

**STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES REVISED  
DECISION TO AMEND THE DANE COUNTY  
AREAWIDE WATER QUALITY MANAGEMENT PLAN**

The Wisconsin Department of Natural Resources (WDNR) had reviewed a request from the City of Fitchburg (City) to amend the Dane County Areawide Water Quality Management (“WQM”) Plan and issued a decision regarding that request on April 14, 2015. Following the issuance of that decision, Fitchburg Lands, LLC, filed a petition for judicial review challenging the decision as being beyond the authority of the WDNR because the decision's conditions were unclear, and that the decision was not made on the entire area sought to be approved in the City's application. The Town of Dunn intervened as a party in the case. On its own review, and upon discussions with the parties, the WDNR determined that in the interest of resolving the judicial review action and issuing a decision that would not be subject to challenge, several conditions of the approval should be made more clear as to scope and timing, as well as making more clear the description of the applicability of the conditions to the City and the developers. In support of this effort, additional clarification and explanation of the application has been provided by the City and an owner of land within the proposed urban service area amendment area that were lacking at the time of the April 14, 2015, approval, which now allows the WDNR to approve, with conditions, additional areas as part of the plan. Therefore, WDNR issues the following revised decision regarding that request.

**FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION**

**FINDINGS OF FACT**

WDNR finds that:

1. In November 2013, the City of Fitchburg submitted the Northeast Neighborhood (NEN) Urban Service Area Draft Amendment Application to the Capital Area Regional Planning Commission (CARPC).
2. In December 2013, CARPC staff replied to the City with a list of 24 questions to better understand the proposal.
3. On February 12, 2014, the Fitchburg Plan Commission requested the Fitchburg Common Council to authorize submittal of NEN Amendment to CARPC.
4. On February 25, 2014, the City of Fitchburg Common Council voted to approve the NEN Amendment, Resolution R-18-14.
5. On March 21, 2014, the City submitted the NEN Amendment to CARPC.
6. At the June 2014, CARPC meeting, the staff made a preliminary presentation of the NEN Amendment to the Commission, members of which asked for additional or clarifying information to be included in the final staff analysis.
7. At the July 2014, CARPC meeting, Professor Calvin DeWitt presented scientific data on the Waubesa Wetlands, regional groundwater issues, and hydrologic connectivity.

8. The Northeast Neighborhood Amendment was placed on the CARPC September 2014 Agenda for Public Hearing, along with 3 other amendment requests, including another City of Fitchburg Amendment called North Stoner Prairie. The Commission was not able to consider either of the two City of Fitchburg requests due to time constraints.
9. At the October 2014, CARPC meeting public hearings for both North Stoner Prairie and NEN were, again, on the agenda. The public hearing for North Stone Prairie was held and the Commission approved the North Stoner Prairie amendment. The City of Fitchburg then made its presentation on the Northeast Neighborhood amendment. The public hearing for the NEN was opened and public testimony was held until 11:40 pm, at which time the meeting was adjourned.
10. At the November 13, 2014, meeting the Commission heard additional public testimony regarding the NEN Amendment. CARPC staff made their presentation and the commission voted, but the request failed to receive the required eight votes.
11. On November 19, 2014, CARPC sent a letter to the WDNR with the results of the Commission vote, a summary of the amendment request, and all supporting materials in fulfillment of its work program with the Department.
12. On January 7, 2015, the City sent a letter to the Department via email requesting that the WDNR conduct a review of the City's application for the NEN Urban Service Area Amendment.
13. On January 9, 2015, the Department replied to the City and asked that the City supply materials needed for the WDNR to review the amendment request.
14. On January 14, 2015, the Department received the amendment application and associated materials from the City of Fitchburg.
15. The Department convened a technical team for the amendment review. Meetings were held on January 21, January 27, January 28, and March 10 of 2015. The technical team included water quality biologists, groundwater quality experts, wetlands ecologists, water resources specialists, and storm water management experts.
16. On February 16, 2015, the technical team met at the offices of the Wisconsin Geological and Natural History Survey to gain a more thorough understanding of the Dane County Hydrologic Model and how that model was applied to the proposed development. The team discussed local and regional issues related to Dane County's WQM Plan including the existing and projected aquifer drawdown, modeled source water areas, and anticipated 2015 aquifer and surface water status. Discussion included evaluating the connectivity between the various groundwater flows in differential aquifer strata with the various surface water features of concern, with particular emphasis on the Waubesa Wetlands. Wisconsin's updated springs inventory (conducted by the Wisconsin Geological and Natural History Survey and Beloit College) was also discussed; the absence of delineated springs from the project area in the groundwater run and the use of a coarser scale groundwater model versus the finer scale cell-model released in 2015 were noted.
17. On March 10, 2015, DNR met with CARPC technical staff to view results using the Dane County Hydrologic Model. Issues discussed included the potential need for a watershed study to better understand sources and sinks of nutrients and water flows to the Waubesa Wetlands and the Groundwater Status and Protection Appendix to the Dane County WQM Plan.

