducted by comparing the performance of each subalternative with

respect to the attainment of the water supply planning objectives and attendant standards (see page 7).

Based upon the comparative evaluation of the two subalternatives to the preliminary recommended plan, the following conclusions were drawn:

- There are viable options which rely on increased use of the shallow groundwater as a source of supply for communities located west of the subcontinental divide,
- Both subalternatives to the preliminary recommended plan represent viable water supply plans for the Southeastern Wisconsin Region,
- When Subalternative 2 is assumed to include the most costly return flow option for the City of Waukesha, the equivalent annual costs of the two subalternatives to the preliminary recommended plan are about equal. When other return flow options are considered, the equivalent annual cost of Subalternative 2 is less than that of Subalternative 1,

Table 5

POTENTIAL NEW MUNICIPAL WATER UTILITIES ENVISIONED UNDER THE PRELIMINARY RECOMMENDED REGIONAL WATER SUPPLY PLAN

County and Utility

Kenosha County

Village of Silver Lake Proposed Utility

Village of Twin Lakes Proposed Utility

Town of Salem Proposed Utility

Powers-Benedict-Tombeau Lakes Area Proposed Utility

Ozaukee County

Town of Fredonia-Waubeka Area Proposed Utility

Racine County

Northwest Caledonia Area Proposed Utility District

Town of Burlington-Bohner Lake Area Proposed Utility District

Town of Dover-Eagle Lake Area Proposed Utility District

Town of Norway Area Proposed Utility

Village of Rochester Area Proposed Utility

Town of Rochester Area Proposed Utility

Town of Waterford Area Proposed Utility

Walworth County

Town of Lyons Area Proposed Utility

Town of East Troy-Potter Lake Area Proposed Utility

Washington County

Village of Newburg Area Proposed Utility

Waukesha County

Village of Big Bend Proposed Utility

Village of North Prairie Proposed Utility

Village of Wales Proposed Utility

Town of Eagle-Spring Lake Area Proposed Utility

Town of Oconomowoc -Okauchee Lake Area Proposed Utility

Town of Ottawa-Pretty Lake Area Proposed Utility

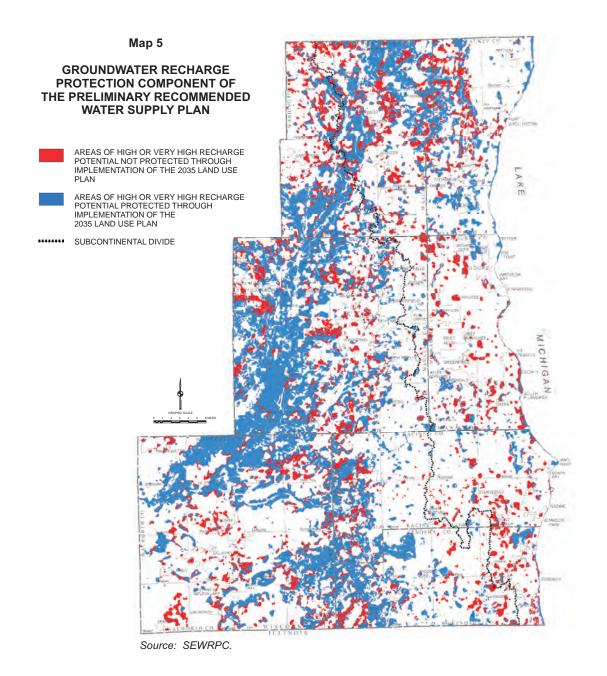
Town of Summit-Golden Lake Area Proposed Utility

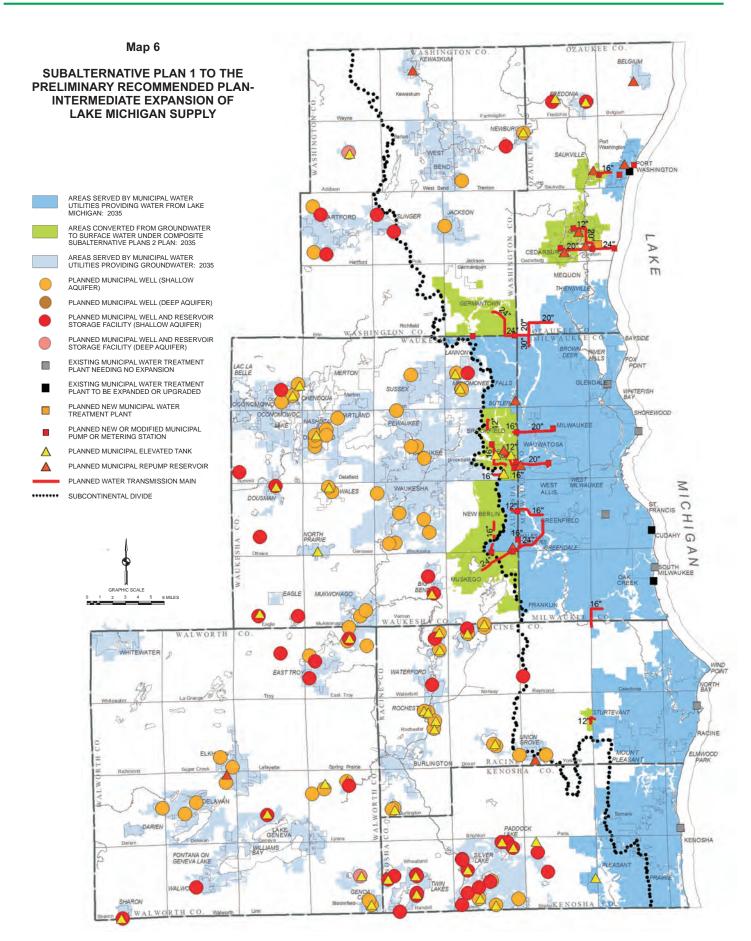
Source: SEWRPC.

Table 6
SELECTED CHARACTERISTICS OF SUBALTERNATIVES TO THE PRELIMINARY RECOMMENDED PLAN

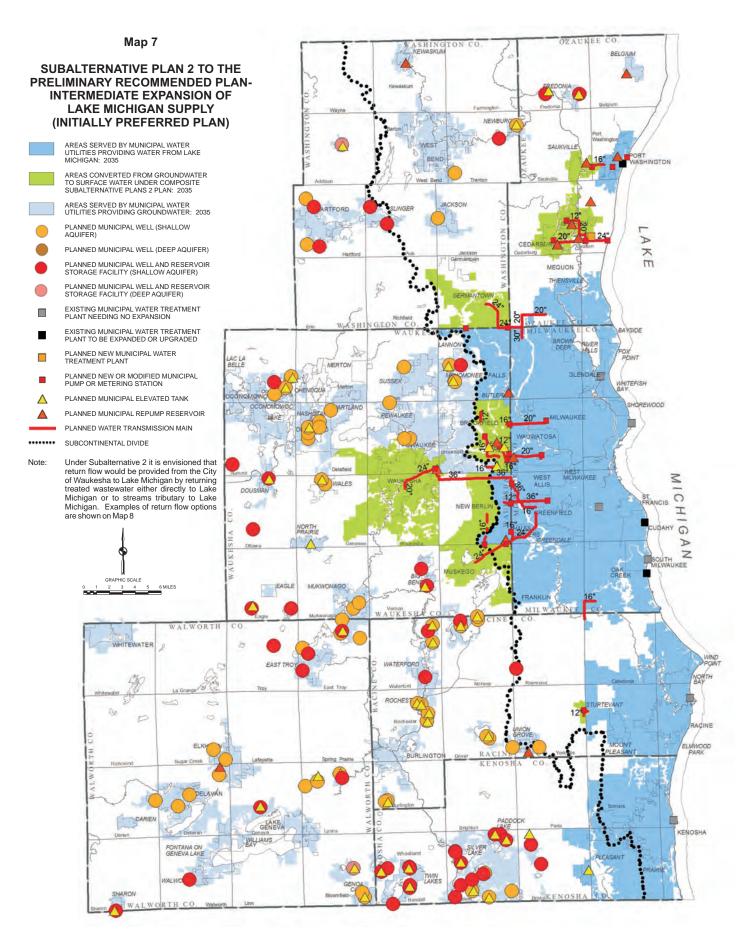
Alternative Plan	Components	2035 Groundwater Pumpage Amounts	2035 Lake Michigan Supply Amount
Subalternative 1: Design Year 2035 Forecast Conditions Intermediate Expansion of Lake Michigan Supply and City of Waukesha on Groundwater Supply	112 wells (two deep, 110 shallow) 97 storage tanks 1 new water treatment plant 2 water treatment plant expansions 37 rainfall infiltration systems 7 Lake Michigan supply connections	88 mgd, an increase from 77 mgd in 2005 61 mgd from shallow aquifer 27 mgd from deep aquifer	232 mgd, an increase from 206 mgd in 2005
Subalternative 2: Design Year 2035 Forecast Conditions Intermediate Expansion of Lake Michigan Supply and City of Waukesha on Lake Michigan Supply	104 wells (two deep, 102 shallow) 97 storage tanks 1 new water treatment plant 2 water treatment plant expansions 31 rainfall infiltration systems 8 Lake Michigan supply connections	78 mgd, nearly the same as in 2005 56 mgd from shallow aquifer 22 mgd from deep aquifer	242 mgd, an increase from 206 mgd in 2005

Source: SEWRPC.





