

**Legal Basis for Approving the Proposed
City of Verona ‘Southwest USA’ amendment
Based on Compliance with**

Dane County’s

“Dane County Water Quality Plan”

As Adopted In 2004

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The proposed ‘Southwest USA Amendment’, as proposed by the City of Verona, complies with the four (4) ‘recommendations’ sections of the Dane County Water Quality Plan as adopted in 2004—as follows:

Urban Non-Point Source Control Recommendations:

U-1: All urbanizing units of government should develop comprehensive stormwater management plans that account for water quality and quantity, that encourage infiltration of stormwater, and that are integrated into the long-term land use and open space plans of the area. Stormwater management plans should attempt to mitigate the adverse impacts of development on water resources to the maximum extent practicable.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has adopted Dane County’s stormwater management regulations—as contained in Chapter 14—and these regulations are based on NR 151 and NR 216;
- The City of Verona adopted a comprehensive Stormwater Management Plan in 2000;
- The City of Verona updated this comprehensive Stormwater Management Plan in 2002;
- The City of Verona updated this comprehensive Stormwater Management Plan again in 2003;
- The City of Verona completed the NR 216 permitting process in 2007;
- The adopted Verona Stormwater Management Plan accounts for water quality;
- The adopted Verona Stormwater Management Plan accounts for water quantity;
- The adopted Verona Stormwater Management Plan encourages infiltration of stormwater;
- The adopted Verona Stormwater Management Plan is integrated into the long-term land-use and open space plans through the city’s technical plan review process that is utilized for all land-use proposals, including urban service area amendments, annexations, preliminary and final plats, utility extensions, infrastructure design and construction, zoning, site plan review, and building permit issuance;
- The adopted Verona Stormwater Management Plan attempts to mitigate the adverse impacts of development on water resources to the maximum extent practicable, including significant success with preventing flooding, reducing ‘flashiness’ in local streams and rivers, removing sediments, and infiltrating water to recharge groundwater resources.

The development of the ‘Southwest Amendment Area’ will comply with all of these adopted plans, ordinances and regulations.

U-2: Management agencies should promote land use patterns and practices which preserve the integrity of the natural hydrologic system, including the balance between groundwater and surface water. Require future development to implement infiltration measures, wherever practicable, as a means of controlling stormwater impacts and ensuring groundwater recharge.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona requires infiltration measures in all new development;
- The City of Verona has required—and developers have constructed—infiltration measures as a means of controlling storm water impacts and ensuring ground water recharge *in a number of city projects*, including:
 - The West End mixed-use development;
 - The Scenic Ridge residential development;
 - The Cathedral Point residential development;
 - The reconstruction of West Verona Avenue infrastructure project;
 - The site development of Walgreens;
 - The site development of the Holiday Inn Express;
 - The site development of the ‘103 South Main Street’ redevelopment project;
 - The redevelopment of Miller’s and Son’s Supermarket;
 - The redevelopment of Park Bank; and
 - The ‘Hankard House’ relocation and residential-to-commercial conversion project on East Verona Avenue;
- The City of Verona promotes land-use patterns that preserve natural hydrologic systems through designating natural drainage areas as open stormwater conveyance areas. Specific examples include:
 - The ‘Dry Tributary’ open stormwater conveyance on the City’s west side;
 - The ‘Military Ridge’ open stormwater conveyance on the City’s east side; and
 - The ‘Prairie Crest’ open stormwater conveyance on the City’s south side, among others;
- The City of Verona will require infiltration measures within the proposed ‘Southwest Amendment Area’;

U-3: Designated municipalities should implement the state NR 216, NR151, and federal Phase II stormwater regulations along with existing Erosion Control and Stormwater Management Ordinance (Chapter 14). Other municipalities should consider developing consistent programs, ordinances, and requirements.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has adopted and administers Dane County’s Chapter 14 requirements, which implements NR 216;

- The City of Verona has adopted and administers Dane County’s Chapter 14 requirements, which implements NR 151;
- The City of Verona has implemented federal Phase II stormwater regulations;
- The City of Verona has adopted and enforces Erosion Control ordinances;
- The City of Verona has adopted and enforces Stormwater Management Ordinances and regulations;
- The proposed ‘Southwest Amendment Area’ will be developed in compliance not only with the requirements of NR 216, NR 1561, and federal Phase II stormwater regulations, but will also be developed in compliance with the more stringent water quality protection recommendations as included in the “Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona” report, which was the final report from the 3-year ‘Badger Mill Creek-Sugar River Area’ study.

U-4: Dane County should apply to be certified by the DNR as a Local Qualified Program for the issuance of stormwater permits under NR 216.

This recommendation from the adopted ‘Dane County Water Quality Plan’ does not appear to be applicable specifically to the City of Verona nor to the currently proposed ‘Southwest USA Amendment’. However, the City of Verona is supportive of Dane County being certified as a Local Qualified Program for issuance of stormwater permits under NR 216—if it has not already received such certification.

Additionally, the City of Verona utilizes professionally-trained and certified engineers for all reviews and issuances of stormwater permits under NR 216.

U-5: Prepare specific watershed plans incorporating flow and water quality management practices for all existing and developing urban drainage basins. Where possible, such plans should be prepared in the context of comprehensive watershed water quality plans.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona conducted city-wide SLAMM modeling for the City of Verona NR 216 permit in 2007;
- The City of Verona’s adopted ‘Stormwater Management Plan’ includes specific watershed plans incorporating flow and water quality management practices for all existing and developing urban drainage basins, and these plans were prepared in the context of comprehensive watershed water quality plans;
- The proposed ‘Southwest USA Amendment’ has been extensively studied and comprehensive plans have been created for incorporating flow and water quality management practices for this environmentally-sensitive area.

U-6: A coordinated stormwater management plan should be developed for all communities in the municipal NR 216 stormwater permit area.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona is currently collaborating actively with the City of Madison on plans for future stormwater management in the area north of the City of Verona—both north and south of C.T.H. ‘PD’. Portions of this area are included in the City of Madison’s comprehensive plan and others in the City of Verona’s comprehensive plan for future urban development. Because this area is a ‘closed basin’ with no natural outlet for accumulated storm water, extensive planning and collaboration will be required to manage long-term stormwater issues;
- The City of Verona is an active member of the Madison Area Municipal Storm Water Partnership known as MAMSWAP. As part of this regional partnership, the City of Verona collaborates with other communities to coordinate stormwater management plans and regulations for communities within the NR 216 stormwater permit area;
- The City of Verona will continue to participate in MAMSWAP and will apply the results of MAMSWAP collaboration in the proposed ‘Southwest Amendment Area’;

