Planning Unit Staff Report

Recommended Cherokee Special Area Plan Revisions
Plan Commission--January 8, 2007

Introduction

The Plan Commission is scheduled to consider action on the Cherokee Special Area Plan, the memorandum of understanding for the acquisition of open space lands and the annexation agreement with Cherokee Park, Inc. at the Plan Commission meeting of January 8, 2007. On several occasions dating back to June of 2006, the Plan Commission has reviewed the principal draft land use recommendations for development of this area and the preservation of open space lands. Over the last year, the developer and City have also had neighborhood meetings to consider preliminary development concepts and land use issues related to the development of the Special Area Plan.

City staff has considered the comments and recommendations made by those who attended the neighborhood meetings and City board and commission meetings where the Special Area Plan has been reviewed. The plan has now been recommended for approval by the Board of Estimates, the Parks Commission and the Long-Range Transportation Planning Commission. Staff has considered carefully the comments and recommendations made by individuals who have attended the many meetings held during the development of the plan. The Parks Commission and Long-Range Transportation Planning Commission recommendations are attached for the Plan Commission's consideration.

After considering the comments that have been made, staff believes that the plan is now ready for Plan Commission action.

Staff Recommendations

Staff has reviewed comments received at various meetings and from the public and recommends that the following recommendations be added to the Cherokee Special Area Plan:

Stormwater Recommendations

- It is recommended that at the time of development, the developer work with the City to accomplish the stormwater management objectives. For example, the proposal to remove or obstruct the old farm drainage channels in the wetland east of Sherman Avenue has considerable merit. Diversion of some drainage to the southeast represents an "inter-basin transfer" and is problematic. Furthermore, differences in the regional flood elevation of the Monona-Starkweather Basin and the Mendota-Yahara Basin need to be taken into consideration. Stormwater detention basins should be designed and constructed in advance of any development phase. A goal of 80% reduction in suspended solids in the stormwater runoff is achievable. After being treated, the stormwater from Area 1 may be directed around the more disturbed southwest perimeter of the wetland, which has been previously designated for stormwater treatment during the construction of existing residential units west of Sherman Avenue. The stormwater would then flow north along Sherman Avenue and discharge into the Cherokee Golf Course to the same place it goes today, west through the golf course without the circulating through the wetland.
- Acquisition of the Stewart property will allow the City to better manage stormwater in that area. The acquisition presents an opportunity to interrupt the existing drainage channels to enhance the treatment of stormwater. Given the site, this needs to be undertaken thoughtfully with consideration for the removal of accumulated material and the biological impact to the site.
- Staff recommends that the Cherokee Marsh Management Plan for the Eastern Wetland be referenced in section ___ of the Cherokee Special Area Plan and attached as an appendix to the Special Area Plan. The management plan recommends a number of actions including filling drainage ditches in the marsh to restore natural hydrology, removing exotic species, reducing the current and future impacts of stormwater run-off through detention, infiltration, and diversions; and harvesting marsh hay to remove nutrients that favor exotic species which degrade the marsh.
- Staff recommends that the City undertake an independent review of the Maple Bluff landfill and evaluate and document the impact on the marsh.

Bike-Pedestrian Recommendations

- Create a bike path that extends near Dennis Drive on the east, and then heads south across CTH CV to International Lane near the airport. This would provide a connection to Anderson Drive and points east. This path should be shown on Map 9 of the Special Area Plan.
- Bike lanes should be added along CTH CV.
- Show a conceptual bike path on the Maple Bluff landfill property extending to CTH CV. This path is should be shown on Map 9 of the Special Area Plan.
- Staff supports efforts to improve bicycle pedestrian connections along and crossing Sherman Avenue from Wheeler Road to Northport Drive. Other north-

south connections in this area are also desirable, and could include a path through the PDQ property. This recommendation is found on page 28 of the Special Area Plan.

- Provide a bike-pedestrian connection be provided through the Wheeler Triangle to Comanche Way. This connection should be shown on Map 9 of the Special Area Plan.
- Add missing sidewalks in the planning area to a map that would be added to the Special Area Plan as an appendix. Staff supports the recommendation that sidewalk connections be provided wherever possible. Text will be added after the last bullet point on page 28 of the Special Area Plan. A map (Map 3-7) that shows areas that are missing sidewalks is included in the Comprehensive Plan and is included with this report as an Appendix. The map should also be added as an appendix to the Special Area Plan.

Green Building Recommendation

- The Special Area Plan encourages the developer to use green building practices that will be more specifically detailed at the zoning application stage.

Conclusion

The Cherokee Special Area Plan is the result of many meetings and discussions concerning the appropriate mix of residential development, land uses and the preservation of parks and open space lands within the study area. These discussions have occurred over the last couple of years. Following several neighborhood meetings and Plan Commission discussions on the draft land use recommendations, the full Cherokee Special Area Plan document has been prepared for your consideration and adoption. The plan provides an appropriate and desirable mix of dwelling unit types and densities, which are compatible with nearby existing residential neighborhoods, and at the same time, does so in a way which allows adequate infrastructure and services to be provided while protecting the highest priority open space lands in the area.

The City's recently adopted Comprehensive Plan provides the basis for the development of the Cherokee Special Area Plan. The City of Madison has over a 40-year history working with Cherokee Park, Inc. on development planning for this area. The City of Madison has the ability to set in place a plan for this area along with a memorandum of understanding and annexation agreement with Cherokee Park, Inc. which will allow the

City to acquire the highest priority open space lands within this area, and which will guide the development of the remaining developable lands.

The memorandum of understanding is a very good agreement for the City of Madison. The memorandum of understanding with Cherokee Park, Inc. was the result of a negotiation that has resulted in an agreement in which the City will acquire approximately 279 acres of land and open space easements for approximately $4.5 million. The memorandum of understanding reflects a negotiation with the developer which has resulted in the City being able to meet its highest priorities for open space acquisition while meeting the property owner's highest priorities for residential development on the remaining acreage. The memorandum of understanding is a compromise between the City and the developer, but is one that, staff believes, is clearly in the public interest to implement. These lands are being acquired from a willing seller (i.e. Cherokee Park, Inc.). It is very important to remember that the Wisconsin Department of Natural Resources and Dane County grants cannot be used if the City proposed to use condemnation (eminent domain) to acquire these lands.

The alternative development proposals that have been presented for the areas south of Wheeler Road, which move residential development and associated densities from the area north of Wheeler Road, are not supported by City staff. The alternative land use plans and development proposals for this area, aside from changes similar to the ones suggested in this report, would require the planning process for the Special Area Plan to start over, along with negotiations on the acquisition of open space lands (the memorandum of understanding) and the annexation agreement. Planning Unit staff believes that it is time to act on the Special Area Plan and put in place a plan, memorandum of understanding and annexation agreement that will accomplish the recommendations of the City's adopted Comprehensive Plan for this area, preserve the highest priority open space lands, and result in a development pattern that is compatible with nearby existing residential neighborhoods.