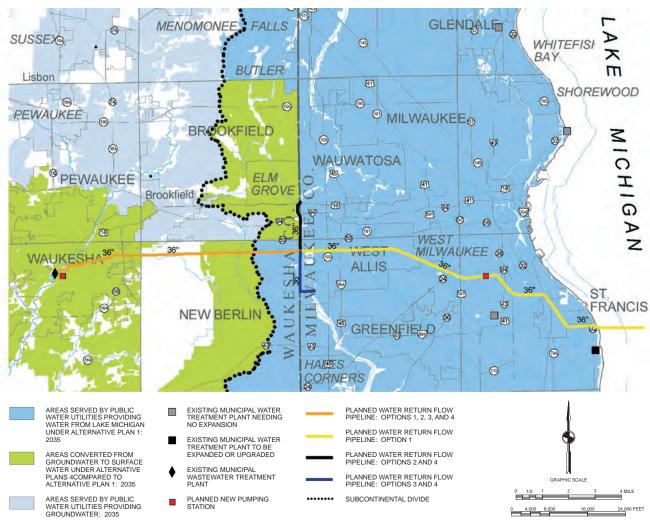
Source: Ruekert & Mielke, Inc. and SEWRPC.



Source: Ruekert & Mielke, Inc. and SEWRPC.

Map 8

RETURN FLOW OPTIONS FOR THE PRELIMINARY RECOMMENDED WATER SUPPLY PLAN:
RETURN FLOW PIPELINES TO LAKE MICHIGAN, THE ROOT RIVER, AND UNDERWOOD CREEK



Note: Subsequent detailed planning and engineering will be required to determine the best means of providing return flow. Under all return flow options, an amount of treated wastewater equal to at least the amount withdrawn would be conveyed from the City of Waukesha sewerage service area back to the Lake Michigan Watershed. The return flow would be actively managed to minimize impacts on the Fox River during low flow periods and, for those options involving return flow via discharge of treated wastewater into streams tributary to Lake Michigan, to eliminate return flow during flood-flow periods on the tributary streams. Since wastewater flows to the Waukesha treatment plant typically consists of amounts of water 15 percent or more greater than the amounts of water used in the service area, active management of the return flow can be used while meeting the return flow requirements.

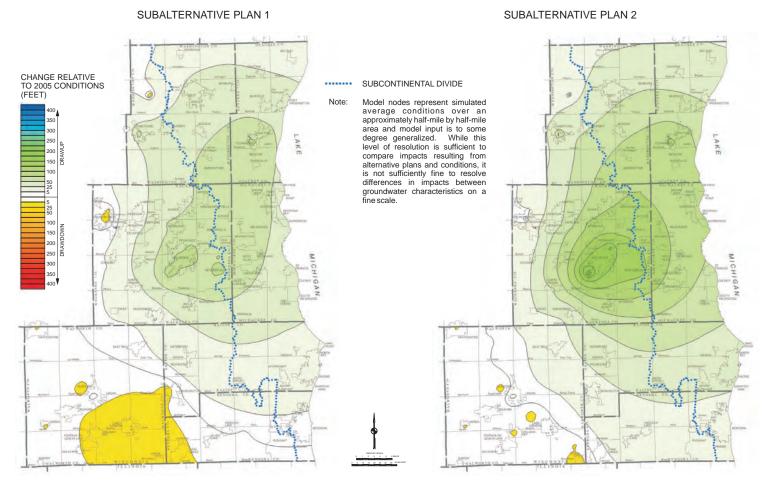
Source: Ruekert & Mielke, Inc. and SEWRPC.

• Subalternative 2 would result in greater drawups—or rises in the water levels—in the deep aquifer, less loss of baseflow to surface waters, and a smaller amount of chloride being discharged to surface waters than Subalternative 1.

Based upon these findings, Subalternative 2 was selected for inclusion in the preliminary recommended plan. While both of the subalternatives to the plan are considered to be equally cost-effective and are considered to be viable options which generally meet the plan objectives and standards, Subalternative 2 would provide greater drawups in the deep groundwater aquifer, lesser loss of baseflow to surface waters, and greater reductions in chloride discharges to surface waters than Subalternative 1. Subalternative 2 meets the water supply planning objectives somewhat more fully than Subalternative 1 and was therefore recommended for presentation as the initially preferred regional water supply plan for the Southeastern Wisconsin Region.

Figure 2

CONDITIONS IN THE DEEP AQUIFER ASSOCIATED WITH SUBALTERNATIVES TO THE PRELIMINARY RECOMMENDED PLAN: 2035



Source: U.S. Geological Survey.

Table 7

GROUNDWATER AND SURFACE WATER IMPACTS OF SUBALTERNATIVES TO THE PRELIMINARY RECOMMENDED PLAN

	Groundwater Lo		
Alternative Plan	Deep Aquifer	Shallow Aquifer	Surface Water Baseflow Impacts
Subalternative 1: Design Year 2035 Forecast Conditions Intermediate Expansion of Lake Michigan Supply and City of Waukesha on Groundwater Supply	Drawup in the deep aquifer Average drawup by county of three to 39 feet Maximum drawup of 225 feet Some drawdown in southeastern Walworth County	Localized impacts around community wells Average drawdown by county of two feet or less Maximum drawdown of 71 feet	Average 3.4 percent reduction in groundwater-derived baseflow Average baseflow change by county of 14.3 percent augmentation to 4.6 percent reduction 26 of 100 sensitive sites have reduction of 10 percent or more
Subalternative 2: Design Year 2035 Forecast Conditions Intermediate Expansion of Lake Michigan Supply and City of Waukesha on Lake Michigan Supply	Drawup in the deep aquifer Average drawup by county of eight to 85 feet Maximum drawup of 248 feet No significant drawdown	Localized impacts around community wells Average drawdown by county of two feet or less Maximum drawdown of 71 feet	Average 2.0 percent reduction in groundwater-derived baseflow Average baseflow change by county of 14.9 percent augmentation to 4.5 percent reduction 14 of 100 sensitive sites have reduction of 10 percent or more

Source: SEWRPC.

Table 8

COSTS OF SUBALTERNATIVES TO THE PRELIMINARY RECOMMENDED PLAN

Alternative Plan	Capital (dollars)	Annual Operations and Maintenance Cost ^a (dollars)	Equivalent Annual (dollars)
Subalternative 1	277 million	5.4 million gross -4.0 million net ^b	9.9 million
Subalternative 2	325 to 352 million ^c	8.0 to 8.5 million gross ^c -8.2 to -8.7 million net ^{c,d}	8.3 to 10.5 million ^c

^aGross operation and maintenance cost represents the operation and maintenance costs of new, upgraded and expanded facilities. Net operations and maintenance cost includes a credit for reduced household water softening costs.

Source: SEWRPC.

SUSTAINABILITY OF THE PRELIMINARY RECOMMENDED PLAN

Sustainability with respect to water supply resources may be defined as the condition of beneficially using water supply resources in such a way that while current and probable future needs are met, the resource is not unacceptably damaged or diminished, but essentially conserved for future use. For the purposes of this water supply planning program, the phrase "unacceptable damage or diminishment" is defined as a change in an important physical property of the groundwater or surface water system—such as water level, water quality, water temperature, recharge rate, or discharge rate—that approaches a significant percentage of the normal range of variability of that property. Changes that are 10 percent or less of the annual or historic period of record range for any property are considered acceptable, unless it can be shown that the cumulative effect of the changes will cause a permanent change in an aquatic ecosystem by virtue of increasing the extremes of that property to levels known to be harmful.

Water levels in the deep sandstone aquifer under most of the Region are expected to rise under the use and recharge conditions envisioned under the initially preferred plan. This increase in water levels should ensure the sustainability of this aquifer.

Because unconfined shallow aquifers are hydraulically connected to surface waterbodies, water levels in the shallow aquifer are buffered by the surface water system. As a consequence, groundwater-derived baseflow to surface waterbodies is a better indicator of impacts on the shallow groundwater system than water levels in the shallow aquifer. Under the initially preferred plan, some surface waters in the Region are expected to experience reductions in groundwater-derived baseflow. In many streams that are expected to experience reductions in groundwater-derived baseflow, however, baseflow is supplemented by discharges of effluent from wastewater treatment plants. For these streams, the impact of groundwater-derived baseflow reductions upon total streamflow is expected to be small or negligible, since the groundwater withdrawals for the utility systems concerned are returned to the streams through the wastewater treatment plants. The initially preferred plan includes mitigative measures for those waterbodies expected to experience reductions in groundwater-derived baseflow that do not receive contributions of treated effluent; however, some reduction in groundwater-derived baseflow, representing about 2 percent of the total regional baseflow, is expected. Given that groundwater-derived baseflow typically comprises between 20 and 50 percent of total streamflow, this is considered to be a small impact and within the range considered acceptable.

^bIncludes a credit of \$9.4 million for reduced household water softening costs.

^cRange of costs is based upon the costs of the options for return flow components.

^dIncludes a credit of \$16.7 million for reduced household water softening costs.