U-7: Eligible units of government should apply for funding through the DNR Targeted Runoff Management or Urban Nonpoint Pollution grant program to develop stormwater management plans and install practices that control urban stormwater impacts.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has applied for and received two ‘basin grants’ through the Department of Natural Resources, including:
 - A basin grant for the West Verona Avenue street-reconstruction and infiltration enhancement project; and
 - A basin grant for the south basin within the Westridge Subdivision on the City’s west side.
- The City of Verona will continue to seek grant funding through various sources to develop or update the City’s stormwater management plans and to install practices that control urban stormwater impacts, including within the proposed ‘Southwest Amendment Area’;

U-8: Management agencies should promote open drainage systems incorporating detention and infiltration areas and natural greenways in developing areas.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona promotes open drainage systems that incorporate detention and infiltration areas and natural greenways in developing areas. Specific examples include:
 - The ‘Dry Tributary’ open stormwater conveyance on the City’s west side;
 - The ‘Military Ridge’ open stormwater conveyance on the City’s east side; and
 - The ‘Prairie Crest’ open stormwater conveyance on the City’s south side, among others;
- The City approved open-swale drainage systems in the most recent industrial park subdivision—Technology Park—on the City’s southeast side;
- The proposed ‘Southwest USA Amendment’ includes requirements for open drainage systems and infiltration areas and natural greenways as recommended in final report from the 3-year ‘Badger Mill Creek-Sugar River Area’ study, entitled “Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona”;

U-9: Urban management agencies should work cooperatively with state and local agencies to incorporate stormwater infiltration practices into local erosion control/stormwater management ordinances. Infiltration practices should be designed to protect the groundwater.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona’s adopted stormwater management ordinances and regulations require infiltration, and these ordinances require that infiltration practices protect groundwater (such as prohibiting the use of karst features or fractured bedrock for infiltration purposes...);
- The City of Verona utilized an intensive intergovernmental planning process to develop water quality protection plans for the proposed ‘Southwest Amendment Area’. During the 3-year ‘Badger Mill Creek-Sugar River Area’ planning process—the City collaborated with the Department of Natural Resources (Bob Hansis); the Madison Metropolitan Sewer District (John Schellpfeffer); the Capital Area Regional Planning Commission (Kamran Mesbah); the Town of Verona (Rose Johnson); and Dane County (Kevin Connors) to develop appropriate stormwater management plans specific to the proposed ‘Southwest Amendment Area’, and these plans specifically address infiltration practices to protect groundwater;
- Higher than minimum infiltration requirements are proposed for the ‘Southwest Amendment Area’.

U-10: Evaluate and promote potential approaches for enhancing or improving sediment and phosphorus removal in the design, operation, and maintenance of urban drainage systems.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City’s required stormwater management facilities—whether public or private—remove 80% of sediment from urban storm water run-off;
- 50% of particulate phosphate is currently removed from storm water run-off in the City of Verona;
- The City of Verona—like many other Dane County communities—is awaiting the results of a comprehensive DNR study regarding the removal of dissolved phosphates from urban stormwater run-off;
- Stormwater run-off within the proposed ‘Southwest Amendment Area’ will meet or exceed these current minimum standards and will include environmental corridor designs to provide additional water quality benefits downstream of traditional water quality treatment basins.

U-11: Urban management agencies should cooperate in sponsoring field tests of the feasibility and effectiveness of innovative stormwater management ideas and technologies.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has actively encouraged the use of rain-gardens in both residential and non-residential developments within the City;
- The City of Verona has provided public education and promotional information about rain gardens and other infiltration methods to city residents and businesses through the quarterly distribution of the City’s utility bills;
- The City of Verona is currently exploring a variety of ideas with the Department of Natural Resources and will implement innovative stormwater management ideas and technologies as recommended from that collaborative effort;
- The City of Verona will continue to participate in the MAMSWAP group and will implement innovative stormwater management ideas and technologies as recommended by that collaborative effort. Additionally, MAMSWAP is sponsoring research on rain garden performance by USGS and others and the City of Verona is contributing financially to that effort;
- The recommendations from the “Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona” report—which was the result of the 3-year ‘Badger Mill Creek-Sugar River Area’ study—includes specific recommendations for innovative stormwater management ideas and technologies for the ‘Southwest Amendment Area’—such as green roofs—and these ideas and technologies will be promoted and encouraged within the proposed amendment area;

U-12: Design urban drainage systems and associated land use practices to minimize the potential for toxic or hazardous materials being washed or discharged into surface waters, with emphasis on source control.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona recently rewrote the ordinances for stormwater management to minimize the potential for toxic or hazardous materials from being washed or discharged into local surface waters;
- The City of Verona requires all non-residential development (commercial, industrial, and mixed-use projects...) to install and maintain oil and grease removal systems to keep these toxic/hazardous materials from entering local surface water bodies;
- The City of Verona is currently modifying an existing stormwater pond (Acadia Pond...) to comply with toxic/hazardous materials requirements from NR 216. Specifically, the City is retrofitting the detention facility with an impermeable liner to prevent oil and grease contamination from the adjacent Town of Verona’s public works garage;
- The City of Verona collaborates with other agencies to implement ‘fuel spill prevention plans’ for gasoline service stations within the City;
- The City of Verona has actively encouraged the use of rain-gardens in both residential and non-residential developments within the City;
- The City of Verona has provided public education and promotional information about rain gardens and other infiltration methods to city residents and businesses through the quarterly distribution of the City’s utility bills;
- The City will continue all of these efforts within the proposed ‘Southwest Amendment Area’;

U-13: Promote inter-agency review among the appropriate state and local designated management agencies to work with developers to streamline permitting while ensuring protection of the natural resources.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona works closely with CARPC to review proposed stormwater management facilities within areas that were added to the Verona USA during approximately the last decade and also to review any stormwater management facilities that will discharge to the surrounding township;
- The City of Verona works closely with Dane County to review stormwater management facilities as necessary (such as facilities that will discharge to the surrounding township?);
- The City of Verona works with the DNR as needed to review stormwater management facilities—particularly where wetlands are present. For example—

the City is currently working with the DNR to address needed improvements to the 'Gateway Pond' stormwater management facility on the City's north side to address flooding concerns within a detention basin that includes wetlands;

- The City will continue working with CARPC, the County, and the DNR to review stormwater management facilities and to ensure protection of natural resources within the proposed 'Southwest Amendment Area';

U-14: Urban management agencies should enact and enforce leaf, yard, and garden debris storage and disposal ordinances in urban areas, including leaf pick-up in the fall, with emphasis on keeping leaves and yard waste off of streets and paved surfaces.

The City of Verona complies with this recommendation and the proposed 'Southwest USA Amendment' also complies with this recommendation. Specifically,

- The City of Verona has an aggressive brush pick-up program within the City, with brush pick-up provided bi-weekly throughout the year;
- The City of Verona also has an aggressive leaf and yard-waste pick-up program, with leaf and yard-waste pick-up being provided on a weekly-basis during the autumn;
- The City of Verona has a convenient yard-waste drop-off site located within the City, and the City provides public education and promotional information about this facility through its quarterly utility billings;

U-15: Urban management agencies should include provisions in building codes and ordinances that require that, whenever feasible, drainage from roofs, driveways, and parking lots be directed toward grassed or vegetated areas, rather than paved areas or storm sewers.