18. WDNR issued a press release on March 12, 2015, which directed the public to a WDNR webpage on the NEN Urban Service Area Amendment. The webpage included the City's submittal to CARPC, as well as supporting information used in the local decision making process. The press release outlined WDNR's public participation process for the NEN Urban Service Area Amendment, including a public comment period from March 12 to April 3, 2015.
19. As part of the public comment process, on March 27, 2015, DNR met with the Town of Dunn representatives to hear perspectives and gather information from wetlands biologists who reside in the Town.
20. On April 14, 2015, WDNR issued a decision to amend the Dane County Areawide Water Quality Management Plan relative to the November 2013, City of Fitchburg Northeast Neighborhood (NEN) Urban Service Area Draft Amendment Application.
21. Following the issuance of the decision, WDNR determined that several conditions of the approval were ambiguous as to scope and timing, as well as a lack of a clear description of the applicability of the conditions to the City and the developer. Additionally, communications among representatives of WDNR, the City, the developer, and the Town of Dunn have provided additional clarification as to the details of the application.
22. On February 29, 2016, the WDNR placed on its webpage the draft revision to the NEN Urban Service Area Amendment for public review, along with a map of the proposed area and DNR staff analysis memo. The webpage also included the City's submittal to CARPC, as well as WDNR's initial and proposed revision to the prior Urban Service Area Amendment Approval.
23. WDNR considered the public comments received in the formulation of its final decision. These comments are summarized in Attachment 2 and in the staff analysis. The final decision includes two changes from the draft decision: 1) the total acreage and mapped area was adjusted to account the road right of way along Hwy 14 to make this amendment contiguous with the current urban service area for the City of Fitchburg. In addition, the amount of acres designated as environmental corridor within the approved area was specified. 2) The two "Additional Recommended Actions" were combined into a single action and clarified as to scope and details of the proposed watershed study.

### **CONCLUSIONS OF LAW**

1. The Legislature requires WDNR to "establish a continuing water pollution control planning process which is consistent with applicable state requirements. The continuing planning process shall result in plans for all waters of the state..." (s. 283.83(1), Wis. Stats).
2. WDNR implements a continuing water pollution control planning process through Chapter NR 121, Wis. Adm. Code which "establishes regulations specifying policies, procedures, and requirements for Wisconsin's areawide water quality planning process" and results "in the preparation throughout the state of areawide plans for managing the quality of waters of the state..." (s. NR 121.01, Wis. Adm. Code)
3. WDNR "shall recommend that the governor designate areawide planning areas which as a result of urban and industrial concentrations or other factors have substantial and complex water quality control problems." (s. NR 121.06(1), Wis. Adm. Code). Dane County is a

"designated area."

4. WDNR shall also "recommend to the governor for designation a single agency capable of developing effective areawide water quality management plans" within "designated areas." (s. NR 121.06(2), Wis. Adm. Code). CARPC is not a "designated agency" but provides contractual services to conduct technical reviews and public input processes on behalf of DNR.
5. For "designated areas," WDNR has the authority to review and approve areawide water quality management plans (s. NR 121.07(1), Wis. Adm. Code), and review and approve revisions to areawide water quality management plans (s. NR 121.07(3), Wis. Adm. Code).

## **DECISION**

### **Decision**

The area identified in the map attached as Attachment 1 is approved for addition to the Central Urban Service Area for the City of Fitchburg subject to conditions identified below.

The remainder of the area proposed in the City of Fitchburg's application (identified by dashed lines in Attachment 1) is denied because the information provided in the application to the Department did not sufficiently evaluate potential impacts to water quality of downstream resources, including the Waubesa Wetlands. The "Additional Recommended Actions" specified below would be necessary for any subsequent urban service area amendment applications immediately adjacent to the approved amendment area.

As part of the original CARPC review process, CARPC provided numerous recommendations in addition to the specific conditions of approval. The WDNR has reviewed and incorporated the CARPC recommendations into this decision as general recommendations. These recommendations are not conditions of approval to the Dane County Areawide Water Quality Management Plan, but are considered good practices supported by the WDNR.