Appendix

Board of Park Commissioners Action

At its December 13, 2006 meeting, the Board of Park Commissioners took the following action:

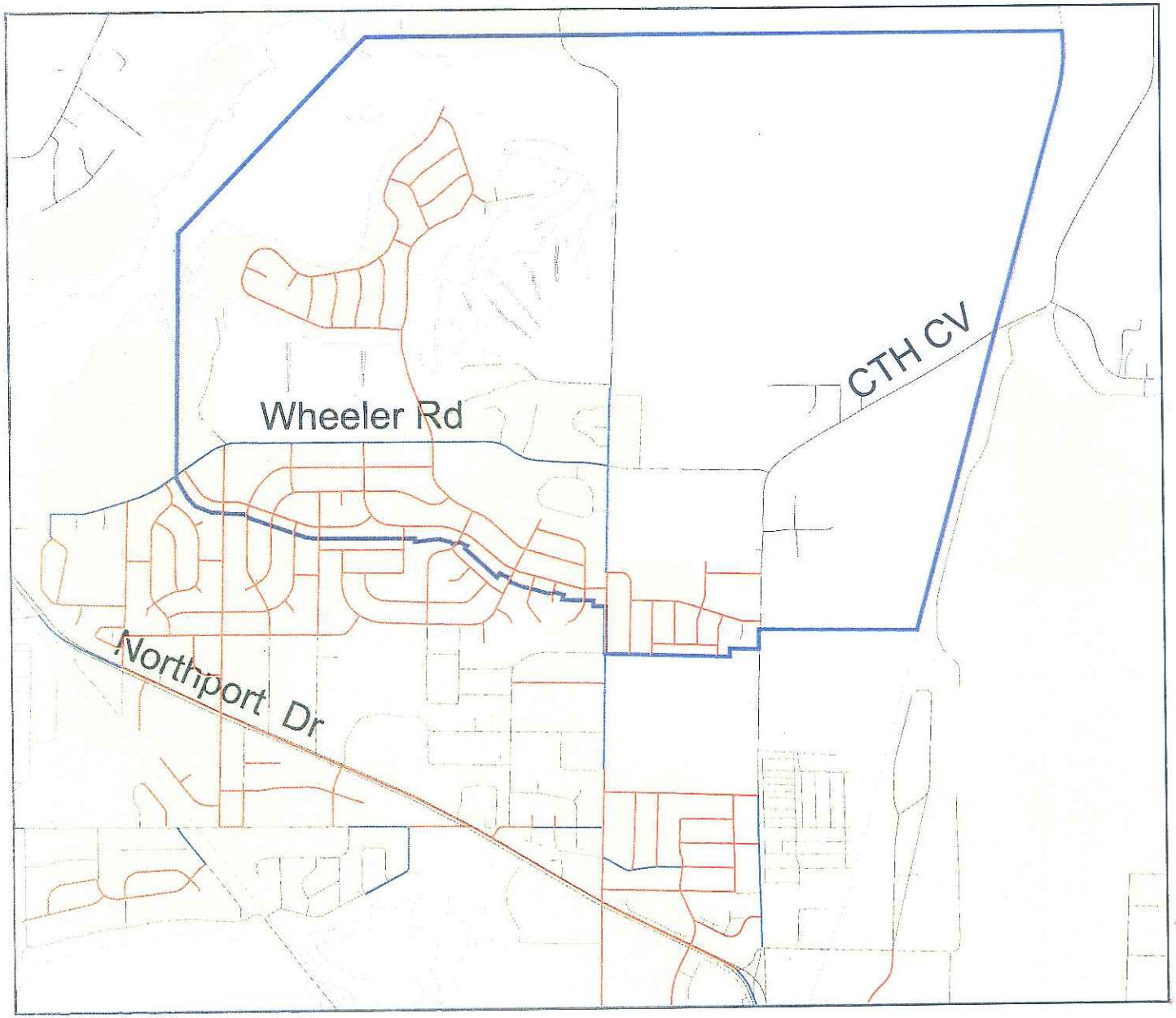
A motion was made by Skidmore/MacDonald with a friendly amendment by Webster/Scarborough to approve Resolutions #04939, #04942 and #04956 while acknowledging the issues raised with Current Cherokee Special Area Plan and Cherokee Marsh Management Plan for the Eastern Wetland and urging the Plan Commission to give full and due consideration to alternative proposals that enhance the park and green space preservation. **MOTION CARRIED UNANIMOUSLY.**

Long-Range Transportation Planning Commission Minutes (December 21, 2006)

See attached minutes.