The City of Verona complies with this recommendation and the proposed 'Southwest USA Amendment' also complies with this recommendation. Specifically,

- The City of Verona's Stormwater Management regulations and ordinances include building code provisions for erosion control;
- The Building Inspector and the Department of Public Works work collaboratively to enforce the provisions of the City's adopted erosion control regulations and requirements;
- The City of Verona provides public education and promotional information through quarterly utility mailings to encourage residents and businesses to direct storm water run-off from roofs onto grassy areas rather than paved areas;

U-16: Conduct aggressive public education and information programs regarding source control, on an annual basis.

The City of Verona complies with this recommendation and the proposed 'Southwest USA Amendment' also complies with this recommendation. Specifically,

- The City of Verona provides public education and information through a variety of sources, including quarterly newsletters distributed along with the City's utility bills and the City's web-site;
- The City of Verona participates in and contributes financially toward the '**My Fair Lakes**' public education campaign, which includes radio spots and printed materials promoting public awareness about protecting surface water quality;

U-17: Improve the water quality protection and effectiveness of street sweeping by providing frequent (weekly to biweekly) sweeping of streets in commercial and industrial areas, and regular (biweekly to monthly) sweeping of residential streets, with extra efforts at thoroughly cleaning all streets in early spring and late autumn. Vacuum sweepers should be used where feasible because of greater removal effectiveness.

The City of Verona complies with this recommendation and the proposed 'Southwest USA Amendment' also complies with this recommendation. Specifically,

- The City of Verona provides bi-weekly street sweeping;
- The City of Verona is currently in the planning stages for compliance with NR 216. To comply with NR 216, the City is planning to use a high-efficiency street vacuum in targeted areas of the City where this new technology will provide the best results and improvements in water quality;

U-18: Continue to expand efforts to reduce ground and surface water impacts associated with road salt storage and use, and snow removal, including alternative materials and approaches.

The City of Verona complies with this recommendation and the proposed 'Southwest USA Amendment' also complies with this recommendation. Specifically,

- The City of Verona has utilized a mixture of sand and salt in addition to pure salt applications;
- The City of Verona maintains a covered salt shed for salt storage with drainage provided through weepers to a detention basin;
- The City of Verona's public works employees receive extensive training in salt-application management to insure that deicing efforts to not use more salt than what is required for adequate public safety;
- The City of Verona provides public education and promotional information through quarterly utility mailings to encourage residents and businesses to direct storm water run-off from roofs onto grassy areas rather than paved areas;

Stream and Shoreland Management Recommendations:

S-1: The environmental and open space corridors illustrated on the Regional Development Plan Map should be adopted and incorporated into the plans, land-use controls, and resource protection programs of all units of government in Dane County. The corridor system should be adopted as the basic skeleton or framework to promote community-wide open space and resource protection networks, and should be expanded to include additional needed lands and resources.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has reviewed the ‘Regional Development Plan Map’ dated 5/2002 and determined that the City of Verona adopted land-use plans, land-use controls, and resource protection programs are all consistent with this map;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with the ‘Regional Development Plan Map’ recommendations for environmental and open space corridors for all portions of the proposed amendment area;

S-2: Wetlands, steep slopes, buffer strips, and wooded areas in or near water bodies should be protected from development or adverse impacts through regulation or acquisition. Restore these areas where possible.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona implements Dane County ordinance regulations and CARPC recommendations for the protection, preservation, and restoration of wetlands within the City;
- The City of Verona implements Dane County ordinance regulations and CARPC recommendations for the protections, preservation, and restoration of steep slopes—typically over 12%;
- The City of Verona implements Dane County ordinance regulations and CARPC recommendations for the protections, preservation, and restoration of wooded areas. A notable example is the City of Verona effort to cooperate with the Natural Heritage Land Trust, the Town of Verona, Dane County, and others to preserve the wooded area in southeast quarter of Section 21—commonly referred to as ‘Stewarts Woods’. The Department of Natural Resources decided in 2005 to not purchase this land from the Department of Transportation but to instead sell the land for urban development—despite the City of Verona and other units of government encouraging the DNR to purchase these lands for preservation and protection (The DNR chose instead to purchase lands in the southwest quarter of Section 21 to incorporate into the Sugar River Wetlands Natural Area...). Since that time, the City of Verona—through its Parks Department—has made great

efforts to work with the State of Wisconsin to see how this wooded area might be protected and preserved as a significant wooded area;

- Additional examples of the City protecting wooded areas include the use of parkland dedication requirements to preserve wooded areas along the Ice Age Trail in the City’s Technology Park and the preservation of wooded areas in the planned ‘Reinke’ development;
- The City of Verona implements Dane County ordinance regulations and CARPC recommendations for the protections, preservation, and restoration of buffer strips and buffer areas adjacent to surface water bodies, primarily through the implementation of shoreland set-back requirements;

- While not listed in the recommendation above—the City of Verona has also successfully **preserved remnant prairies**. Specifically—the City of Verona required remnant prairies within the ‘Cross Point’ subdivision to be dedicated to the City for parkland.

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Wetlands within the proposed amendment area will be placed within environmental corridors, most notably along the entire length of the Badger Mill Creek;
 - Steep slopes within the proposed amendment area will be placed within environmental corridors, most notably along the eastern bank of the Badger Mill Creek;
 - Buffer strips and buffer areas for wetlands will exceed current Dane County minimum requirements throughout the entire amendment area and—consistent with the recommendations of the “Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona” report—these larger wetland buffer strips and areas will be applied *throughout* the larger ‘Southwest Neighborhood’ area;
 - Wooded areas within the amendment area—as well as within the larger ‘Southwest Neighborhood’—will be preserved, most notably along the eastern bank of the Badger Mill Creek;

S-3: Management agencies should endeavor to increase or maintain functional values of wetlands regardless of size, especially in urban settings where they have multiple functions. Restore farmed or prior-converted wetlands where possible.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has endeavored to preserve wetlands in all of the developments during the past decade. Examples include:

- Wetland preservation in the ‘Kettle Woods’ subdivision/development;
- Wetland preservation in the ‘Technology Park’ subdivision/development;
- Wetland preservation in the ‘Kettle Creek’ subdivision/development;
- Wetland preservation in the ‘Commerce Parkway’ development;
- Wetland preservation in the South Nine Mound development;
- Wetland protection measures for wetlands outside of the city that had the potential to be impacted by development within the City (Solar Court);
- The City of Verona has also collaborated with Dane County Parks to successfully complete a wetland restoration project behind City hall, to restore a wetland so it can serve to protect water quality within the Badger Mill Creek.
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Wetlands within the proposed amendment area will be placed within environmental corridors, most notably along the entire length of the Badger Mill Creek;
 - Buffer strips and buffer areas for wetlands will exceed current Dane County minimum requirements throughout the entire amendment area and—consistent with the recommendations of the “Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona” report—these larger wetland buffer strips and areas will be applied *throughout* the larger ‘Southwest Neighborhood’ area;
 - Prior converted wetlands which have been destroyed by agricultural practices will be restored so they can once again function to protect and enhance water quality within the Badger Mill Creek;

S-4: Park and open space land acquisition policies in Dane County should continue to place priority on acquisition of water-oriented parks, water-related resource protection areas, and public access.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has utilized parkland dedication requirements to acquire lands adjacent to water-related resource protection areas—namely wetlands;
- The City of Verona utilizes environmental corridors and public dedication requirements to remove resources such as surface water bodies (like Badger Mill Creek) from private property—where it is only accessible with property owner permission or via trespassing—and into *publicly accessible* park lands. The Badger Mill Creek within the City of Verona is an excellent example of this tradition of making formerly private lands

along surface water bodies into public lands with accessibility for everyone.