### **Description of Approved Amendment Area:**

This amendment as revised adds approximately 511 acres (including approximately 155 acres of environmental corridor, 52 acres of Highway 14 right-of-way, and 304 developable acres) to the City of Fitchburg's urban sewer service area, south of Highway 18/151 (south of East Clayton Road), east of Highway 14, west of Larson Road, and north of Goodland Park Road (see Attachment 1 - map of approved urban sewer service area amendment). Fine scale analysis of environmentally sensitive area delineations both within the approval area as well adjacent to and downstream will be developed and published for the record and future USA amendment applications.

This approval to the Dane County WQM Plan to revise Fitchburg's Urban Sewer Service Area does not constitute approval of any other local, state, or federal permit that may be required for sewer construction or associated land development activities.

## CONDITIONS OF APPROVAL

1. The City of Fitchburg (or the developer and/or representative consulting firm, through the City, herein “the Applicant”) must prepare a detailed stormwater management plan prior to any land disturbing activities in the amendment area. The plan should be submitted to CARPC and Dane County Land and Water Conservation Department staff for review to ensure consistency with the Dane Co WQM Plan (as amended) and other relevant county plans.

The storm water management system must be integrated across the landscape to include quantity and quality controls within source areas, conveyance swales and channels, and interconnected green space corridors. The green space corridors must be designed to provide connected open space, and include the protection for enhancement of regulatory wetland areas within the corridors. Conveyance of storm water throughout the site must be by open vegetated drainage swales to the extent practicable, and must be designed to disperse water and avoid concentrated discharges.

At minimum, the storm water management plan shall include the following:

- a. Install storm water and erosion control practices prior to other land disturbing activities to the extent practicable and consistent with good construction practices (*e.g.*, installation of engineered storm water collection systems in public rights-of-way during street construction; any green roofs, rain gardens, or landscaping swales during construction of associated project features). Protect infiltration practices from compaction and sedimentation during land disturbing activities.
- b. Control peak rates of runoff for the 1, 2, 10, and 100-year 24-hour design storms to “pre-development” levels (*i.e.*, maximum Runoff Curve Number = 68 for agricultural land use and hydrologic soil group B). Peak flow calculations are to be based on National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation Frequency Estimates for precipitation depth. Wisconsin has calculated county-specific Atlas 14 precipitation depths and in Dane County, it is to be used in combination with the Natural Resources Conservation Service (NRCS) MSE4 precipitation distribution. MSE4 refers to the Midwest/Southeast 4 rainfall distribution as developed by the NRCS National Water Quality and Quantity Team based on data from Atlas 14 Volumes 8 (Midwest US) and Volume 9 (Southeast US).
- c. Maintain the post development stay-on volume to at least 90% of the predevelopment stay-on volume for the one-year average annual rainfall period, as defined by WDNR.
- d. Maintain pre-development groundwater recharge rates from the Wisconsin Geological and Natural History Survey (WGNHS) 2009 report, Groundwater Recharge in Dane County, Wisconsin, Estimated by a GIS-Based Water-Balance Model (an average of 9-10 in./yr. for the amendment area) or by a site specific analysis.
- e. Provide at least 80% sediment control for the amendment area in accordance with existing ordinances.
- f. Stormwater practices should be publicly owned and managed or have perpetual legal maintenance agreements with the City, which will allow the City to maintain facilities if owners fail to do so.
- g. Site-specific analyses of the potential for storm water infiltration to create groundwater recharge-induced water table rise will be conducted, and infiltration designs will be adjusted to address potential groundwater table rise criteria. In these cases, equivalent storm water volume

reduction performance will be achieved by use of evaporation-intensive BMPs, such as green roofs or storm water capture and reuse systems, to the extent practicable.

2. CARPC staff must update and submit to WDNR land use need calculations based on 2013 population projections from US Census and adjust its 20 year development needs in the Dane County WQM Plan. CARPC must provide a letter or other written communication from Department of Administration (DOA) indicating support of the projections used. CARPC staff should then forward this information to the DNR for approval, as an amendment to the Dane County WQM Plan. This Condition No. 2 was a condition of the original approval and has been completed.

3. The Applicant must provide to CARPC technical staff and the WDNR wetland delineations, as determined through procedures specified in state and federal rules, for the approved amendment area and delineated environmentally sensitive areas (ESAs) in order to allow CARPC technical staff and the DNR to update ESA delineations to guide future development, water quality protection, and stormwater planning. The Applicant must complete this wetland delineation requirement prior to any development in the approved amendment area.