Conclusion

The preliminary recommended plan incorporating Subalternative 2 is considered as the initially preferred water supply plan for the Southeastern Wisconsin Region to be presented for public review and reaction. This plan is summarized on Map 7. This plan represents a means of providing a sustainable water supply for the Southeastern Wisconsin Region through the plan design year of 2035 which is specifically designed to be consistent with the Great Lakes-St. Lawrence River Basin Water Resources Compact and with the groundwater protection provisions of Chapter 281.34 of the *Wisconsin Statutes*. It provides a flexible plan under which a number of options for the provision of the return flows required by the extension of Lake Michigan as a source of supply to areas lying west of the subcontinental divide can be considered in subsequent more detailed plan implementation steps. Under this plan, water levels in the deep sandstone aquifer may be expected to rise significantly over most of the Region. Some waterbodies in the Region may be expected to experience reductions in groundwater-derived baseflow under the initially preferred plan; however, in many of these waterbodies baseflow is augmented by discharges of effluent from wastewater treatment plants and the impacts on total streamflow are expected to be minimal. The initially preferred plan recommends mitigative measures for those surface waters not receiving these contributions, so that baseflow reductions should not exceed about 2 percent of the total existing baseflow. Based upon public review and reaction, this preliminary recommended plan will be refined as necessary to produce a final recommended plan.

FOR MORE INFORMATION

The findings and recommendations of the regional water supply planning program are being documented in a series of reports. Several of these reports have been published and are available.

- SEWRPC Technical Report No. 37, Groundwater Resources of Southeastern Wisconsin, June 2002.
 - This report documents the hydrogeology of the Southeastern Wisconsin Region. It presents information and mapping related to soils and their ability to attenuate contaminants before they reach the groundwater system, the glacial and bedrock geology of the Region, groundwater aquifers of the Region, groundwater quality, and potential sources of groundwater contamination.
- SEWRPC Technical Report No. 41, A Regional Aquifer Simulation Model for Southeastern Wisconsin, June 2005.
 - This report documents the development, calibration, and testing of a three-dimensional groundwater aquifer simulation model which can be used to forecast water levels and groundwater flow under various water demand scenarios.
- SEWRPC Technical Report No. 43, State-of-the-Art of Water Supply Practices, July 2007.
 - This report presents the results of a review of the current and probable future state-of-the-art practices in water supply source development, water treatment, water transmission, water storage, and water conservation and reuse.
- SEWRPC Technical Report No. 44, Water Supply Law, April 2007.
 - This report identifies and analyzes water supply law applicable to the Southeastern Wisconsin Region, including law applicable to the capture of water and law applicable to the ownership, operation, and financing of water supply systems.
- SEWRPC Technical Report No. 47, Groundwater Recharge in Southeastern Wisconsin Estimated by a GIS-Based Water-Balance Model, July 2008.
 - This report documents the development of a soil water balance model used to estimate groundwater recharge in Southeastern Wisconsin. It presents estimates of present day recharge and delineates areas of high recharge.
- Additional reports, including a planning report documenting the plan, are in preparation.

Electronic copies of these reports are available on the Commission's website (http://www.sewrpc.org). Copies can also be ordered from the Commission's office.

NEXT STEPS

The following are the key remaining steps in the regional water supply planning process, and when each is expected to be completed:

- Presentation of initially preferred plan to elected officials—November 2008 to January 2009.
- Series of public meetings—January to early February 2009.
- Adoption of the regional water supply plan—Spring 2009.

CONTACT INFORMATION

E-mail:

Further information on the regional water supply study, including all study materials—Advisory Committee meeting minutes, plan chapters, presentations, and study reports—are all available on the Commission's website.

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Waukesha, WI 53187 sewrpc@sewrpc.org

This newsletter was mailed directly to a list of individuals and organizations that have expressed interest in receiving such information. If you did not receive this newsletter directly, and would like to receive future issues, please contact the Commission using the contact information above.

THIS NEWSLETTER CONTAINS:

Consideration of Alternative Regional Water Supply Plans	p.1
Study Public Informational Meetings	p.1
Water Supply Planning Objectives	
Development of a Preliminary Recommended Regional Water Supply Plan	
Sustainability of the Preliminary Recommended Plan	-
For More Information	•
Next Steps	p. 19
·	'

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REGIONAL WATER SUPPLY PLAN FOR SOUTHEASTERN WISCONSIN



SUMMARY BROCHURE DECEMBER 2008

A preliminary recommended plan for water supply in southeastern Wisconsin through the year 2035 has been completed for public review. This brochure very briefly summarizes a few key elements of that plan. A series of detailed newsletters, plan chapters, Advisory Committee minutes, and other materials are also available at www.sewrpc.org/watersupplystudy.

Why a Regional Water Supply Plan is Important

Few things affect our regional vitality and quality of life as much as clean and sustainable sources of water for public and private uses. Everything from drinking water to sanitary waste disposal, industrial and commercial needs to water-based recreation, and fighting fires to irrigating lawns, gardens, and croplands are reliant upon our water supply. It is true that we live in a generally "water rich" region. However, natural environmental limitations combined with overuse of some water sources and underused reserves of other sources requires proper planning and sound management. If we as a region are to grow and realize our competitive economic advantages tied to water, then we must act wisely. The Regional Water Supply Plan is designed to help us do so.

Major Plan Components

The following were identified and evaluated:

- Water supply service areas and forecast demand for water use.
- Water conservation efforts to reduce demand.
- Alternative sources of water supply and basic infrastructure to deliver that supply.
- Groundwater recharge areas to be protected.

The map on the reverse side shows the preliminary recommended plan for water supply in the Region through the year 2035, after careful consideration of the above components.

Some Key Water Supply Plan Recommendations

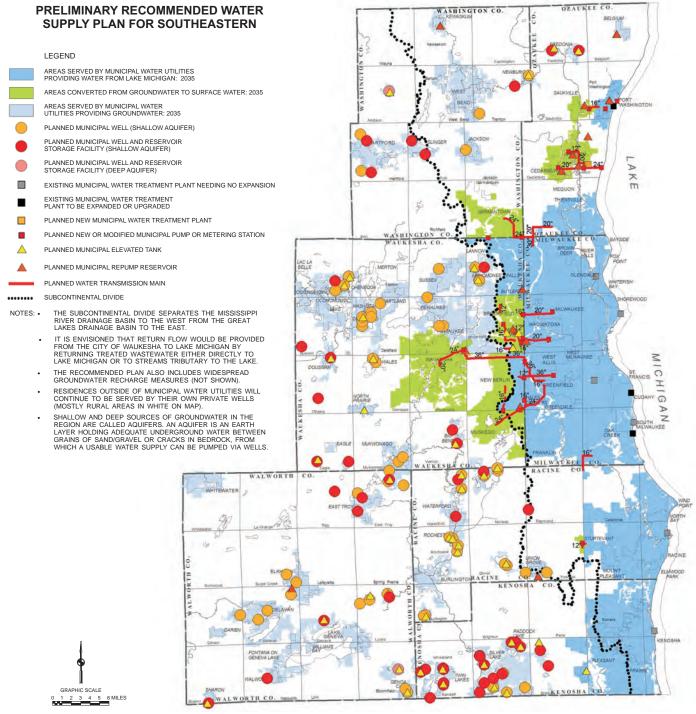
The preliminary recommended plan is a composite plan combining the best elements of the alternatives that were considered. Some of the key elements are:

- Comprehensive water conservation programs including both supply side efficiency measures and demand side water conservation measures would be implemented on a utility-specific basis. Expected reductions in demand vary from 4 to 10 percent on an average daily basis and from 6 to 18 percent on a maximum daily basis.
- A groundwater recharge area protection component would preserve areas classified as having a high or very
 high recharge largely through implementation of the adopted year 2035 regional land use plan. That plan
 recommends preservation of the environmental corridors, isolated natural areas, prime and other agricultural
 areas that benefit groundwater recharge by allowing precipitation to infiltrate or soak into the ground. About 74
 percent of the highly rated and very highly rated recharge areas are thus expected to be preserved. Careful
 design of new development and stormwater management practices should increase this amount.
- Mostly continued use of existing water supply sources—with supply facility expansion—would prevail for
 the vast majority of water utilities. Certain areas of existing urban development currently served by private, onsite
 wells would be provided with municipal water supply when need is demonstrated and at the option of the affected
 areas. Absent a demonstrated need, residents and businesses of these areas would remain on individual wells
- Strategic conversion to Lake Michigan as a source of water supply (green areas on the map) is recommended for nine communities which currently have return flow to Lake Michigan in place. Seven of these—the eastern portion of the City of Brookfield, the City of Cedarburg, the Village of Elm Grove, the Village of Germantown, the Village of Grafton, the Village of Saukville, and the Town of Yorkville—are located east of the

Conclusion

The preliminary recommended plan represents a flexible means of providing a sustainable water supply for the Region through 2035, consistent with the Great Lakes Compact and with the groundwater protection provisions of the *Wisconsin Statutes*. Under this plan, presently reduced water levels in the deep source of groundwater may be expected to recover significantly over most of the Region. The impacts on total streamflow are expected to be minimized. Based upon public review and reaction, this preliminary recommended plan will be refined as necessary to produce a final recommended plan.