Map

Pedestrian Facilities—Map 3-7



VOLUME I MAP 3-7

Pedestrian Facilities

City of Madison
January 2005

GENERAL STUDY AREA

Cherokee Special Area Plan

EXISTING SIDEWALKS *

Sidewalk Both Sides
Sidewalk One Side Only
No Sidewalks

City of Madison
Other Cities and Villages
Unincorporated Areas

* Does Not Include
Multi-Functional Bicycle Paths

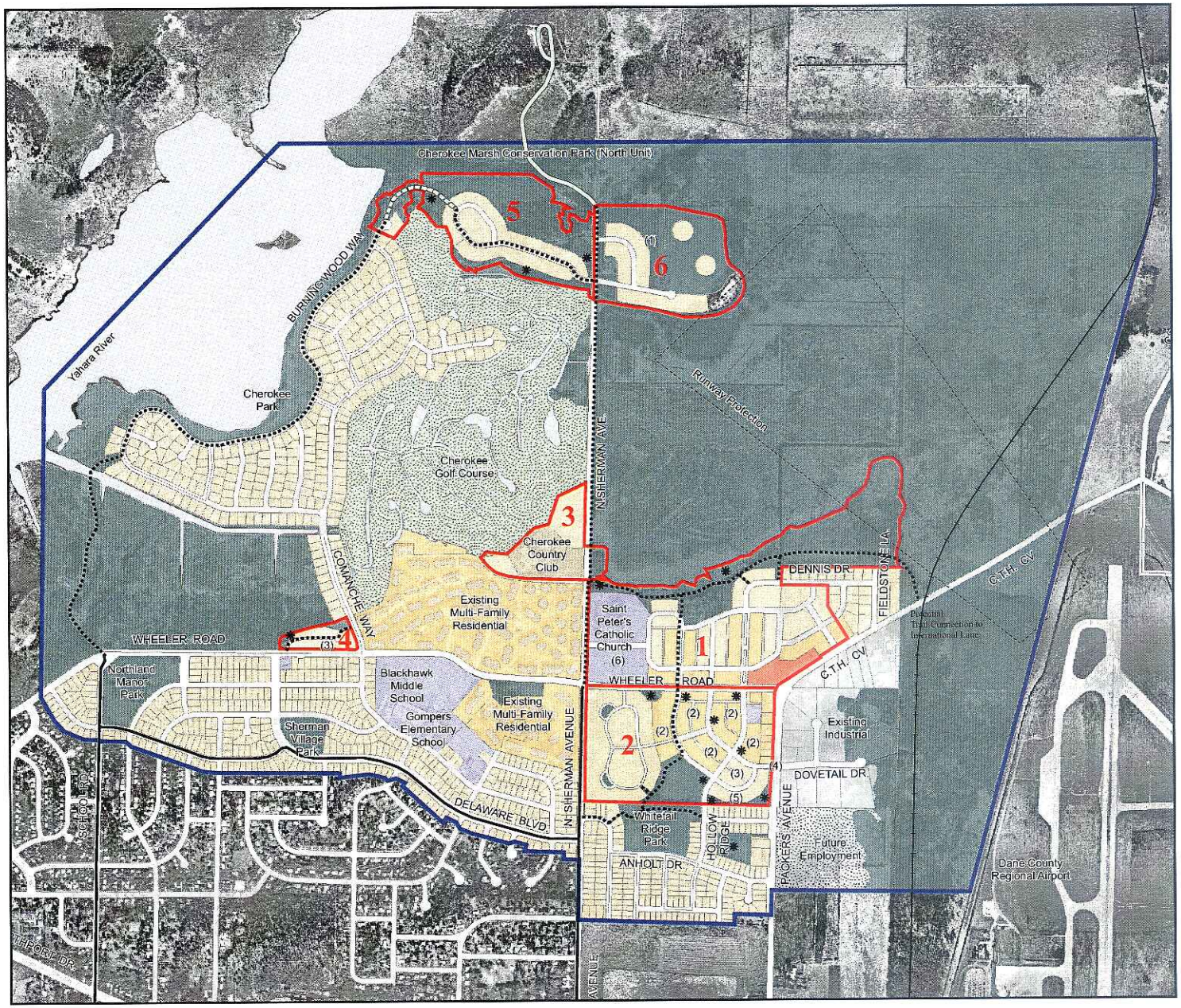
Data Source:
City of Madison Department of Planning and Development, Planning Unit
City of Madison Department of Engineering

0 1,000 2,000 3,000
Feet

N

City of Madison
COMPREHENSIVE PLAN

April 14, 2006 4:09pm



Draft

Map 9
RECOMMENDED LAND USE
Cherokee Special Area Plan
November 2006

- STUDY AREA
- CORE PLANNING SUB-AREAS

RESIDENTIAL
- Low Density Residential
  - Density Range (<8 du/net ac)
  - Density Range (8-15 du/net ac)
- Medium Density Residential (16-25 du/net ac)

COMMERCIAL/EMPLOYMENT/MIXED USE
- Neighborhood Mixed Use
- Industrial
- Employment
- Cherokee Country Club

INSTITUTIONAL

PARK, OPEN SPACE, AND STORMWATER MANAGEMENT
- Park Drainage and Open space
- Golf Course
- Proposed Stormwater Detention

POTENTIAL FUTURE DEVELOPMENT AREA

LAND USE NOTES

(1) "It is recommended that there be no additional development on the top portion of the hill. Future development may be allowed around the lower portions of this hill only if such development is done with sensitivity to the topography in a manner that preserves open space and views to the hill from surrounding properties, and provides adequate vegetative buffers from the existing park property." (City of Madison Comprehensive Plan)

(2) A variety of type and size of structure is sought in these areas.

(3) Smaller scale structures are sought in these areas.

(4) Street alignment planning will continue to examine a connection to Packers Avenue at Dovetail Drive as a preferred option.

(5) Single-family detached housing is recommended for this area.

(6) The St. Peter's Church institutional use will continue. Should portions redevelop, residential at 8-15 dwelling units per net acre is recommended.

- STREET ROW (Public and Private)

SPECIAL FEATURES
- Runway Protection
- Railroad Realignment
- Cherokee Marsh Cons. Park Access Road
- Trail/Emergency Access Road
- Exisitng Bike Routes
- Proposed Routes,Paths and Trails

Data Source:
City of Madison, Dept. of Planning and Development

0 500 1,000 1,500 2,000
Feet

City of Madison
Dept of Planning and Development, Planning Unit

Last edited: January 5, 2007

m:\arcview\sfc_plan\projects\ neighborhood plans\cherokee\cherokee special area plan maps\current map\map 9a

MINUTES

Long-Range Transportation Planning Commission (LRTPC)

Thursday, December 21, 2006
Room LL-110, Madison Municipal Building
5:00 p.m.

-- **CALL TO ORDER**

Chair Mark Shahan called the 12-21-06 meeting of the Long Range Transportation Planning Commission to order.

1. **ROLL CALL**

Members Present:	Kevin Hoag; Matt Logan; Sup. Al Matano; Mike Rewey; Bob Schaefer; Mark Shahan; Ald. Robbie Webber; Tim Wong.
Members Absent:	Judy Bowser (*notified*); Sup. Dave de Felice (*notified*); Ald. Ken Golden (*notified*); Ald. Brenda Konkel (*notified*).
Staff Present:	Dan McCormick (Traffic Engineering); Brad Murphy (Planning Unit Director); Rick Roll (Planning Unit); David Trowbridge (Planning Unit); Si Widstrand (Parks Division).
Others Present:	Jon Becker (Friends of Cherokee Marsh; 4233 Kenwood Street); Randy Kyle (5317 Arapahoe Lane); John Lichtenheld (Schreiber Anderson Associates); Rob Montgomery (2820 Walter Commons West); Bill White (Cherokee Park; 2708 Lakeland Avenue).

2. **APPROVAL OF MINUTES FROM NOVEMBER 16, 2006 MEETING**

Mark Shahan said that, on page 2, paragraph 3 (4th sentence) the word "could" should be changed to "should".

Bob Schaefer said that the minutes should reflect the fact that Planning Unit staff do not feel 10-foot bicycle paths are necessary (as was suggested by LRTPC member Mike Rewey). David Trowbridge said that he would make these changes.

The Minutes of the 11-16-06 LRTPC meeting were then unanimously approved (as amended), on a motion submitted by Tim Wong/Bob Schaefer.

3. **OPPORTUNITY FOR PUBLIC COMMENT**

There were no members of the public wishing to speak in regard to future LRTPC agendas.