4. The Applicant must conduct and submit to CARPC and WDNR a wetland condition survey of all affected wetlands including riparian and isolated features within the site boundary prior to locating stormwater management facilities. This survey will apply the Wisconsin Wetland Rapid Assessment Methodology for wetland condition and function, and use the Floristic Quality Assessment for plant community condition. These analyses will be used to identify compliance with ch. NR103, Wis. Adm. Code. The survey shall include the identification of all currently placed agricultural drainage structures. The Applicant must complete and submit this survey prior to any development in the approved amendment area

5. The City of Fitchburg shall cooperate with DNR and CARPC staff to update the environmentally sensitive area (ESA) map for the Fitchburg portion of the Dane County WQM Plan to reflect non-developable areas involved in and adjacent to the approved amendment areas. These ESAs may include springs, wetlands, and rivers/streams with 75 to 300 foot buffers in the development area and in surrounding areas. The update of ESAs is not a condition precedent to development in the approved amendment area; provided that the areas identified as Proposed Environmental Corridor on the map attached as Attachment 1 shall be treated as ESAs until the update of the ESA is completed for the approved amendment area.

### **CARPC RECOMMENDATIONS**

In addition to the Conditions of Approval described above, WDNR supports the following CARPC recommendations as they relate to the Dane County WQM Plan. These CARPC Recommendations are not conditions of approval to the Dane County WQM Plan.” Nothing in the inclusion of these actions as recommendations is intended to waive any duty to take such action that Applicant may have, if any, under other laws or regulations.

1. Maintain suitable wetland hydrology by controlling the wetland water level bounce for the 1-, 2-, and 10-year, 24-hour design storms to within 0.5 feet of existing conditions and providing a maximum drawdown time within the wetland of 24-hours for the 1- and 2-year, 24-hour storms and 72-hours for the 10- and 100-year, 24-hour storms.
2. Deep till all compacted pervious areas.

3. Consider non-infiltration based volume control measures such as stormwater reuse and green roofs.
4. Conduct a threatened and endangered resources ecological survey for the amendment area in consultation with WDNR prior to plat design and submittal procedures and any land disturbing activities. Any necessary habitat protection measures as recommended by WDNR shall be implemented.

#### **ADDITIONAL RECOMMENDED ACTION**

The following Additional Recommended Action is not a condition of approval to the Dane County WQM Plan. However, this recommended action would be necessary for any subsequent urban service area amendment applications immediately adjacent to the approved amendment area.

DNR will take a leadership role in collaboration with other interested and affected parties to conduct a comprehensive study of the watershed upstream of the Waubesa Wetlands within the next 3 years. At a minimum, the study should:

- Evaluate groundwater flow and surface and groundwater interactions between streams, springs, groundwater, and Lake Waubesa, using the 2014 Dane County Regional Groundwater Model update developed by WGNHS, including the development of a new inset model for the Waubesa Wetlands, if warranted.
- Utilize updated rainfall data from NOAA Atlas 14 and include considerations for changing climatic conditions.
- Evaluate nutrient loadings, including nitrogen and phosphorus in both particulate and dissolved forms, in streams, springs, groundwater, and Lake Waubesa.
- Assess the health of the watershed's biological communities (plants, wildlife, fish, invertebrates, etc.), and how changes in surface and ground water quantity, quality, and flow may affect those biological communities.
- Evaluate current and potential future municipal water supply well placement.
- Provide recommendations for source water protection of areas that feed the perched fen located in the southwest portion of Lake Waubesa.
- Provide recommendations for management actions to mitigate the cone of depression resulting from current and future municipal water well pumping.

Completion of this action is not required prior to the development action that is the subject of this approval, but would be useful for future proposals. The watershed study should be conducted as soon as resources and funds are available through the WQM Planning program and/or partnership resources. The data and related study information will be posted to a web site to provide citizen access as results accumulate.

## APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes, administrative rules, and case law establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition to the Department. A petition for judicial review must name the Department of Natural Resources as the respondent.

Dated this 14th day of April, 2016



Susan L. Sylvester, Director  
Water Quality Bureau  
Department of Natural Resources

- Attachment 1 – Map of Northeast Neighborhood Amendment to the Central Urban Service Area and Environmental Corridors in the City of Fitchburg. Final environmental sensitive area delineations will be published subsequent to this decision.
- Attachment 2 – Summary of Public Comments Received during both public comment periods
- Attachment 3 – List of Public Comments Received by WDNR during both public comment periods
- Attachment 4 – DNR Discussion/staff analysis