Public comments are welcome through March 16, 2009, by mail – SEWRPC, P.O. Box 1607, Waukesha, WI 53187; fax – (262) 547-1103; email – <u>rbiebel@sewrpc.org</u>; or online at <u>www.sewrpc.org/watersupplystudy</u>. Further information is available online or by c



Source: Ruekert & Mielke, Inc. and

PLAN REGIONAL DE SUMINISTRO DE AGUA PARA EL SURESTE DE WISCONSIN



FOLLETO SUMARIO DICIEMBRE 2008

Un plan preliminar recomendado de suministro de agua en el sureste de Wisconsin hasta el año 2035 ha sido completado para revisión pública. Este folleto resume muy brevemente unos pocos puntos importantes del plan. Una serie de boletines detallados, capítulos del plan, minuta del Comité Consultivo, y otros materiales están también disponibles en www.sewrpc.org/watersupplystudy.

Porque un Plan Regional de Suministro de Agua es Importante

Pocas cosas afectan nuestra vitalidad regional y calidad de vida tanto como las fuentes de agua limpia y sustentable para usos públicos y privados. Todo desde agua para beber a disposición sanitaria de desperdicio, de necesidades industriales y comerciales a recreaciones acuáticas, del combate de fuegos al riego de prados, jardines, y tierras de labranza es dependiente de nuestro suministro de agua. Es verdad que vivimos en una región generalmente "rica en agua". Sin embargo, limitaciones ambientales naturales combinadas con la sobre explotación de algunas fuentes de agua y el bajo uso de reservas de otras fuentes requieren una planeación apropiada y una administración sólida. Si nosotros, como región, esperamos crecer y realizar nuestras ventajas económicas competitivas vinculadas al agua, entonces debemos de actuar prudentemente. El Plan Regional de Suministro de Agua está diseñado a ayudarnos a hacerlo.

Componentes Principales del Plan

Las siguientes fueron identificadas y evaluadas:

- Areas de servicio del suministro de agua y demanda pronósticada de uso del agua.
- Esfuerzos de conservación del agua para reducir demanda.
- Otras opciones de fuente de suministro de agua e infraestructura básica para abastecerla.
- Areas de recarga de aguas subterráneas a ser protegidas.

El mapa en la parte posterior muestra el plan preliminar recomendado para suministro de agua en la Región hasta el año 2035, después de una cuidadosa consideración de las componentes arriba mencionadas.

Algunas Recomendaciones Importantes del Plan para Suministro de Agua

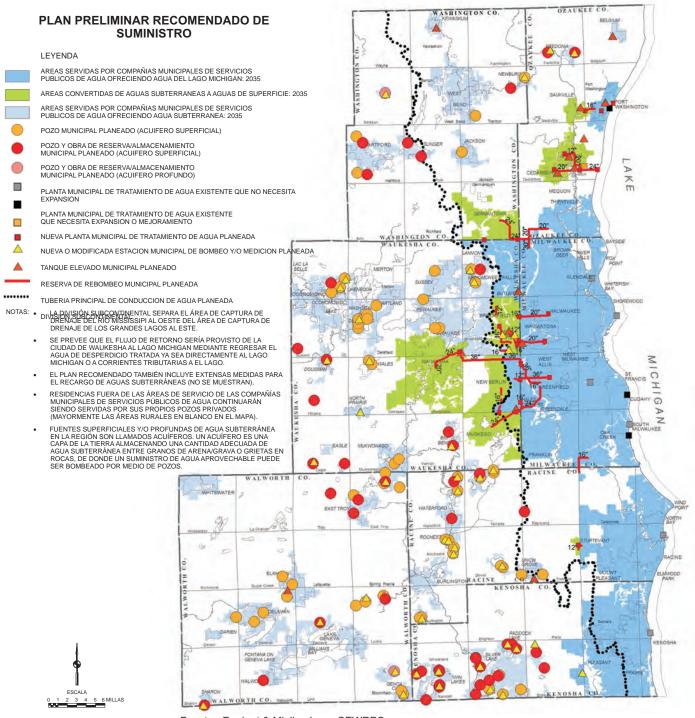
El plan preliminar recomendado es un plan compuesto combinando los mejores elementos de las alternativas que fueron consideradas. Algunos de los elementos principales son:

- Programas comprensivos de conservación de agua incluyendo medidas de eficiencia del lado de la oferta y
 medidas de conservación de agua del lado de la demanda que serían implementadas de una manera específica
 para cada compañía de servicios públicos de agua. Las reducciones esperadas en la demanda varían de un 4 a
 un 10 por ciento basados en promedios diarios de consumo y de un 6 a un 18 por ciento basados en consumo
 máximo diario.
- Una componente de protección de áreas de recarga de aguas subterráneas preservaría áreas clasificadas que tienen un alta o muy alta recarga mayormente a través de la implementación del plan regional adoptado para el uso de la tierra hasta el año 2035. El plan recomienda la preservación de los territorios ambientales, áreas aisladas naturales, las mejores y otras tierras de cultivo que benefician la recarga de aguas subterráneas al permitir que la precipitación se infiltre o remoje el suelo. Cerca del 74% de las altamente clasificadas o muy altamente clasificadas áreas de recargo se esperan ser preservadas. El diseño cuidadoso de nuevos desarrollos y prácticas de manejo de aguas de lluvias deben de incrementar esta cantidad.
- Mayormente se continuaría utilizando las existentes fuentes de suministro de agua—con la expansión de las plantas de abastecimiento—para la gran mayoría de las compañías de servicios públicos de agua. Ciertas áreas de desarrollo urbano existentes actualmente servidas por pozos privados locales serían abastecidas con suministros de aguas municipales cuando la necesidad fuese demostrada y a la opción de las áreas afectadas. Sin una necesidad demonstrada los residentes y los negocios de estas áreas permanecerán bajo pozos individuales.
- Una conversión estratégica al Lago Michigan como fuente de suministro de agua (áreas verdes en el mapa)
 es recomendada para nueve comunidades las cuales actualmente tienen flujos de retorno de agua al Lago
 Michigan. Siete de éstas—el lado Este de la Ciudad de Brookfield, la Ciudad de Cedarburg, La Villa de Elm Grove,

Conclusión

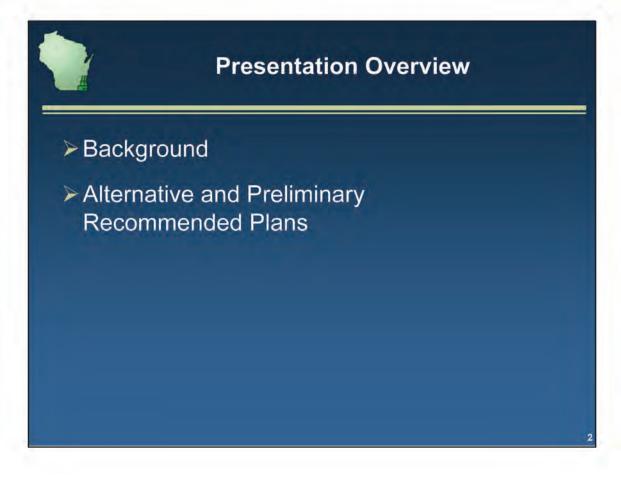
El plan preliminar recomendado representa una manera flexible de proveer un suministro de agua sustentable para la Región hasta el año 2035, consistente con el Convenio de los Grandes Lagos y con las provisiones de protección de agua subterránea de los *Estatutos de Wisconsin*. Bajo este plan, pudiese esperarse que los niveles de agua actualmente bajos en las fuentes profundas de aguas subterráneas se recuperasen significativamente en la mayoría de la región. Los impactos en el total del caudal se esperan sean minimizados. Basado en la revisión y reacción del público, este plan preliminar recomendado será refinado como sea necesario para producir un plan final recomendado.

Comentarios del público son bienvenidos hasta el 16 de Marzo, 2009, por correo – SEWRPC, P.O. Box 1607, Waukesha, WI 53187; fax – (262) 547-1103; correo electrónico – <u>rbiebel@sewrpc.org</u>; o en línea at www.sewrpc.org/watersupplystudy. Más información está disponible en línea o llamando al (262) 547-6721.