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Water-oriented parks and water-related resource protection areas within the ‘Southwest USA Amendment’ area will be removed from private property—where they are not accessible to the public—and placed into environmental corridors in outlots dedicated to the public. This change will allow these surface water-body resources to be accessible to the public without requiring property-owner permission or trespassing on private lands.

S-5: Enhance and promote the role of woodlands and hillsides in protecting water quality and hydrologic functions, such as groundwater recharge, through woodland management and protection plans, and financial incentives.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has endeavored to preserve woodlands in all of the developments during the past decade. Examples include:
 - Wooded areas preservation in the ‘Kettle Woods’ subdivision/development through the flexible use of zoning that protected existing trees. This area was also characterized by kettles which were also protected and enhanced;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Woodlands will be preserved within the amendment area;
 - Steep hillsides—most notably on the eastern bank of the Badger Mill Creek—will be preserved within the amendment area;

S-6: Adequate vegetative cover and buffer strips to protect and stabilize the shoreline and stream corridor functions should be included in land use and development plans, controls, or regulations.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has collaborated with the Madison Metropolitan Sewer District, the Ice Age Trail Foundation, the U.S. Fish and Wildlife Service, and Dane County Parks to clear brush, clear litter, and make other shoreline and stream corridor improvements to the Badger Mill Creek within the City;
- Previous agricultural practices had removed much of these wooded areas and trees (to maximize tillable acres for commodity crop production...) so that the

Badger Mill Creek did not benefit from shade and trees along its banks. These wooded areas and trees have been restored along the banks of the Badger Mill Creek in those areas where this creek have been annexed into the City, so that the creek now benefits from more wooded areas and shade along its banks than existed prior to annexation into the City;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Shorelands that have been destroyed by agricultural practices—especially cattle crossings that have eroded stream banks—will be eliminated and degraded stream banks and shorelines will be protected from further degradation or destruction;
 - Shorelands that have been stripped of their vegetative cover—such as overstory trees—will be restored with trees that provide shade and bank stabilization;
 - Buffer areas along surface water bodies within the amendment area—most notably the Badger Mill Creek—will be established to further protect and enhance the shoreline and stream corridor functions;

S-7: Support the efforts of watershed and conservation groups to protect and improve water resources.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has been a long-time supporter of the Upper Sugar River Watershed Association (USRWA). During the preparations of the 2009 City budget, the city elected officials faced difficult budgetary constraints and decided that one of the areas where budget cuts would have to be made would be in the City’s financial contributions to various agencies and organizations—unfortunately including the USRWA. City department heads are currently drafting the City’s 2010 budget and have agreed that they will seek to impress upon the elected officials that city-support for the USRWA should be restored—as the City had done for many years prior to 2009.
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona collaborated actively with the USRWA on the ‘Badger Mill Creek-Sugar River Area’ study, which preceded and informed the proposal to add the ‘Southwest USA Amendment’ area to the Verona USA. USRWA staff input and suggestions were incorporated into the planning document and recommendations;
 - The City of Verona made a presentation to the USRWA in June of 2009 regarding the proposed ‘Southwest USA Amendment’ to inform this

- watershed group about the land-use plans and environmental protections proposed by the amendment and to answer questions about the proposal;
 - The City of Verona will continue to cooperate and collaborate with the USRWA for development proposals within the proposed amendment area;

S-8: Work with lake, watershed, and conservation groups to promote and install conservation buffers along intermittent and perennial streams, wetlands, ponds, and lakes through easements, land acquisitions, and voluntary cooperation from land-owners.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has worked with various groups to create conservation buffers along the Badger Mill Creek in those areas where this creek has been annexed into the City;
- The City of Verona has utilized the plat-approval process to acquire lands on either side of the ‘Dry Tributary to Badger Mill Creek’—on the City’s west side—so that these lands on either side of this intermittent stream are conserved and protected;
- The City of Verona worked closely with the owners of ‘downstream’ wetlands that were *outside* of the City to minimize impacts upon those wetlands that might have occurred from planned development upstream and within the City on Solar Court. Specifically, the City required the developer to design storm water management facilities so that regulated storm-water discharge was diverted to multiple out-fall locations rather than directing discharge to one location, which could have impacted a ‘downstream’ wetland;
- The City has utilized parkland dedication requirements to augment/supplement buffer areas and undeveloped areas around wetlands and surface water bodies;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will similarly utilize the platting process to acquire lands on either side of the ‘Dry Tributary to Badger Mill Creek’ within the ‘Southwest Amendment Area’ to similarly conserve and protect this intermittent stream;
 - The City of Verona will also use the platting process and parkland dedication requirements to conserve and protect other surface water bodies such as wetlands;
 - The City of Verona will similarly require developers and land-owners to design, construct, and maintain stormwater management facilities within the ‘Southwest Amendment Area’ to minimize impacts upon wetlands, perennial streams, and other surface body water resources;

- S-9: Municipalities should take advantage of federal, state, and private funding opportunities to implement stream bank and in-stream habitat restoration, as well as increase public access along surface water areas.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona will seek to take advantage of funding opportunities to the extent possible to implement stream bank and in-stream habitat restoration;
- The City of Verona has collaborated with other entities such as the U.S. Fish and Wildlife Service, Dane County, and the Ice Age Trail Foundation to improve stream banks along the Badger Mill Creek within the City through litter removal and brush-clearing efforts and also to re-establish shade trees and wooded areas along the banks of the Badger Mill Creek where trees and wooded areas had been previously removed by agricultural practices;
- The City of Verona has increased public accessibility to surface water areas by placing the Badger Mill Creek in parkland and publicly-accessible out-lots in those locations where this stream has been annexed into the City. Prior to annexation into the City—public access to the banks and shore lands along the Badger Mill Creek was limited to those who received property-owner permission or who trespassed onto private property.