4. **RESOLUTION ID 04939, "ADOPTING THE CHEROKEE SPECIAL AREA PLAN AS A SUPPLEMENT TO THE CITY OF MADISON COMPREHENSIVE PLAN, TO INCLUDE LANDS LOCATED WEST OF THE DANE COUNTY REGIONAL AIRPORT, NORTH OF PORTIONS OF THE WHITETAIL RIDGE AND SHERMAN VILLAGE SUBDIVISIONS, EAST OF YAHARA RIVER AND SOUTH OF THE CHEROKEE CONSERVATION PARK AND ADJACENT CHEROKEE MARSHLANDS": COMMISSION CONSIDERATION OF RESOLUTION**

Public comment on this agenda item was deferred until after Brad Murphy (Planning Unit Director) summarized the key components of the Cherokee Special Area Plan. Dan McCormick (Traffic Engineering) also summarized some of the key transportation issues.

McCormick pointed out that the automobile traffic generated by the additional residences recommended in the Plan could generally be accommodated by the existing street network, although some intersection improvements would be necessary (such as at Northport Drive and Sherman Avenue). He felt that there are a number of places where connectivity among bicycle and pedestrian facilities (and their linkages to activity centers) could be improved, and that Traffic Engineering has recommended some. McCormick also said that better connections across major streets could improve pedestrian movements.

Mike Rewey felt that there is no need for bicycle lanes on Sherman Avenue north of the golf course club house. Ald. Robbie Webber asked if that section of Sherman Ave would have curb and gutter. McCormick said that the design details had not been worked out with Wisconsin DNR, but that sidewalks would be included on one side of the street. Mike Rewey said that the sidewalk should be on the west side of Sherman. Ald. Webber said that there should be bicycle accommodations all the way to the trail head (at the north end of Sherman).

Mike Rewey said that a 10-foot bicycle path would be appropriate in those areas and that emergency vehicles can use 10-foot paths. Matt Logan felt that there should be better access between area 2 of the Plan and the schools to the west. Mike Rewey agreed that a path could address that need. Rewey also said that Wheeler Road may need bicycle accommodations in the future, as it is the most direct east-west street. Rewey noted that collector streets should have bicycle lanes, such as along Wheeler Road (between Sherman Ave and CTH CV).

Mark Shahan asked that a map be provided that identifies the places where sidewalk connections are missing, and where there are proposals to correct them. He also said that a short paragraph should be included that explains how sidewalk reconstruction is phased to coincide with street reconstruction.

At this time, the commission asked that public comment be presented.

Randy Kile said that he supported the resolution and offered some comments. He said that he preferred the sidewalk to be on the east side of Sherman Ave, citing conflicts with golfers. He also said he prefers to have one street access into the north side of the development area, rather than two.

Bill White (Cherokee Park) said that adult recreation is the focus of the development. He added that narrow street can be used and that cut-through traffic is discouraged. He also said that topographical constraints would hinder the addition of a connection from development area 2 into the school area. Ald. Robbie Webber said that more kids could be occupying the development in the future and that connections to the school should be made now. Mike Rewey agreed that families would be in these areas in the future.

Jon Becker (Friends of Cherokee Marsh) asked that the LRTPC and Plan Commission support the Friends' recommendations, which he handed out at the meeting. He said that he supports the concept to reduce the density of development on the north side of the Plan area and agreed that better connections for bicycles and pedestrians are important. He said that Sherman Avenue should meander and he also supported the use of porous pavement in the area (as it is better for wetlands).

(Note: A copy of Mr. Becker's comment summary handout can be obtained by request)

Bob Schaefer asked if freeze/thaw would affect the durability of porous pavement. Becker said that there has been some success in Pennsylvania (which has cold temperatures) and that further testing is going on at this time. Becker also said that the cost is comparable to traditional road materials.

John Lichtenheld (Schreiber Anderson Associates) said that his firm was asked to review the traffic impacts of the Plan. He said that most of the additional traffic has been designed to stay off local streets, and to load onto Wheeler Road, CTH CV and Sherman Avenue. He said that Wheeler Road could remain a 2-lane facility and accommodate the additional traffic. Lichtenheld agreed that various intersection improvements would be needed and that a detailed analysis of the Sherman/Northport intersection would be needed. Mike Rewey pointed out that CTH CV was planned to be re-paved only, not expanded.

Bob Schaefer/Mike Rewey then submitted a motion to approve the resolution and request that the Plan Commission consider the LRTPC's comments (as reflected in the Minutes). Mike Rewey also asked that his written comments be considered as part of the LRTPC minutes and considered by the Plan Commission, if acceptable to LRTPC. Rewey then summarized his written comments (*Note: Mr. Rewey's written comments are located at the end of these Minutes, beginning on page 4, below*).

Mike Rewey felt that the bicycle path along Sherman Avenue should be located on the west side of the roadway. He also felt that bike lanes should be included on Wheeler Road. Rewey said that roundabouts should be considered at the intersections of CTH CV/Wheeler Road and at Wheeler Road/Sherman Avenue.

Mark Shahan said that a map should be developed that shows all of the bicycle and pedestrian connection ideas that have been suggested, and some additional connections should be identified. He gave the example of a possible north-south connection between Comanche Way and Troy Drive, although existing apartment buildings would pose a challenge.

Si Widstrand (Parks Division) said that there should not be a path through the current farm field at the north side of the development area or in the wetland area. He also felt that the marsh area north of Wheeler Road should be left alone.

Mike Rewey said that the area needs to be better managed, noting that several areas have collected garbage, etc. Widstrand said that hiking trails are acceptable in some of the areas. Mike Rewey said that he supports a tight walking path close to the development in area 5 of the Plan.

Mark Shahan said that a path should be shown north of the development in area 1. Shahan also said that he supports bicycle lanes along Wheeler Road. Shahan said that a pedestrian/bicycle connection between development area 2 and the schools should be seriously considered. Shahan also suggested that the developer contribute to the costs to improve Sherman Avenue south of Wheeler Road (such as adding bike lanes), and noted that Buckeye Road (east of USH 51) was a good roadway cross-section/design that should be considered.

Sup. Al Matano, citing the Friends of Cherokee Marsh handout, said that the concept of an "amphibian underpass" across Sherman Avenue should be considered.

The Commission then voted 7-1 to recommend adoption of Resolution ID 04939 and request that the Plan Commission consider the LRTPC's comments (as reflected in the Minutes), on the original motion submitted by Bob Schaefer/Mike Rewey. Commissioner Tim Wong was the lone "no" vote.

5. INFORMATION AND ANNOUNCEMENTS BY CHAIR AND COMMISSION MEMBERS - Note: No Discussion of Specific Items

Mark Shahan said that Matt Logan would be stepping down from the LRTPC and a new Vice Chair would be needed. Shahan asked that election of Vice Chair be placed on next month's agenda. He also said that the PBMVC was planning to appoint Mary Conroy as Logan's replacement.

There were no other announcements or information submitted by the Chair or Commission members.