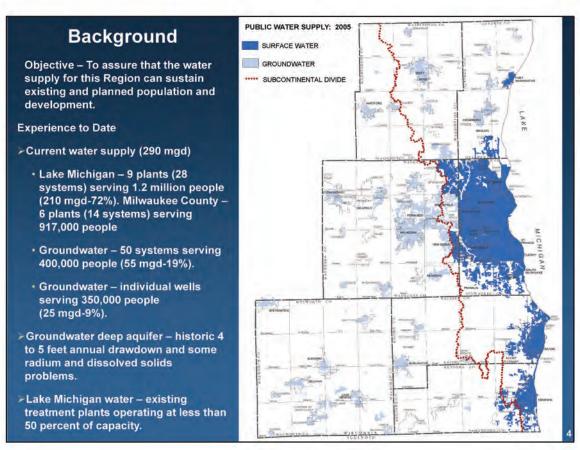


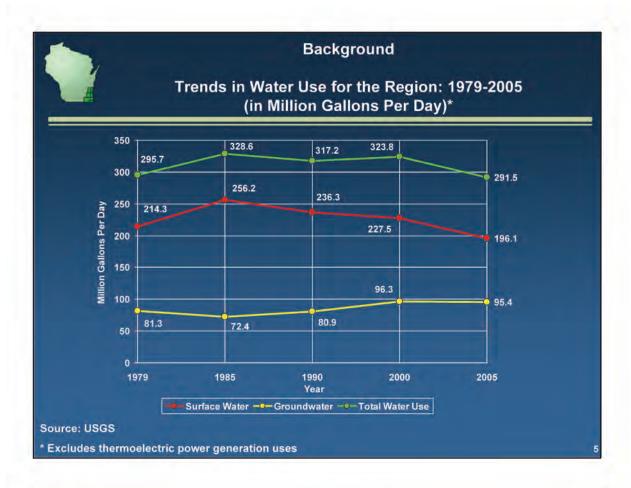
PRESENTATION GIVEN AT PUBLIC INFORMATIONAL MEETINGS