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City will seek to take advantage of funding opportunities to implement stream bank and in-stream habitat restoration; and
 - The City will continue to increase public access to the Badger Mill Creek by placing this stream into publicly-accessible parklands or out-lots through the parkland dedication and plat-approval process. Currently-the banks and shore lands along the Badger Mill Creek through the amendment area is *only* accessible through private property-owner permission or through trespassing on private property;
 - The City of Verona will continue to promote stream-bank restoration efforts through the re-establishment of shade trees and wooded areas along the length of the Badger Mill Creek within the amendment area;

- S-10: An ongoing program of monitoring stream water quality conditions, use suitability and limitations, and corridor evaluations should be supported and conducted by the Wisconsin Department of Natural Resources, Dane County, and local management agencies.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona conducted stream water quality monitoring as part of the 3-year ‘Badger Mill Creek-Sugar River Area’ study and the City of Verona has shared these results with a diverse group of other units of government, organizations, and other stakeholders;
- The City of Verona is supportive of the DNR conducting an on-going program of monitoring stream water quality conditions, use suitability and limitations, and corridor evaluations within the City of Verona and within the proposed amendment area.
- The City of Verona cooperates with the Madison Metropolitan Sewer District on efforts to monitor stream water quality conditions, use suitability and limitations, and corridor evaluations within the Badger Mill Creek and the City of Verona indirectly funds these efforts through the collection of impact fees that are collected on behalf of the MMSD;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will continue to be supportive of on-going programs of stream water quality monitoring, use suitability and limitations, and corridor evaluations within the amendment area and will seek to provide funding for these efforts through direct payment (from revenues derived from a storm water utility); collection of MMSD impact fees, and the pursuit and receipt of various grant and other funding opportunities.

S-11: Maintain and enhance the designation of all current Outstanding Resource Waters, Exceptional Resource Waters, Class I and Class II trout streams, and promote the improvement of impaired water bodies so they can be removed from the 303(d) list.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The Sugar River is classified as an ‘Exceptional Resource Water’ or a ‘Class II trout stream’, and the City of Verona has complied with development limitations for development within the Sugar River basin;
- The Badger Mill Creek is classified as a “Warm Water Sport Fishery” or a “Limited Forage Fishery” and so this recommendation does not appear to be applicable to the Badger Mill Creek. Nonetheless, the City of Verona has expended extraordinary financial and city-staff resources on the improvement of this impaired surface water body to not only minimize any negative impacts from urbanization but to also improve and enhance water quality within this creek;
- The City of Verona is particularly committed to insuring that the City’s efforts and resources to improve and enhance the Badger Mill Creek are not ‘undone’ downstream by un-regulated or under-regulated agricultural practices downstream such as the application of petroleum-based pesticides, herbicides, and fertilizers that end-up in the Badger Mill Creek; stream bank erosion and

sediment creation from cattle-crossings, and other damaging practices that undermine the City of Verona’s efforts to improve water quality within the Badger Mill Creek;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Extra protections for the Sugar River have been incorporated into the plans for the western-most portion of the proposed amendment area—which lies within the Sugar River Basin;
 - The Badger Mill Creek is classified as a “Warm Water Sport Fishery” within the proposed ‘Southwest Amendment Area’ and so this recommendation appears to be ‘not applicable’. Nonetheless, the City of Verona will continue to expend significant financial and city-staff resources on the improvement of this surface water body to not only minimize any negative impacts from urbanization but to also improve and enhance water quality within this creek;
 - The City of Verona will eliminate damaging agricultural practices within the amendment area so that the application of petroleum-based chemicals will be reduced or eliminated and stream-bank erosion and sediment creation from cattle crossings will be eliminated;

S-12: Participate and support the development of a water body classification system for Dane County waters.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona was a participant in the drafting of the ‘Dane County Water Body Classification’ project. City staff participated in stakeholder focus groups during the drafting of the ‘Water Body Classification Report’ and additionally provided written comments and suggestions on the draft final report.
- While the City of Verona expressed support for efforts to preserve, protect, and enhance surface water bodies and surface water quality *overall*, it should be noted here that the City of Verona did express opposition to *some* of the proposed recommendations included in the final draft ‘Water Body Classification’ report—most notably:
 - The City of Verona believes that inflexible shore land set-back requirements in urban areas are contrary to the goals of urban renewal and good urban development. The City of Verona has cited examples such as Monona Terrace, the U.W. Union Terrace, and the Edgewater Hotel as urban developments that would not be allowed with inflexible shore land set-back requirements, and that future urban developments such as these public and private examples should be allowed in any shore land regulations;

- The City of Verona believes that large minimum lot-size requirements within urban areas are contrary to the goals of urban renewal and good urban development. Density and smaller lot-sizes should be encouraged—not discouraged or prohibited—within urban areas. Larger lot sizes causes significantly larger amounts of impervious surface area *per housing unit* and so should be discouraged rather than encouraged or required.
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will comply with any adopted ‘Water Body Classification’ regulations that are applied County-wide and will insure that such regulations are applied specifically to developments proposed within the ‘Southwest Amendment Area’.

S-13: Municipalities in which sewer service area boundary expansions are requested should review and revise existing flood plain zone maps to accommodate potential hydrologic modifications.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona adopted new Flood Insurance Rate Maps (FIRMs) in December of 2008 and these newly-adopted and updated flood maps took effect in January of this year (2009). The City actively uses these revised and updated flood maps during the development review and approval process;
- As part of the FIRM map revision and up-dating process, the City of Verona also adopted new flood-plain zoning regulations which comply with the Department of Homeland Security-Federal Emergency Management Agency’s requirements for continued City of Verona participation in the National Flood Insurance Program (NFIP). The City of Verona actively administers and enforces these flood-plain zoning regulations. Potential hydrologic modifications will also be accounted for as necessary;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Flood plain locations within the proposed amendment area were more accurately identified and delineated as part of the 2008-2009 Flood Insurance Rate Map modernization project;
 - The City of Verona will administer its flood-plain zoning regulations—in compliance with National Flood Insurance Program requirements—within the proposed amendment area. Potential hydrologic modifications will also be accounted for as necessary;

S-14: Management agencies should endeavor to prevent development that would increase the potential for flood-related problems. Promote implementation of the Dane County Flood Mitigation Plan.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona administers storm water management regulations in complete compliance with Dane County Chapter 14 requirements. These regulations insure that storm water run-off is detained so that flooding is prevented, primarily through the use of storm water detention and retention facilities;
- The City of Verona adopted new Flood Insurance Rate Maps (FIRMs) in December of 2008 and these newly-adopted and updated flood maps took effect in January of this year (2009). The City actively uses these revised and updated flood maps during the development review and approval process to prevent development that would increase the potential for flood-related problems;
- As part of the FIRM map revision and up-dating process, the City of Verona also adopted new flood-plain zoning regulations which comply with the Department of Homeland Security-Federal Emergency Management Agency’s requirements for continued City of Verona participation in the National Flood Insurance Program (NFIP). The City of Verona actively administers and enforces these flood-plain zoning regulations to prevent development that would increase the potential for flood-related problems;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will administer storm water management regulations in complete compliance with Dane County Chapter 14 requirements within the amendment area. These regulations insure that storm water run-off is detained so that flooding is prevented, primarily through the use of storm water detention and retention facilities;
 - Flood plain locations within the proposed amendment area were more accurately identified and delineated as part of the 2008-2009 Flood Insurance Rate Map modernization project;
 - The City of Verona will administer its flood-plain zoning regulations—in compliance with National Flood Insurance Program requirements—within the proposed amendment area to prevent development that would increase the potential for flood-related problems;