6. **SCHEDULE OF FUTURE MEETINGS**
- Next Meeting: Thursday, January 18th, 5:00 p.m., Room LL-110 MMB

David Trowbridge noted that the January 18th meeting could possibly include a review of design options for the CTH S/CTH M intersection on the west side.

7. **ADJOURNMENT**

The Commission adjourned its meeting at 7:00 p.m.

****
Addendum to the Minutes: Written Comments Submitted by Michael W. Rewey
****

Comments on the Transportation Components of the *Draft* Cherokee Special Area Plan

City of Madison
Department of Planning and Development, Planning Unit

Michael W. Rewey
December 21, 2006

Existing Transportation Facilities

Page 8 Roadway Facilities

Correction: Between Comanche Way and just west of Cherokee Circle , Wheeler Road has a sidewalk on both sides of the street. Between Comanche Way and Cherokee Circle, Wheeler Road has a sidewalk on the north side of the street. West of Comanche Way, Wheeler Road has a sidewalk on the south side of the street.

Page 9 Bicycle Facilities

Correction: **Through streets suitable for adult bicyclists** include Wheeler Road, North Sherman Avenue, Comanche Way and Delaware Boulevard north and south of Northland Drive. These streets are collector or arterial streets generally suitable for most adult bicyclists, but without any special facilities for bicyclists.

Collector streets connect the neighborhood streets to the arterial streets. Collector streets have higher volumes of traffic and higher speeds than local streets. Bicycle lanes should be considered to encourage more on-street bicycling.

Correction: **Bike routes include CTH CV, Delaware Boulevard, Northland Drive and North Sherman Avenue.** Eliminate wide curb lane (where there is no parking) as a bicycle facility type. Motor vehicles tend to take over the entire lane and increase speeds. Only experienced adult cyclist feel comfortable in wide curb lanes. They do not encourage new users.

Correction. Delaware Boulevard north and south of Northland Drive. These streets are collector or arterial streets generally suitable for most adult bicyclists, but without any special facilities for bicyclists. Collector streets connect the neighborhood streets to the arterial streets. Collector streets have higher volumes of traffic and higher speeds than local streets. Bicycle lanes should be considered to encourage more on-street bicycling.

Page 10 Bicycle Facilities

Correction: **A bike path connects Delaware Boulevard to Monica Lane.** . Eliminate this reference. This park path functions only as a sidewalk and is not plowed in winter. Monica Lane actually intersects with Delaware Boulevard.

Page 10 Pedestrian Facilities

Correction: North Sherman, between Wheeler Road and Golf Parkway and has sidewalk on the west side. North of Golf Parkway there is no sidewalk.

Page 10 Rail Facilities

Correction: This line is also being considered for High Speed Rail (Milwaukee-Madison, Twin Cities).

Other Planning Considerations

Pages 13 & 14 Potential Street Extensions

Conceptually OK..

Hornung Range Sub-area (1) Recommendations

Page 19 & 20 Park and Open Space Uses

Path reference is conceptually OK.

Page 20 & 21 Transportation System

Conceptually OK.

Hornung Woods Sub-area (2) Recommendations

Page 22 Park and Open Space Uses

Path references are conceptually OK.

Page 22 Transportation System

Conceptually OK.

Cherokee Country Club Sub-area (3) Recommendations

Page 22 Transportation System

Conceptually OK, but recommend that path be placed on west side of North Sherman Avenue.

Wheeler Triangle Sub-area (4) Recommendations

Page 23 Transportation System

Conceptually OK.

Cherokee Park Fifth Addition Sub-area (5) Recommendations

Page 24 Park and Open Space Uses

Recommend Path in buffer area from Burning Wood Way cul-de-sac to North Sherman Avenue.

Page 25 Transportation System

Conceptually OK. The paved emergency path should be built as a 10-foot paved multi-purpose path with 2-foot stabilized shoulders on both sides. This is standard path construction and is more than suitable for emergency vehicles. As an example, heavy city trucks use the10-foot Starkweather Path on a regular non-emergency basis.

High Hill Sub-area (6) Recommendations

Page 26 Transportation System

Conceptually OK.

Recommended Transportation Facilities

Pages 26 & 27 Preliminary Traffic Review

Traffic Calming on Wheeler Road. The proposed traffic calming has some potentially adverse impacts on some of the turning movements at Comanche Way, Golf View Road and North Sherman Avenue. Care must be taken in the decision process and care must be taken to not adversely impact on-street biking.

Page 27 Preliminary Traffic Review

Recommend a Round-about at North Sherman Avenue and Wheeler Road.

Recommend a Round-about at CTH CV and Wheeler Road. Early coordination is required because of an upcoming resurface project on CTH CV.

Proceed with caution on traffic calming on North Sherman Avenue. Any claming should not adversely impact on-street biking. Marked bicycle lanes may be desirable.

Pages 27 & 28 Preliminary Traffic Review

Recommend a traffic study for the North Sherman Avenue – Northport Drive (STH 113) Intersection.

Page 28 Recommended Pedestrian-Bicycle Facilities

1. An off-street path connection between Wheeler Triangle and Comanche Way. This should enter Comanche Way at Golf Course Road. The Golf Course Road-Golf Parkway bike/ped corridor extends to North Sherman Avenue and the Country Club. It is recommended that this path also extend westerly to School Road extended. This could be limited to pedestrian only. *(See bullet 5)*

2. An off-street path on on-street bike facility connection between Hornung Woods woodlot and Gompers and Blackhawk Schools. The crossing of North Sherman Avenue could occur at approximately Cherokee Circle, just north of the private home on the east side of North Sherman Avenue.

3. An off-street connection between the Hornung Woods and Whitetail Ridge Park. Yes.

4. An off-street path along North Sherman Avenue, north of Wheeler Road. This path should be north of Golf Parkway and on the West side of North Sherman Avenue extending to the Fifth Addition. A path for only pedestrians may be adequate. In either case on-street bicycle accommodation is needed

5. An off street path between Wheeler Road and Menomonie Lane. This is assumed to be from the intersection of Wheeler Road-School Road northerly across the canal to Menomonie Lane, a distance of ½ mile. The path would require continuous lighting.

6. An off-street path between Burning Wood Way and the Fifth Addition. The width of this paved path should limited to 10 feet with 2-foot stabilized shoulders. This is more than adequate for alternative emergency vehicle access to the Fifth Addition. Remember that existing Cherokee has been adequately served with only one access since 1970.

7. An off-street path and on-street route through the Fifth Addition. Agree. There should be an off-street paved path from the Burningwood path around the north side of the First Addition easterly over to North Sherman Avenue across form the High Hill Sub-area (5). In addition a foot path should connect more directly from that path into the Cherokee Marsh Park.