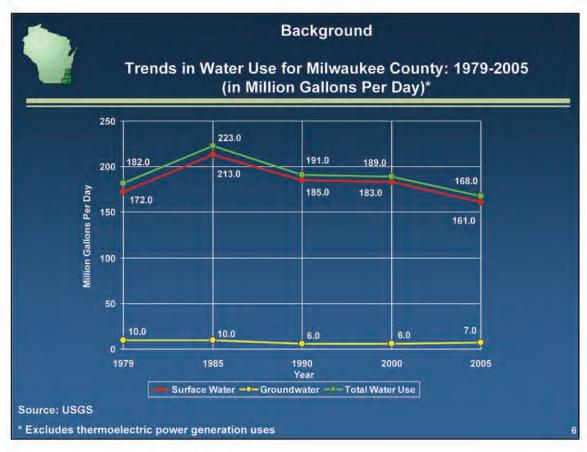


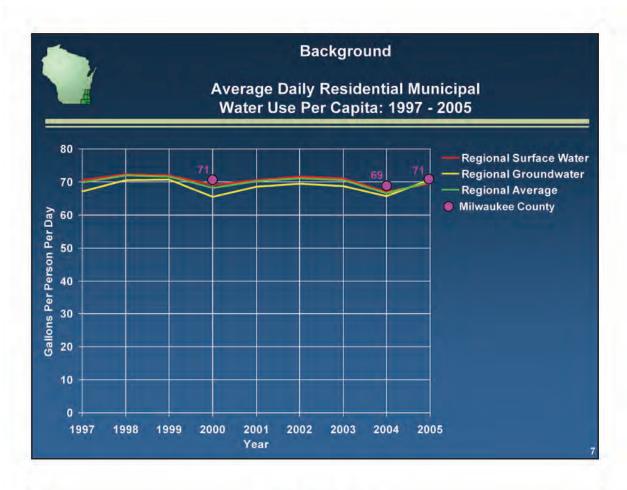


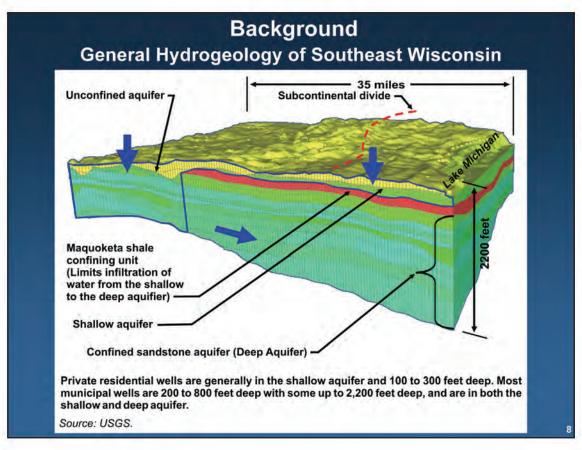


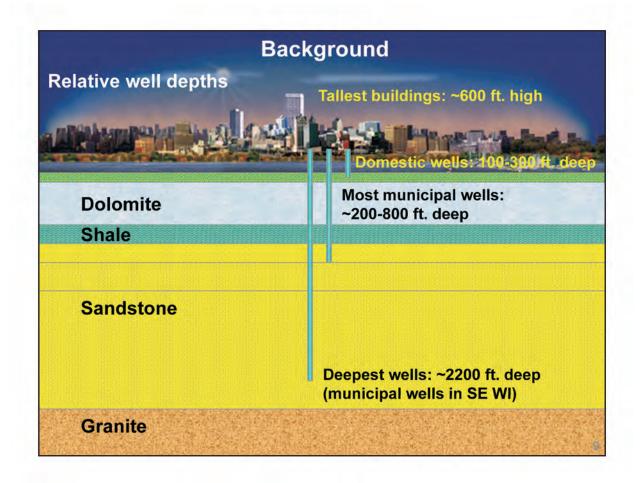


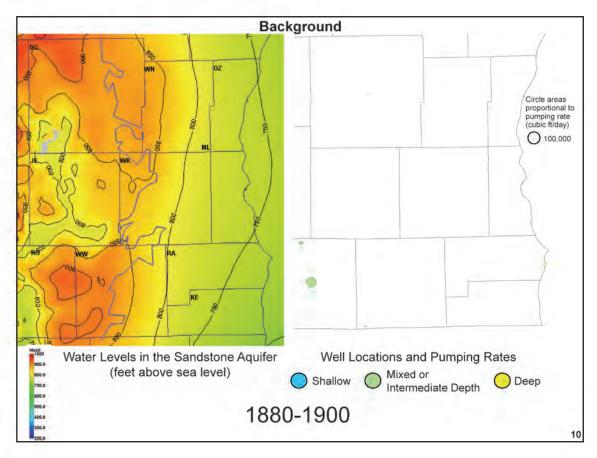


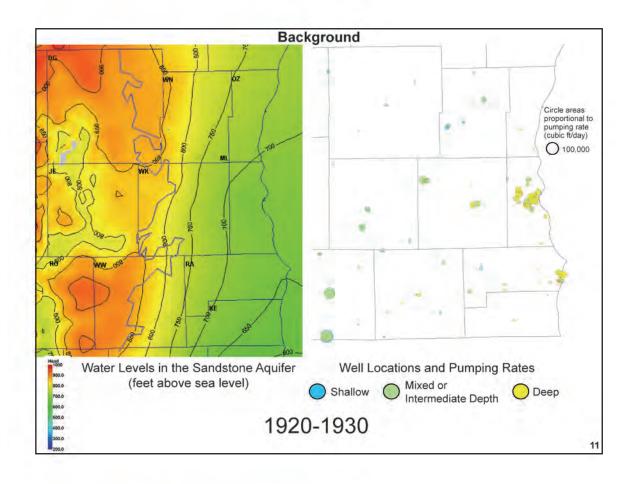


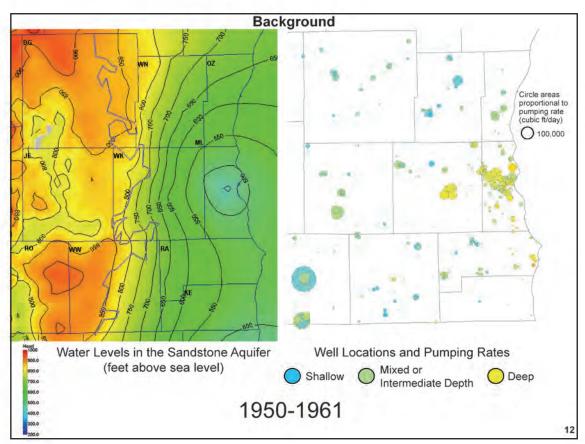


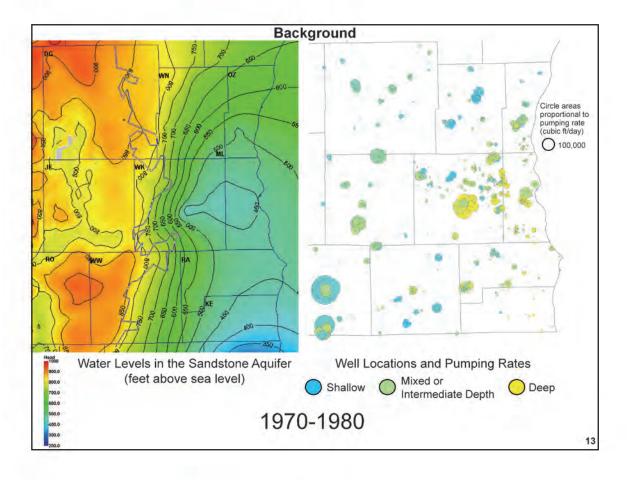


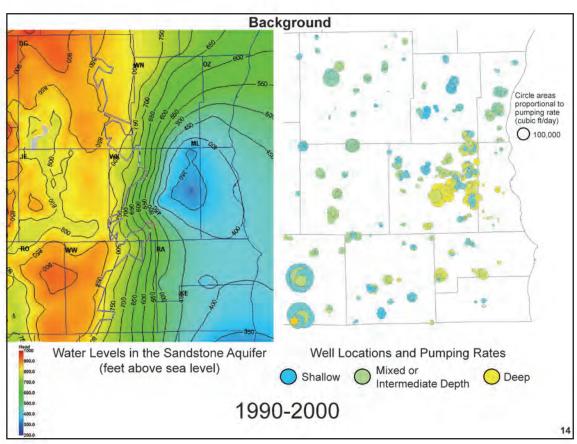


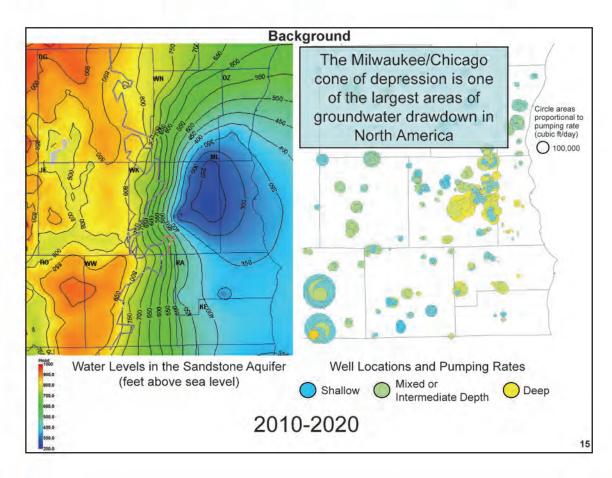


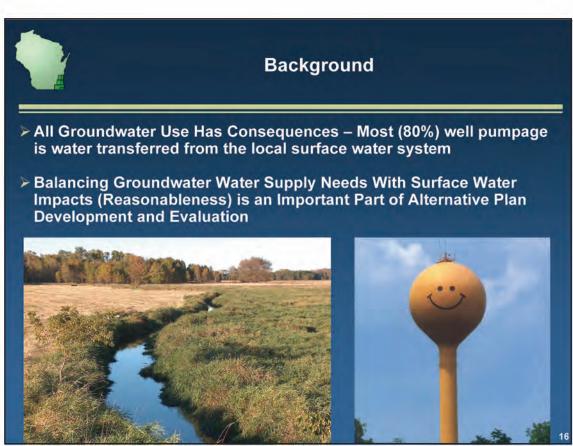














Background

Regional Water Supply Planning Program

Three Elements (Coordinated With And Designed To Complement Local Actions)

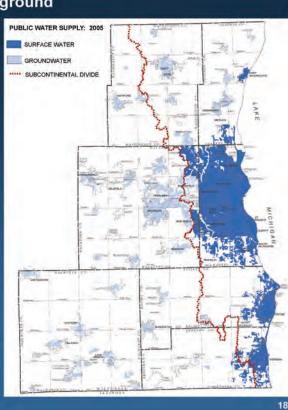
- Conduct Basic Groundwater Inventories (Completed in 2001 With Partners—WGNHS and WDNR)
- Collect Additional Inventory Data and Develop Regional Aquifer Simulation Model (Completed in 2005 with Partners— USGS, WGNHS, UW-Milwaukee, WDNR, and SE Wisconsin Water Utilities)
- Prepare Regional Water Supply System Plan (Planning is Underway With Support from Seven Counties in Southeastern Wisconsin; Partners Include USGS, WGNHS, UW-Milwaukee, and WDNR)

17

Background

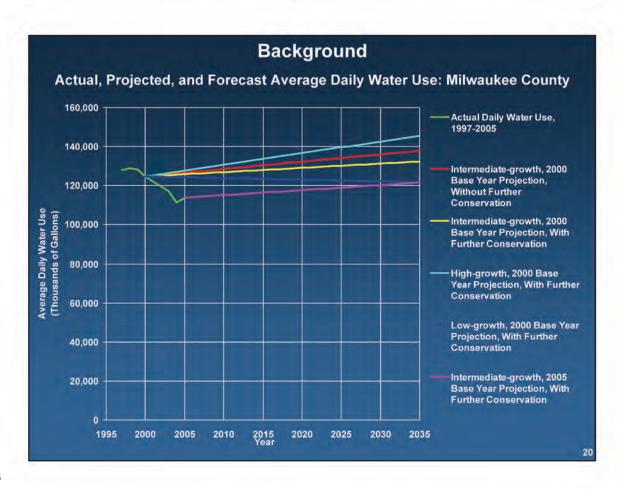
Scope of Study

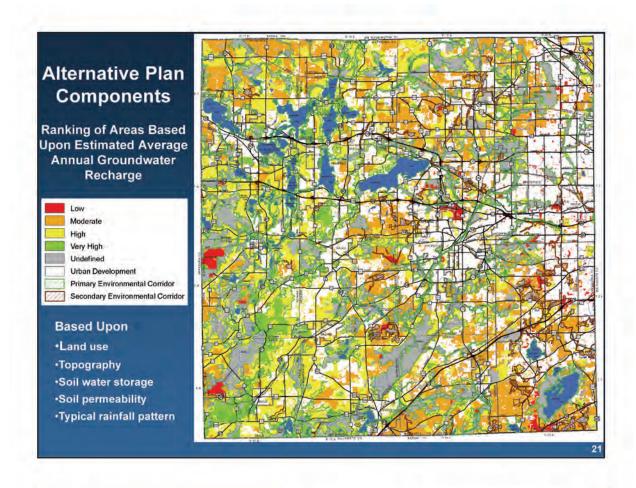
- > Forecast future water use demand in the Region.
- Consider potential of water conservation to reduce future demand.
- Identify groundwater recharge areas which should be protected from development.
- Assess potential for shallow groundwater recharge through infiltration of stormwater runoff and treatment plant effluent.
- > Consider potential alternative sources of supply
 - · Shallow groundwater
 - Lake Michigan water replacing groundwater east of the subcontinental divide.
 - Lake Michigan water replacing groundwater in "straddling communities" which already have "return flow"
 - Lake Michigan water replacing groundwater in "straddling communities" and "communities in straddling counties" and providing for "return flow".
- Estimate costs and impacts of alternatives
 - Groundwater-Surface Water Interdependence and Impacts
- Identify any development constraints necessary to assure water supply sustainability; amend regional land use plan if necessary

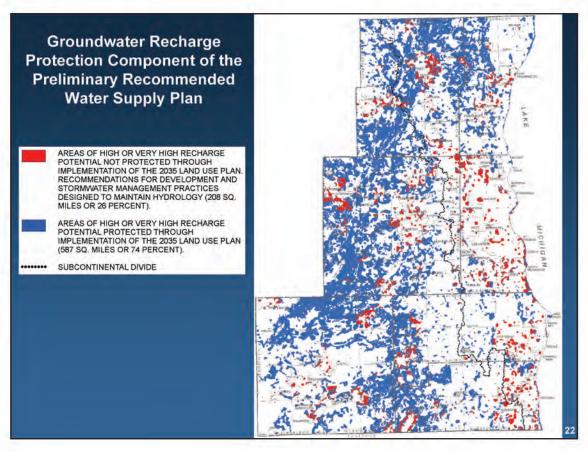


PROPOSED URBAN CENTERS AND MAJOR ECONOMIC ACTIVITY CENTERS IN THE REGIONAL LAND USE PLAN: YEAR 2035 Year 2035 Regional Land Use Plan is Basis for Regional PLANNED URBAN CENTERS Water Supply Plan PROPOSED MAJOR ECO ACTIVITY CENTER: 2035 Preservation of environmental corridors ECONOMIC ACTIVITY CENTER TY and natural areas which account for 23% of the area of the Region GENERAL PURPOSE CENTER INDUSTRIAL CENTER RETAIL CENTER ➤ Preservation of the most productive farmland which accounts for 36% of the INDUSTRIAL AND OFFICE CENTER EQUON WEST (I) RETAIL AND OFFICE CENTER area of the Region 76THBROWN DEER RD (R) BROWN DEER (G) MENOMONEE FA > Accommodate new urban development to around existing urban centers Emphasis on stabilizing and revitalizing the central cities of Kenosha, Milwaukee, and Population changes: 2005 - 2035 · Region 15% increase Milwaukee County 939,000 to 1,007,000 Waukesha County 377,000 to 447,000 Urban land use changes in square miles: 2000 – 2035: Region 13% increase KENOSH CBD (G) KENOSHA • Milwaukee County 194 to 204 (5%) H MUSTH 1850 PLEASAN

Waukesha County 199 to 227 (14%)









Water Conservation Measures Envisioned Under the Alternative and Preliminary Recommended Water Supply Plan

- Base Level Program Providing a 4% reduction in average day demand, and from 6 to 10% reduction in maximum day demand. Utilities using Lake Michigan with none or modest supply infrastructure needs.
- Intermediate Level Program Providing a 6 to 8% reduction in average day demand, and a 12 to 14% reduction in maximum day demand. Utilities using groundwater supply with no major problems and with supply infrastructure needs or using new surface water supplies with significant infrastructure needs.
- Advanced Level Program Providing a 10% reduction in average day demand, and an 18% reduction in maximum day demand. Utilities using groundwater supply with aquifer problems and infrastructure needs or using new surface water supplies and return flow required with major infrastructure needs.
- High Level Program (Evaluated and not included in regional plan recommendations may be considered on a local utility specific basis) Providing a 25 to 35% reduction in average day demand, and a 30 to 50% reduction in maximum day demand

Note: All programs would be designed to meet requirements of the Compact and State regulations under development. Additional measures may be applicable if needed to meet sewerage system protection or stormwater management objectives.