- S-15: Cities and villages should consider regulating their shoreland through conformance with county or model ordinances for shoreland protection—whichever is more protective—even though they are not required to regulate shorelands other than wetlands under NR 117.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has numerous examples along non-wetland shorelands—primarily the Badger Mill Creek—where shoreland set-backs and buffer areas have been established despite such buffers not being required;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City has proposed providing shoreland set backs and buffer areas along the Badger Mill Creek, even though such set-backs are not necessarily required;

- S-16: All units of government should be proactive in the preservation and conservation of aquatic natural resources while promoting environmentally sound development.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City expends tremendous financial and staff resources for the preservation and conservation of aquatic natural resources. The City requires storm water management facilities that significantly reduce sediment levels in local surface body waters; that remove oil and grease contamination from commercial storm water run-off; and that controls the rate of storm water run-off to prevent ‘spikes’ that erode habitats for aquatic natural resources;
- The City requires all new development to either provide publicly-dedicated stormwater management systems or private systems.
 - Public systems are inspected, maintained, and repaired as necessary by City staff.
 - The City requires the owners of private storm water management systems to record binding maintenance and repair agreements and the City inspects these private facilities on a rotating schedule to insure that property maintenance is being performed and to insure that the facilities are properly completing their water quality protection functions;
- The City is currently (2009) pursuing the creation of a storm water utility to provide a stable funding source and mechanism for continued inspections, maintenance and repair of public storm water management and water quality protection systems throughout the city as well as continued inspection services for privately owned systems within the city.

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City will continue to expend financial and staff resources for the preservation and conservation of aquatic natural resources within the amendment area. Stormwater management facilities will continue to be required to reduce sediment load levels; to remove oil and grease; and to control the rate and volume of storm-water run-off to prevent erosion of stream channel habitats (for aquatic natural resources...);
 - Public and private storm water management systems will be required within the amendment area and the city will continue to inspect, maintain, and repair public facilities to insure their property functioning to protect surface water quality while also continuing to require binding maintenance and repair agreements for private facilities. The City will also continue to inspect private facilities to insure that they are complying with these binding maintenance and repair agreements.

Stream and Shoreland Management Recommendations:

G-1: All land use and siting decisions in Dane County should include evaluation of potential groundwater and hydrologic impacts. Incorporate and use the information, tools, criteria, and guidelines identified in the Dane County Groundwater Protection Plan, and coordinate with local agencies. Applicants for land use or siting approvals, such as zoning or subdivision approvals, site or development plan approvals, urban service area additions, or state, federal, or local disturbance or discharge permits approvals, should provide sufficient information to allow the regulatory agency to evaluate the potential groundwater and hydrologic impacts of the proposed activity or development. Evidence of significant unaddressed or unmitigated groundwater or hydrologic impacts should provide the basis for withholding approval for the requested activity or development, or for requiring additional information to be submitted by the applicant before approval is granted. Compliance with state surface water and groundwater standards should be included in the evaluation along with hydrologic impacts. The guidelines and criteria listed on page 62 should be used in conjunction with the groundwater contamination risk maps for preliminary screening and evaluating the potential impacts.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has completed a comprehensive ‘Municipal Water Master Plan’, which evaluates groundwater and hydrologic impacts;
- The City of Verona prohibits the use of karst features and fractured bedrock for infiltration of stormwater run-off to minimize the potential for groundwater contamination;
- The City of Verona is currently participating in County-wide ground-water modeling and forecasting discussions;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The final report from the 3-year ‘Badger Mill Creek—Sugar River Area’ study, entitled the “Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona” included recommendations specific for promoting ground water recharge and minimizing hydrological impacts and the City of Verona will implement these recommendations within the proposed ‘Southwest Amendment Area’;

G-2: State and local agencies should work cooperatively to develop wellhead protection programs to protect municipal water supplies, including adopting more stringent siting and land use regulations for potentially polluting activities in wellhead protection zones. The guidelines and criteria for using the groundwater contamination risk maps in the table on page 62 can provide a basis for these more stringent land use and siting criteria in well protection zones.

The City of Verona does not currently comply with this recommendation. The City of Verona does not currently have a wellhead protection program. The City had planned to begin such a program in 2009 but this City-goal was delayed so the City could instead pursue the higher-priority goal of creating a stormwater utility. At the time of this proposed ‘Southwest USA Amendment’ proposal, City department heads expect the Stormwater Utility to be created and implemented sometime in 2010, after which City department heads anticipate that attention and resources will once-again be turned toward creating a wellhead protection program.

- The City of Verona’s proposed ‘Southwest USA Amendment’ area will be consistent with this recommendation, once the City proceeds with creating a wellhead protection program. Specifically:
 - Any land uses within the proposed ‘Southwest Amendment Area’ that may fall or lie within an identified well-head protection area will be required to comply with wellhead protection requirements;

G-3: Conduct additional groundwater quality monitoring related to the impacts of closed land fills, barnyard and livestock waste storage, agricultural fertilizer and pesticide use, unsewered subdivisions, and land application of septage.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona is supportive of CARPC and Dane County conducting additional groundwater quality monitoring related to the impacts of closed land fills, barnyard and livestock waste storage, agricultural fertilizer and pesticide use, unsewered subdivisions, and land-applications of septage;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Any results for CARPC’s or Dane County’s research or monitoring work will be applied as appropriate within the proposed ‘Southwest Amendment Area’;

- G-4: Underground and above-ground storage tank monitoring and testing programs, and emergency spill response and clean-up programs should continue to be developed.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- There are no above-ground storage tanks in the City of Verona;
- The City of Verona collaborates with the Department of Natural Resources and the Department of Commerce—as appropriate—to deal with existing below-ground storage tanks monitoring and testing programs;
- The City of Verona is currently cooperating with both the Department of Natural Resources and the Department of Commerce on a redevelopment site on Verona Avenue that will require a contaminated site clean-up and brownfield remediation due to a below-ground storage tank contamination;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - There are not underground or above-ground storage tanks within the proposed ‘Southwest Amendment Area’;