8. An off-street and on-street east-west route through the Hornung Range Area. Agree.

9. A designated on-street route on the proposed north-south street that would connect the Hollow Ridge Road to the Hornung Range sub-area. Agree.

10. A new east-west public pedestrian/bike easement is needed to connect to North Sherman Avenue and extend to the east to the new north-south public streets planned in the Hornung Woods sub-area. Agree.

Additional pedestrian/bicycle facilities are recommended to provide connections external to the study area. These include.

- Connecting Comanche Way and Wheeler Road, including Blackhawk and Gompers Schools to Northport Drive and Warner Park. This would be via the local street system from Wheeler Road to Troy Drive. A pedestrian/bike easement through the existing PDQ site needs to be acquired and constructed to provide the physical connection to Northport Drive and the existing signal at Troy Drive to make this north-south street connection a reality and connect the Cherokee area to important activity centers in a pedestrian/bicycle friendly manner. Agree conceptually but this may not be the only solution for crossing Northport Drive.

- Connecting North Sherman Avenue, including Cherokee Marsh Park and the Hornung Range, to CTH CV via Dennis Drive extended to CTHY CV and the Canadian Pacific Rail Line, these types of facilities are likely to become of more interest in the future to connect this area to lands to the northeast such as DeForest, the Token Creek Park and other regional trails having potential; there in the future. Agree. Take a hard look at utilizing the abandoned CPRR line to connect to International Lane.

Reaction to Michael Forster Rothbart Comments.

1. Agree. I already commented on page 4 regarding similar bullet from study.
2. Agree.
3. Do not agree. Not feasible.
4. Agree, but would make connection to North Sherman Avenue farther south with a foot path more northerly into Cherokee Marsh Park. See bullet 7 on page 4.
5. Agree. See bullet 1 on page 3.

Roll, Rick

From: Jonbecker@aol.com

Sent: Thursday, January 04, 2007 4:23 PM

Cc: cherokeemarsh@gmail.com; janet@grammata.com; jan@Lvr.com; hammed@tds.net; dorothywheeler@charter.net; msimms@tm.net

Subject: Fwd: Land Trust role (Cherokee development)

Hello Rick,

I'm forwarding a note from *Natural Heritage Land Trust*, for distribution to PC. It follows below, and is also attached as an MS Word doc.

Please let me know if it is too late to include in the PC packets, and that I'll therefore need to bring 25 copies Monday night.

Best,
Jon
Friends of Cherokee Marsh & Upper Yahara Watershed

&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&

In a message dated 1/4/07 4:01:54 PM, jim@nhlt.org writes:

> **To City of Madison Plan Commission**
>
> **The Natural Heritage Land Trust, a non-profit conservation organization, has already been in discussions with the City of Madison and hopes to partner with the City to obtain government funds not available to the City for the purchase of land and conservation easements the City hopes to make at Cherokee Marsh.**
>
> **The Land Trust may be willing to work with the *Friends of Cherokee Marsh & Upper Yahara Watershed* in a similar fashion but has not made any commitment to do so, pending provision of additional information. The Land Trust seeks strong community consensus from local units of government and residents before assisting with such projects.**
>
> **Our project evaluation process considers the costs, likelihood of funding, and level of community support (which is a big determinant of the ability to raise the funds), in addition to the conservation merits of a project.**
>
> **Jim Welsh**
> **Executive Director**
> **Natural Heritage Land Trust**
> **www.nhlt.org**
> **608/258-9797**

Roll, Rick

From: Paul Noeldner [paul_noeldner@hotmail.com]
Sent: Thursday, January 04, 2007 9:54 PM
To: Roll, Rick
Subject: FW: 4:1 ratios

Rick - cc fyi and for the record - my response to city staff followup query re upland:wetland ratios.

Paul Noeldner 608-698-0104
/
\
(:>)
/
\

From: paul_noeldner@hotmail.com
To: swidstrand@cityofmadison.com
CC: rhefty@cityofmadison.com
Subject: RE: 4:1 ratios
Date: Fri, 5 Jan 2007 03:49:03 +0000

Hello, Si -

In response to your query, I would refer you to a Google search for 'upland wetland ratio 4:1'. This will bring up numerous hits for documents related to CRP and WRP programs, for example "**WRP** allows for a maximum 6:1 **upland/wetland. ratio".** The CRP and WRP programs are a useful reference because they apply legislatively enabled, scientifically based formulas to procure and protect huge numbers of wetland acres and surrounding habitat using public funds.

This same search also brings up references to ecosystem impacts, for example "wildlife needs a 4:1 upland to wetland ratio for ideal conditions". This one from Ducks Unlimited regards productive breeding habitats for wetland nesting birds, "**upland** to **wetland ratio** of 10-to-1 is a significant improvement over past CRP practices that only allowed a **4-1 ratio**".

The importance of preserving a significant ratio of upland to wetland acres is highlighted in links such as this reference that also comes up in the above search,
at http://www.cwp.org/wetlands/catalog/articles.pdf: "terrestrial zones of upland habitat surrounding wetlands serve another critical but often overlooked function. Rather than simply a buffer, they are core habitat for many semi-aquatic and terrestrial "ecotone" species. They are therefore essential for the survival of a number of species and for the preservation of biological diversity."

I'm not a scientist, but even from these few links the message is pretty clear that preserving some significant ratio of uplands (certainly more than 0.5:1) is scientifically required as well as economically sound in terms of public investment and protection, to assure the long term sustainability and maximize ecological diversity of a sensitive wetlands area plan.

This highlights why concerned citizens would want the Plan Commission to direct public staff to work to mitigate impacts of surrounding development by preserving as many remaining open upland acres as possible, and to configure housing density within approved scales to apply as low a density as authorized nearest the wetlands and to apply the maximum approved high density scale in areas furthest from wetlands, to achieve the overall development unit goals in a manner that will also preserve the ecological investment and public value.

Therefore I think this data, even with a cursory analysis, indicates clearly that preserving a

significant upland:wetland ratio, regardless of the exact number, is a scientifically justified reason the city should not treat Cherokee area development plans as a just another mixed housing suburban development with scattered high and low density. Rather, when applying approved density ratio options within specific parts of the plan, the city should instead utilize modern design and density distribution goals for a special urban area development proximate to a very sensitive regional area wetland and watershed.