23

Regional Water Supply Plan Alternative Plan 1–Design Year 2035 Forecast Conditions Under Existing Trends and Committed Actions

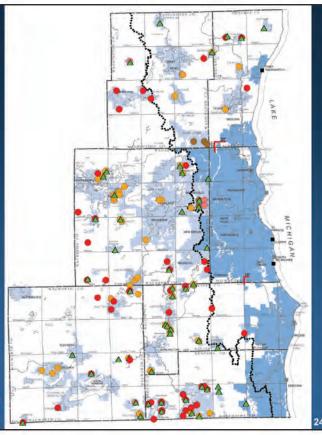
- AREAS SERVED BY MUNICIPAL WATER UTILITIES PROVIDING WATER FROM LAKE MICHIGAN: 2035

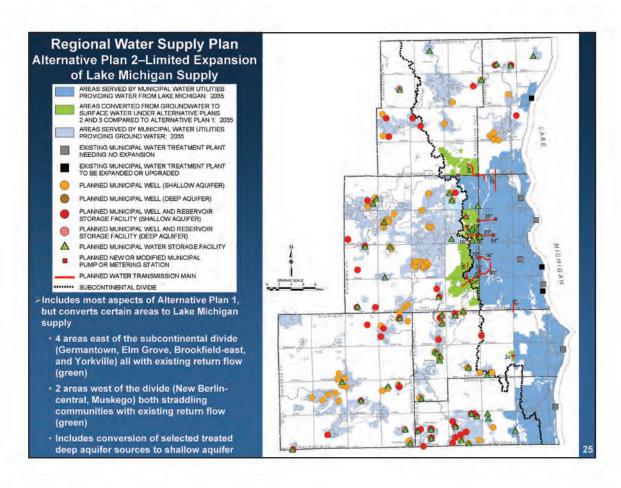
 AREAS SERVED BY MUNICIPAL WATER UTILITIES PROVIDING GROUND WATER: 2035
- EXISTING MUNICIPAL WATER TREATMENT PLANT NEEDING NO EXPANSION
- EXISTING MUNICIPAL WATER TREATMENT PLANT
 TO BE EXPANDED OR UPGRADED
- PLANNED MUNICIPAL WELL (SHALLOW AQUIFER)
- PLANNED MUNICIPAL WELL (DEEP AQUIFER)

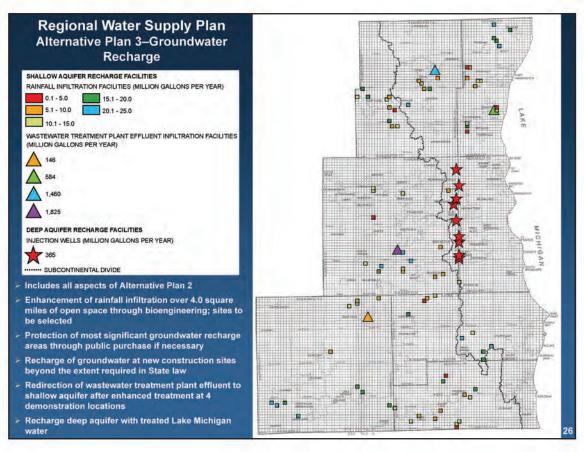
 PLANNED MUNICIPAL WELL AND RESERVOIR
- STORAGE FACILITY (SHALLOW AQUIFER)

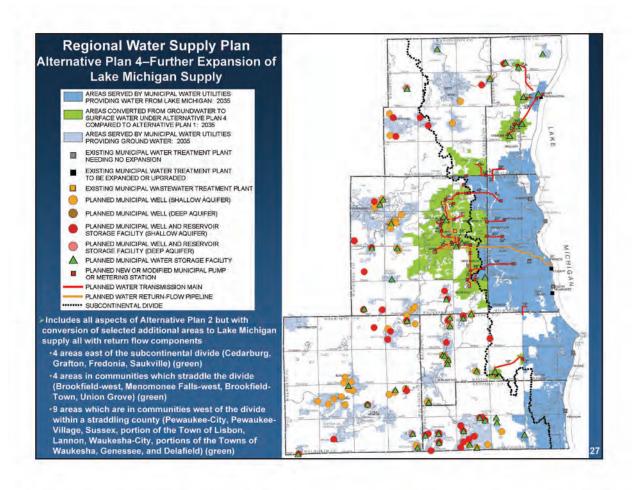
 PLANNED MUNICIPAL WELL AND RESERVOIR
- PLANNED MUNICIPAL WELL AND RESERVOIR
 STORAGE FACILITY (DEEP AQUIFER)
- PLANNED MUNICIPAL WATER STORAGE FACILITY

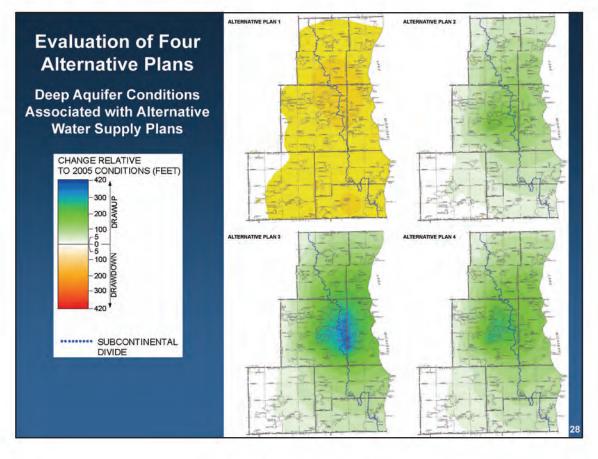
 PLANNED WATER TRANSMISSION MAIN
- SUBCONTINENTAL DIVIDE
- Existing 2007 water supply facilities
- > Enhanced local water conservation programs
- Continued reliance on groundwater sources to meet 2035 demand (light blue)
- Continued reliance on Lake Michigan water sources for all areas now served, meeting 2035 demand (dark blue)
- Recharge of groundwater at new construction sites to the extent required by State law
- Continued reliance on private wells for residential areas (about 180,000 persons) plus selected agricultural, irrigation, and industrial uses













Four Alternative Plans

Test and Evaluation Results-Summary

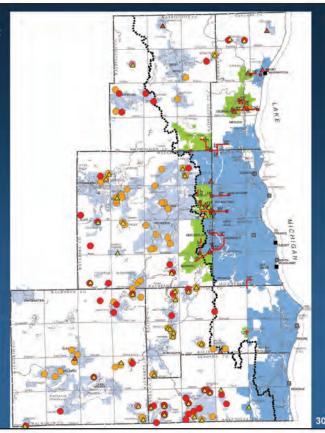
	Capital Costs	Annual Operating and Maintenance Cost	Equivalent Annual Cost	Deep Aquifer Impact	Shallow Aquifer Impact	Surface Water Impact
Alternative Plan 1	\$170 million	\$5.1 million	\$11.2 million	Significant slowdown in the drawdown of the deep aquifer	Localized impact around community wells	4.5% reduction in groundwater derived baseflow
Alternative Plan 2	\$219 million	\$3.2 million gross -\$3.3 million net*	\$6.2 million	Drawup in the deep aquifer	Localized impact around community wells	5.3% reduction in groundwater derived baseflow
Alternative Plan 3	\$367 million	\$8.6 million gross \$2.1 million net*	\$12.9 million	Drawup in the deep aquifer	Localized impact around community wells	1.7% reduction in groundwater derived baseflow
Alternative Plan 4	\$470 million	\$7.3 million gross -\$14.4 million net**	\$14.3 million	Drawup in the deep aquifer	Localized impact around community wells	0.7% reduction in groundwater derived baseflow

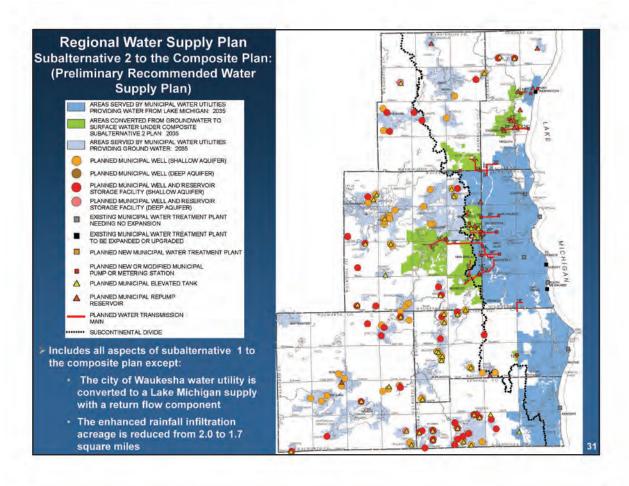
*Includes a credit of \$6.5 million for reduced household water softening costs.