- G-5: Dane County should conduct an aggressive public information and education program to inform rural homeowners of proper use and maintenance of on-site waste disposal systems, along with information on well protection and disposal of household hazardous wastes.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- There are currently no ‘rural’ (The City of Verona uses the term ‘low-intensity urban’ rather than ‘rural’ for well-and-septic development that is not related to farming or similar rural land-uses in unincorporated areas...) homeowners within the City of Verona. The City has opted to *not* pursue such development within the City but to instead pursue dense development on utilities—assuming of course that utilities can be extended to serve such dense development;
- The City of Verona is completely supportive of Dane County conducting an aggressive public information campaign and education program to inform rural homeowners of proper use and maintenance of on-site waste disposal systems, along with information about well protection and disposal of household hazardous wastes;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - If utilities are extended to the proposed ‘Southwest Amendment Area’, there will be no ‘rural’ homeowners within the proposed amendment area;

- If utilities are *not* extended to the proposed ‘Southwest Amendment Area’, the area will be developed with well and septic systems and the City will be completely supportive of Dane County efforts to inform and educate property owners within the area of these matters;

G-6: Inform and educate farmers, homeowners, and commercial businesses on safe handling of chemicals, including the vulnerability of groundwater to contamination and the tremendous difficulty and expense of restoring it to its original condition. Proper on-farm storage of fuels, pesticides, and fertilizers should receive greater emphasis.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- While there is currently only one active farmer within the City of Verona, there are hundreds of commercial businesses and thousands of homeowners. The City is supportive of efforts and will also work to inform and educate all of these groups about safe handling of chemicals and the vulnerability of groundwater to contamination and the tremendous difficulty and expense of restoring groundwater to its original condition;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City will work to inform and educate all groups of Verona citizens about safe handling of chemicals and the vulnerability of groundwater to contamination and the tremendous difficulty and expense of restoring groundwater to its original condition;

G-7: Provide rural homeowners information, guidelines, and contacts for testing their wells and drinking water supplies.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- There are currently no ‘rural’ (The City of Verona uses the term ‘low-intensity urban’ rather than ‘rural’ for well-and-septic development that is not related to farming or similar rural land-uses in unincorporated areas...) homeowners within the City of Verona. The City has opted to *not* pursue such development within the City but to instead pursue dense development on utilities—assuming of course that utilities can be extended to serve such dense development;
- The City of Verona is completely supportive of an aggressive public information campaign and education program to provide rural (low-intensity urban...) homeowners with information, guidelines, and contacts for testing their wells and drinking water supplies;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - If utilities are extended to the proposed ‘Southwest Amendment Area’, there will be no ‘rural’ (low-intensity urban...) homeowners within the proposed amendment area;
 - If utilities are *not* extended to the proposed ‘Southwest Amendment Area’, the area will be developed with well and septic systems and the City will provide homeowners within the low-intensity urban development with information, guidelines, and contacts for testing their wells and drinking supplies;

G-8: Develop a strategy for the proper abandonment of wells.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City has an adopted program and strategy for abandoned wells located within the City and the City implements this program to insure that abandoned wells are properly sealed;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will utilize our existing well abandonment program and strategies for existing wells located within the proposed ‘Southwest Amendment Area’;

G-9: Measures should be taken to protect groundwater recharge areas and springs. Especially in urban area, the adverse impacts of development on groundwater, including diversion through pumpage and sewerage, as well as loss of recharge due to expanded impervious area, are significant and should be mitigated to the maximum extent possible.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona has adopted requirements for storm water infiltration, to recharge existing groundwater resources and springs;
- The City of Verona has required or implemented storm water infiltration measures in many recent development projects, including:
 - The West End mixed-use development;
 - The Scenic Ridge residential development;
 - The Cathedral Point residential development;
 - The reconstruction of West Verona Avenue infrastructure project;
 - The site development of Walgreens;
 - The site development of the Holiday Inn Express;
 - The site development of the ‘103 South Main Street’ redevelopment project;

- The redevelopment of Miller’s and Son’s Supermarket;
- The redevelopment of Park Bank; and
- The ‘Hankard House’ relocation and residential-to-commercial conversion project on East Verona Avenue;
- The City of Verona is an active supporter of the Madison Metropolitan Sewer District’s regional ‘watershed balancing’ efforts, in which treated effluent from the Nine Springs regional treatment plant (in the Yahara River Basin...) are returned to the Badger Mill Creek (in the Sugar River Basin...) in quantities sufficient to ‘balance’ groundwater that is withdrawn from the Sugar River basin and sent to the Yahara River basin for treatment.
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City will require infiltration within the proposed ‘Southwest Amendment Area’ to promote ground water recharge;
 - The City of Verona will continue to support MMSD’s ‘watershed balancing’ pumping of treated effluent to the Badger Mill Creek, including—if appropriate—support for pumping additional quantities of treated effluent from the Nine Springs treatment plant in the Yahara River basin back to the Sugar River basin *in an amount equivalent to the additional ground water demands and usages that are created from planned urban growth within the ‘Southwest Amendment Area’*.

G-10: State and local agencies should work together to develop a comprehensive ground water information and education program.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona is currently participating in County-wide ground-water modeling and forecasting discussions;
- The City of Verona provides public education and information about ground-water resources through a variety of sources, including quarterly newsletters distributed along with the City’s utility bills and the City’s web-site;
- The City of Verona participates in and contributes financially toward the ‘**My Fair Lakes**’ public education campaign, which includes radio spots and printed materials promoting public awareness about protecting ground water resources;
- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will continue to provide public education and information about groundwater resources through a variety of sources, including quarterly newsletters distributed along with the City’s utility bills and the City’s web-site;

- The City of Verona will continue to participate in and contribute financially toward the **'My Fair Lakes'** public education campaign, which includes radio spots and printed materials promoting public awareness about protecting ground water resources;

City of Verona ‘Priority Action’ Recommendations:

1. Implement the state NR 151, NR 216, and federal Phase II stormwater regulations (as applicable) along with the existing Erosion Control and Stormwater Management Ordinance (Chapter 14).

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City had adopted and utilizes/administers Dane County’s storm water management regulations as included in Chapter 14, which are based on NR 151, NR 216, and federal Phase II recommendations;
 - The City of Verona has adopted an Erosion Control and Stormwater Management Ordinance and has made several updates/revisions to this ordinance since it was originally adopted to keep it consistent with applicable State and County regulations;
 - The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - Existing City of Verona storm water management regulations—which are consistent with Dane County’s Chapter 14 requirements and which were based on NR 151, NR 216, and federal Phase II stormwater regulations—will be applied and enforced within the proposed ‘Southwest Amendment Area’;
 - Existing City of Verona erosion control regulations will be applied and enforced within the proposed ‘Southwest Amendment Area’;
2. Vigorously enforce and, in some cases, possibly expand comprehensive erosion control and stormwater management requirements beyond the minimum standards of Dane County Ordinance, Chapter 14, to protect the Sugar River and its tributaries from the adverse impacts of development.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona currently/already exceeds Dane County Chapter 14 requirements for stormwater requirements. Specifically:
 - The City of Verona currently requires *more* stormwater run-off to be detained in City of Verona stormwater management facilities than current Dane County Chapter 14 regulations require. The City utilizes a pre-condition curve number of 58 when calculating required sizes for stormwater detention facilities, whereas Dane County requires a curve number of only 63. The result of the City of Verona’s use of the more restrictive curve number when calculating size requirements for stormwater detention facilities is that larger detention pond facilities are required in