Paul Noeldner 608-698-0104
/
\
(:>)
/
\

Subject: 4:1 ratios
Date: Thu, 4 Jan 2007 11:03:53 -0600
From: SWidstrand@cityofmadison.com
To: paul_noeldner@hotmail.com
CC: RHefty@cityofmadison.com

Rick passed along your email to me. We know about the 4:1 ratio but have not been able to find the research that you refer to. If you have papers or references, we would love to read them. SW

Roll, Rick

From: Carin Mizera [CarinM@fsmad.org]
Sent: Thursday, January 04, 2007 2:54 PM
To: Roll, Rick
Subject: Preserve Cherokee land

I'm writing in support of the Proposal to preserve land adjacent to Cherokee Marsh as drafted by the Friends of Cherokee Marsh. I have read the proposal and believe it to be a reasonable and sound recommendation to preserve not just the wetland, but the watershed area surrounding it, and of course any groundwater effected by it. Also effected is of course flood levels, wildlife, air quality, quality of life, etc.
To give economic advantage to the already economically advantaged over preserving vulnerable resources is unacceptable. I hope the decision is made to do the right thing in this matter.
Carin Mizera
Madison, WI

Take sides. Neutrality helps the oppressor, never the victim.
Silence encourages the tormentor, never the tormented.
- Elie Wiesel,accepting the 1986 Nobel Peace Prize

EMAIL COMMUNICATION 2 JAN 2007

Dear Jon,
.....

I believe that you have correctly identified the areas that are eligible for the Dane County Conservation Fund Grant Program. Looking at the maps, it does appear that Subarea 4 is included in the mix of eligible areas.

It is difficult to answer your questions regarding the City's application to the County since nothing has been submitted. I believe that the City is still negotiating and will not officially request County assistance until it is clear what the request is for, which is the appropriate way to handle the situation. At that time, the Dane County Board and Executive will respond to the request via resolution and I am not in a position to guess what their response might be.

It is also difficult to answer your question regarding the connection of Cherokee Marsh to other City parks/open spaces. The only document that I am qualified to answer questions on is the Dane County Parks & Open Space Plan (POSP). The POSP does not reference any connections between Cherokee Marsh and other city parks/open spaces.

Please let me know if you need clarification on the information above or have any other questions.

Regards,
Laura

Laura Guyer
Conservation Fund Manager
Dane County Land & Water Resources Department
phone: (608) 224-3765
fax: (608) 246-3898
1 Fen Oak Court #234
Madison, WI 53718

EMAIL COMMUNICATION 4 JAN 2007

Dear Laura,

Thanks for your detailed response.

BTW, the Dane County map that you sent me last week, showing the DCDNRA overlaid with environmental corridors does show at least one eco-corridor connection from the City's western portion of the Cherokee Marsh, the conservation park near School Road, to its Northland Manor Park, across the street at the corner of Wheeler and School Roads.

Perhaps this is the last remnant of the work rumored to have been done by City Parks in the 1970s & 80s, and now absent for some reason from both city and county Parks planning documents?

Best
Jon

Dear Plan Commission Members:

I, and many other citizens, remain concerned about the impact of the Cherokee Special Area Plan. While the city staff has included important recommendations to help improve the way the development will interact with the area on which it is to be built, there are aspects which have continued to be downplayed or ignored. I commend the city for having the vision to acquire the 234 acres of wetland that has been neglected for many years. Unfortunately, when they considered that area, they did not look at the whole ecosystem, which includes the lowland and upland areas just south of the peat marsh that the city wishes to purchase. These areas have been identified as recommended open space by Dane County, and are linked to the wetlands in many ways.

Right now you have the opportunity to preserve one of the most important ecologies in Dane County. The Cherokee Marsh and its attendant lowlands and uplands perform critical functions for the Yahara River and all of our lakes downstream. It can also be used to help maintain or possibly improve our groundwater quality, if we choose to preserve and restore the whole so that it functions to its full capacity.

By allowing development on this area, the city is risking further damage to the peat marsh, as many experts have testified during this long process. While mitigation efforts will be made, such efforts are expensive, and do not always succeed. Certainly, you will be choosing to let go of a naturally-occurring part of our infrastructure, one that humans cannot come close to replicating or improving upon.

We are all approaching many tipping points in our human developments. This is one, as the loss of this open space will permanently alter the area. I know that the city staff say that they will "protect the environment", but our human record on that is poor, and even when we mean well, engineered solutions and "mitigation" never work as well as allowing "nature" to do the work. Using the natural infrastructure of the whole marsh area will save us money, protect our water quality, and preserve (or hopefully improve) the health of Madison's very precious lakes.

The Friends of Cherokee Marsh ask you to amend the Special Area Plan so that we can pursue the option of maintaining Subarea 1 as open space, and eventually restoring it to its critical functions. We ask that you recommend that development be kept away from this are, and that all support be given to the Friends and the developer to find a solution that allows this to be open space. Because Subarea 4 is similarly environmentally delicate, we ask that you consider the same for this area. Whether it is through purchase, transfer of dwelling units to another location, or a combination of the two, we ask for the time and support to pursue the best options for these areas, rather than allow development to occur and leave us with a situation we may well regret in the future.

We also ask that you include a requirement for porous pavement for the service drive connecting Burning Wood Way and Subarea 5, and for all internal pavement (driveways, walkways around dwelling units, and sidewalks) on Subareas 2, 3, 5 and 6. If development must occur in Subareas 1 and 4, we ask that porous pavement be required for everything other than streets in those areas.

All of us will be living with your decisions on this plan for a long time. Please consider taking the most cautious stance, and allow us to pursue options that will preserve this area for generations to come.

Ellen Barnard
Friends of Cherokee Marsh & Upper Yahara Watershed

Comments on the

Draft Cherokee Special Area Plan

"Recommendations for Land Use and Development"

prepared by

Joe E. Meisel, Ph.D. (Zoology, UW-Madison)
Vice-President, Ceiba Foundation for Tropical Conservation
513 Bowman Avenue
Madison, WI 53716
Email: jemeisel@wisc.edu

13 December 2006

To Whom it May Concern,

As a biologist, an experienced conservationist and a concerned citizen, I am pleased to provide comments on the current draft Cherokee Special Area Plan, and the recommendations contained within regarding the purchase, easement and development of lands within the greater Cherokee Marsh area. I have reviewed the draft Plan, and the supporting maps and other materials made available by the City of Madison. I made a brief site visit to the area on the morning of 13 December, and conducted informal discussions with members of the Friends of Cherokee Marsh (of which I am not a member) and the City Parks Commission.

Allow me to make it clear at the outset that I accept the necessity for growth by the City of Madison, and adjacent townships, and that I am not inherently opposed to development. I respect the fact that the City of Madison must make difficult choices in order to balance the competing interests of developers, homeowners and conservation-minded citizens.

The authors of the Special Area Plan are to be commended for their commitment to protecting the ecological and aesthetic values of Cherokee Marsh. A substantial portion of the document is dedicated to summarizing the services provided by a healthy marsh ecosystem, such as rainwater filtering and flood protection, and reviewing the applicable federal, state and local ordinances constraining development near marshes. Furthermore the Plan specifically recommends green building materials, rain gardens, exotic species control, and other environmentally sound approaches to housing construction in sensitive areas. Finally, several statements in the Plan underscore the importance of "view protection," with specific reference to High Hill and the Hornung Woods.