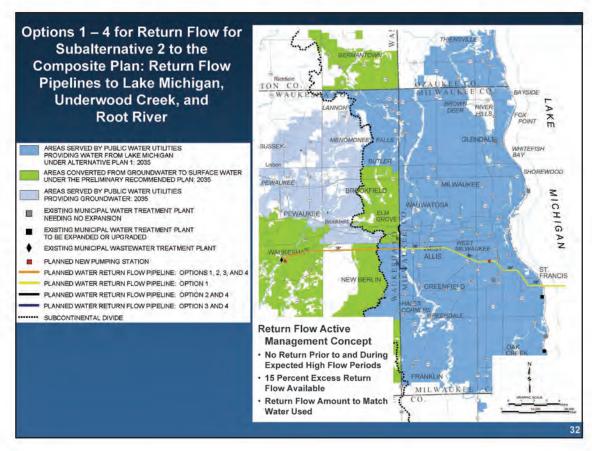
**Includes a credit of \$21.7 million for reduced water softening costs.

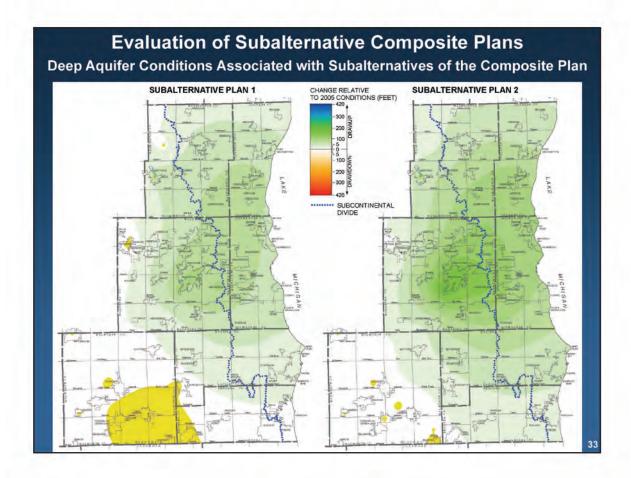
Regional Water Supply Plan Subalternative 1 to the Composite Plan:

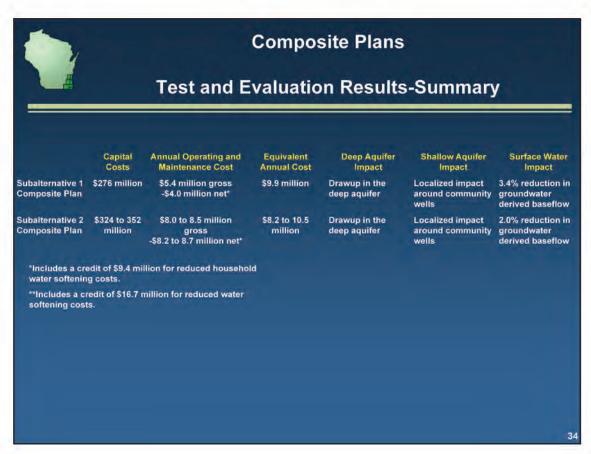
- AREAS CONVERTED FROM GROUNDWATER TO SURFACE WATER UNDER COMPOSITE SUBALTERNATIVE 1 PLAN: 2035
- AREAS SERVED BY MUNICIPAL WATER UTILITIES PROVIDING GROUND WATER: 2035
- PLANNED MUNICIPAL WELL (SHALLOW AQUIFER)
- PLANNED MUNICIPAL WELL (DEEP AQUIFER)
- PLANNED MUNICIPAL WELL AND RESERVOIR STORAGE FACILITY (SHALLOW AQUIFER) PLANNED MUNICIPAL WELL AND RESERVOIR STORAGE FACILITY (DEEP AQUIFER) EXISTING MUNICIPAL WATER TREATMENT PLANT NEEDING NO EXPANSION
- EXISTING MUNICIPAL WATER TREATMENT PLANT TO BE EXPANDED OR UPGRADED
- PLANNED NEW MUNICIPAL WATER TREATMENT PLANT
- PLANNED NEW OR MODIFIED MUNICIPAL PUMP OR METERING STATION
- PLANNED MUNICIPAL ELEVATED TANK
- PLANNED MUNICIPAL REPUMP RESERVOIR
 - PLANNED WATER TRANSMISSION MAIN
 - SUBCONTINENTAL DIVIDE
- Enhanced local conservation programs
- > Conversion of selected areas with current return flow to Lake Michigan supply
- Conversion of selected groundwater supply from deep to shallow aquifer supply
- Enhancement of rainfall infiltration over 2.0 square miles of open space through bioengineering
- Continued reliance on private wells for selected residential areas (about 180,000 persons plus selected agricultural, irrigation, and industrial uses)













Summary of Plan Findings and Recommendations

Water Conservation

- The level of water conservation to be implemented should be utility-specific based upon the utility infrastructure needs, the characteristics and sustainability of the source of supply, and consistency with the Compact and Federal and State regulations.
- The level of water demand reduction which might be expected from water conservation programs utility-wide will vary from 4 to 10 percent in average daily demand and from 6 to 18 percent in maximum day demand. For all Milwaukee County communities the recommendations provide for base level water conservation programs providing for about a 4 percent reduction in average daily demand and a 6 to 8 percent reduction in maximum daily demand.

Groundwater Recharge

• The recharge areas within southeastern Wisconsin have been identified and ranked low, moderate, high, and very high with regard to the amount of recharge which occurs on each acre of land. Implementation of the 2035 regional land use plan will result in protection of about 74 percent of the areas ranked as having high recharge and very high recharge characteristics. Careful design of new residential development and the use of selected stormwater management practices would be expected to increase this amount.

35



Summary of Plan Findings and Recommendations

➤ Water Supply Sources

- There are viable options which rely on increased use of groundwater as a source of supply for communities located west of the subcontinental divide.
- The existing Lake Michigan treatment supplies are generally of a high quality and have adequate or excess capacity. Some added capacity would be needed to serve expanded service areas in Ozaukee County and Oak Creek in Milwaukee County.

36



Summary of Plan Findings and Recommendations

- For 59 water utilities the existing sources of supply—generally Lake Michigan, the shallow
 aquifer, or a combination of shallow and deep aquifers underlying the Region were determined
 to be adequate. Therefore, the plan proposes that these utilities continue to utilize their
 existing sources of supply with expansion as needed.
- For four utilities the plan places greater reliance on use of the shallow groundwater aquifer as a source of water supply (Delavan, Elkhorn, Hartford, Bristol).
- Utility areas expected to change to a Lake Michigan supply over the planning period (to 2035) include
 - Cedarburg (east of divide)
 - Grafton (east of divide)
 - Saukville (east of divide)
 - Eastern Brookfield (east of divide)
 - Central New Berlin (straddling community, return flow system already in place)
 - Elm Grove (east of divide)
 - Muskego (straddling community, return flow system already in place)
 - Waukesha (west of divide in straddling county, new return flow system required)
 - Germantown (east of divide)
 - Yorkville (east of divide)
- This plan is being proposed because of its benefits in the drawup of the deep and shallow aquifers, minimizing loss of baseflow in surface waters, and reducing chloride discharges to surface waters.

37



Summary of Plan Findings and Recommendations

- Groundwater pumping in the Region by 2035 is expected to remain about the same as in 2005 about 78 mgd. However, pumping from the shallow aquifer is expected to increase and pumping from the deep aquifer is expected to decrease.
- The use of Lake Michigan supplies is expected to increase from about 206 mgd in 2005 to 242 mgd in 2035.

38



Summary of Plan Findings and Recommendations

- Recommended high capacity wells siting procedures would involve more site selection and impact analysis, monitoring, and mitigation steps.
- ➤ The cost of the new facilities and programs envisioned in the plan for municipal utilities averages \$14 per capita per year, with a range of from under \$2 per person in Milwaukee County to over \$80 per person in Ozaukee County. The fiscal impact on Milwaukee County residents and businesses would be a net savings when factoring in revenue sales to new customers outside the County.
- The water table in the deep aquifer in the Region is expected to stabilize or partially recover in most of the Region.
- ➤ The impacts of groundwater pumping on stream baseflow are minimized. 2.0 percent reduction is expected by 2035. County specific impacts range from a 14 percent augmentation to a 4.5 percent reduction.

39



Summary of Plan Findings and Recommendations

- Impacts of Preliminary Recommended Plan on Milwaukee County Communities, Residents
 - Existing water treatment supplies are generally of a high quality and have adequate capacity. (In the case of the City of Milwaukee Water Works, considerable excess capacity exists.) No major new infrastructure requirements are envisioned, except at the City of Oak Creek water treatment plant where expansion has long been planned and was found to be needed under all alternative plans evaluated due to planned growth in the areas served by the Utility.
 - An opportunity would be presented to expand the customer base for the Milwaukee Water Works and potentially the City of Oak Creek Water Utility by the addition of customer communities outside of Milwaukee County. This could take advantage of unused water treatment plant capacity in the case of the Milwaukee Water Works treatment plants. Such an increase in customer base should result in a reduction in water rates, all other things being equal.
 - The cost for providing any new conveyance infrastructure needed for new customer communities would be borne by those new customer communities.
 - Return flow options for Waukesha will need careful environmental evaluation as part of plan
 implementation. Groundwater remains a viable option for Waukesha should the environmental
 evaluation conclude that Lake Michigan should not be used as a source of supply.

40



Regional Water Supply Planning Program

Remaining Steps in Planning Process

Estimated Time Frame

Public informational meetings, outreach, and other activities

October 2008 through February 2009

Complete planning report (recommended plan, April, 2009 implementation, and summary chapters)