Verona to detain/retain larger amounts of stormwater run-off than would otherwise be required by Dane County regulations;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will continue to require *more* stormwater run-off to be detained in City of Verona stormwater management facilities within the ‘Southwest Amendment Area’ than current Dane County Chapter 14 regulations require.
 - The City of Verona will follow the recommendations of the final report from the 3-year ‘Badger Mill Creek-Sugar River Area’ study—entitled “‘Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona’”—for stormwater infiltration requirements that will provide *greater protections* within the proposed amendment area;
 - Erosion Control within the proposed ‘Southwest Amendment Area’ will similarly be based upon the recommendations of the final report from the 3-year ‘Badger Mill Creek-Sugar River Area’ study—entitled “‘Resource Assessment and Development Analysis for the Upper Sugar River and Badger Mill Creek Southwest of the City of Verona’”—for erosion control requirements that will provide *greater protections* within the proposed amendment area.
3. Implement the City stormwater management plan in cooperation with neighboring jurisdictions. Consider creating a stormwater utility for financing stormwater management programs.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona currently/already cooperates with neighboring jurisdictions to implement stormwater management plans. Specifically:
 - The City of Verona is currently cooperating actively with the City of Madison on plans for future stormwater management in the area north of the City of Verona—both north and south of C.T.H. ‘PD’. Portions of this area are included in the City of Madison’s comprehensive plan and others in the City of Verona’s comprehensive plan for future urban development. Because this area is a ‘closed basin’ with no natural outline for accumulated storm water, extensive planning and collaboration will be required to manage long-term stormwater issues;
 - The City is mid-way through a year-long examination of creating a storm water utility to fund stormwater management and environmental protection programs. At the time this ‘Southwest USA Amendment’ is being proposed

(summer—2009) it appears that local elected officials may chose to create such a utility before the end of this year;

- The City of Verona’s proposed ‘Southwest USA Amendment’ area is consistent with this recommendation as well. Specifically:
 - The City of Verona will cooperate with CARPC, Dane County, and the DNR on any issues related to stormwater management within the proposed ‘Southwest Amendment Area’, including treatment and requirements (such as rate or volume controls...) for any stormwater that is released into neighboring jurisdictions;
 - If a stormwater utility is created, its jurisdiction will include the proposed ‘Southwest Amendment Area’;
- 4. Participate with other units of government, and watershed and conservation groups, in water resources management activities for the Upper Sugar River and Badger Mill Creek.

The City of Verona complies with this recommendation and the proposed ‘Southwest USA Amendment’ also complies with this recommendation. Specifically,

- The City of Verona currently participates with other units of government and watershed and conservation groups in water resources management activities for the Upper Sugar River and the Badger Mill Creek. Specifically:
 - The City of Verona is an active member of the Madison Area Municipal Storm Water Partnership known as MAMSWAP. As part of this regional partnership, the City of Verona collaborates with other communities to coordinate stormwater management plans and regulations for communities within the NR 216 stormwater permit area;
 - The City of Verona is currently participating in County-wide ground-water modeling and forecasting discussions;
 - The City of Verona has historically collaborated with the Upper Sugar River Watershed Association, and City staff anticipate that City financial support for the USRWA will recommence in 2010;
 - The City of Verona collaborates with the Madison Metropolitan Sewer District on water resources management activities, including ‘regional watershed balancing’ efforts through the return of treated effluent from the Nine Springs Treatment Plan to the Sugar River watershed;
 - The City of Verona collaborates with the City of Madison on water resources management activities;
 - The City of Verona participates in County-wide
- The City of Verona’s proposed ‘Southwest USA Amendment’ will be consistent with some of this recommendation as well. Specifically:

- The City of Verona will continue to collaborate with the USBWA on water resources management activities within the proposed ‘Southwest Amendment Area’ for the Upper Sugar River and Badger Mill Creek;
 - The City of Verona will continue to participate in County-wide ground-water modeling and forecasting discussions;
 - The City of Verona will continue to participate in MAMSWAP and will apply the results of MAMSWAP collaboration in the proposed ‘Southwest Amendment Area’;
 - The City of Verona will continue to collaborate with the Madison Metropolitan Sewer District on water resources management activities within the proposed ‘Southwest Amendment Area’ for the Upper Sugar River and Badger Mill Creek;
5. Evaluate deicer use and snow storage practices for potential water quality impacts. Adopt a written salt use management policy.

The City of Verona complies with some of this recommendation and the proposed ‘Southwest USA Amendment’ also will comply with some of this recommendation. Specifically,

- The City of Verona currently/already reviews salt and deicer usages on an on-going basis. Specifically:
 - The City of Verona utilizes pure-salt or salt-sand mixtures as appropriate;
 - The Department of Transportation (DOT), and not the City of Verona, is responsible for deicing the over-passes on 18-151 where slurry mixes or other deicing options can minimize water quality impacts that result from current heavy salt usage on these overpasses;
- The City of Verona has evaluated its snow storage practices for potential water quality impacts and has determined that improvements can be made. Specifically, the City will pursue measures to minimize the amount of salt and other contaminants that drain from the City’s snow storage area into local surface water bodies;
- The City of Verona has not yet adopted a written salt use management policy but will pursue creating one, probably after the intensive and currently-demanding stormwater utility planning work is completed;
- The City of Verona’s proposed ‘Southwest USA Amendment’ will be consistent with some of this recommendation as well. Specifically:
 - The City will continue to evaluate its de-icing usages and will continue to utilize pure salt, salt-sand, and other deicing methods as appropriate;
 - Snow storage is not relevant to the proposed ‘Southwest Amendment Area’, because the City of Verona does not plan to store any snow within this proposed amendment area;

- Any written salt use management policy that is adopted will be applied to the ‘Southwest Amendment Area’;

6. Develop a wellhead protection program for municipal wells.

The City of Verona does not currently comply with this recommendation. The City of Verona does not currently have a wellhead protection program. The City had planned to begin such a program in 2009 but this City-goal was delayed so the City could instead pursue the *higher-priority goal* of creating a stormwater utility. At the time of this proposed ‘Southwest USA Amendment’ proposal, City department heads expect the Stormwater Utility to be created and implemented sometime in 2010, after which City department heads anticipate that attention and resources will once-again be turned toward creating a wellhead protection program.

- The City of Verona’s proposed ‘Southwest USA Amendment’ area will be consistent with this recommendation, once the City proceeds with creating a wellhead protection program. Specifically:
 - Any land uses within the proposed ‘Southwest Amendment Area’ that may fall or lie within an identified well-head protection area will be required to comply with wellhead protection requirements;