The Plan therefore reveals a laudable desire on the part of the City to restrain growth in an informed, intelligent fashion that takes into account the needs of developers, the ecological value of intact biological systems, and the desires of many of Madison's dedicated conservationists to protect the city's many areas of natural habitat. The open nature of the Parks and Planning Commission meetings which will establish the final Special Area Plan, and the willingness of these groups to receive public comment, further underscore the City's commitment to finding a solution mutually acceptable to all parties.

The multi-area and multi-solution approach described in the current draft Plan permits considerable flexibility in meeting the City's prior agreements with developers while maintaining a commitment to the conservation of the marshlands currently held by Cherokee, Inc. The authors have made several wise choices, such as the outright purchase of the marsh section of Sub-area 5 ("Fifth Addition"), and the implementation of easements in Sub-area 6 ("High Hill"). A number of other recommendations in the Plan, however, are in my opinion less wise choices that appear to sacrifice too much of the integrity of the greater Cherokee Marsh lands. I believe that a variety of modifications to the Plan could be adopted that would greatly strengthen the City's commitment to protecting the environment, with little or no negative impact on the needs of developers.

Many recommended modifications to the Plan have been prepared by the Friends of Cherokee Marsh. While I subscribe in principal to their broad aims, I have not had time to adequately review all their suggestions in detail. I will let their representatives speak for themselves, and instead present my own suggestions of how the draft Plan can be improved. If my suggestions coincide at times with those of the Friends, let that be taken as a form of concordance between like-minded environmentalists.

First and foremost, I argue that the lands to the north of Wheeler Road (Sub-area 1, "Hornung Range"), are unsuitable for development. I offer several justifications. First, those lands clearly form the upland rim of the current marsh, due to their north-facing slope. Development in this sub-area would lead to greater runoff of storm wastewater and lawn-care chemicals directly into the marsh, with potentially severe and pervasive negative impacts on the marsh community. Second, as a nearby upland, such lands could serve as valuable habitat and foraging grounds for wildlife species (e.g., waders, cranes) that occur in the marsh. Note that although a considerable proportion of the sub-area currently is mowed grass, there also are sizeable woodlots and shrubby areas, and recovery to a natural upland community would likely occur rapidly and without expensive intervention. Third, the open areas of the western portion of this sub-area could serve as an ideal ecological corridor, linking the open marshes to the residential neighborhoods to the south, and permitting a green and aesthetically pleasing route for residents to access the trails and attractions of the marsh.

The north-eastern section of Sub-area 1 deserves special mention. Development in this section should be prohibited, because of its close proximity to the Dane County Airport's Runway Protection Zone. The marshlands within the Zone can be expected to remain as marsh, and development within this section therefore will insert a peninsula of residential properties into a pristine marsh, with the associated deleterious effects of runoff, vehicle-wildlife collisions, introduction of invasive species and so forth.

In short, development should not be permitted north of Wheeler Road, and time should be provided to various concerned groups (including the Friends of Cherokee Marsh) to seek outside funding to enable the purchase of this area, so that it may be allowed to regenerate, and re-unite biologically with the marsh.

The Plan's proposal to install low-density housing units in the area currently occupied by Hornung's Woods (Sub-area 2, western section) is, in my opinion, a poor use of a fine forested resource. As a biologist who has studied the role of forest fragments in human-managed systems, I can attest to the importance of forest patches such as Hornung's Woods. Native wildlife relies on such forests, for food and shelter, nesting and hibernating locations, and as a thermal refuge from the extremes of Wisconsin's climate. Additionally, migratory species such as Warblers repeatedly have been shown to utilize such forests as "stepping stones" or "stop overs" during their long, and climatically challenging, journey to the northern forests of the

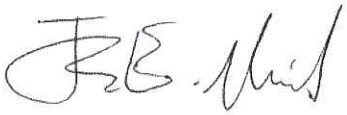
US and Canada. Finally, these woods, located as they are near to an extensive marsh, provide valuable habitat for species that utilize and reside in the marsh.

From a human standpoint, the Hornung Woods serve several purposes. Aesthetically, they provide residents an opportunity to experience a natural habitat within their own community; the current proposal to replace the woods, in part, with a "swings and see-saws" park will dramatically change the character of the site. Second, these woods form an integral part of the eco-corridor mentioned above, connecting the residential areas to the marsh via a continuous green space passing through sub-area 1 and into Cherokee Marsh proper. Indeed, the aesthetic value of these woods are mentioned in the draft Plan, which recommends that "some trees along the perimeter" be preserved so as to achieve "view protection." The Commission should be advised that numerous conservation agencies (i.e., The Nature Conservancy, the Wildlife Conservation Society, et al.) have lambasted just this sort of development: the gutting of a forest by large houses, masked by the retention of perimeter trees, effectively destroys the habitat while preserving the illusion of remaining forest.

In closing, I reiterate that much of the contents of the draft Plan outline an admirable balance between developer needs and environmental protection. Modifications to the Plan can be made, however, that substantially improve the degree of protection afforded the marsh lands, without overtly negatively affecting the carefully controlled growth of the City's residential districts. I urge the Parks and Planning Commissions to consider carefully the fact that land use decisions made today will severely limit the environmental protection options available in the future. Thus these decisions must be made carefully, and with regard towards the potential costs of future protection (e.g., purchase of additional lands by the City) and the potential risks of under-protecting a natural system that provides critical flood mitigation and filtration of storm water overflow.

The Commissions are to be congratulated for developing an excellent draft Plan, and for seeking public comment. I hope that the recommendations contained in this letter, along with the proposals of the Friends of Cherokee Marsh, be given serious consideration. Indeed, they seek only to improve the Plan, for all concerned.

Yours truly,



Joe E. Meisel, Ph.D.

(sent by email, December 2006)

Dear Mr. Roll and Mr. Murphy,

I was not able to attend the public hearing on the Cherokee Marsh Development this evening, but would like to submit these comments.

As a devoted visitor to Cherokee Park and retired environmental scientist, I wholeheartedly support the Memorandum of Understanding, the Annexation Agreement and the Draft Special Area Plan for the proposed Cherokee Marsh Development. Thank you for your time and effort in making them come to pass. I am particularly struck by the language of the Draft SAP that indicates sensitivity to the important function Cherokee Marsh plays in the Yahara Watershed.

Regarding stormwater management -

I wholeheartedly support the stated SAP goal of preventing stormwater runoff/discharge from affecting the marsh. I would like to suggest that the Eco-Alternate Development Plan developed by the Friends of Cherokee Marsh and Upper Yahara Watershed (FOC) would help achieve this goal by eliminating the need for additional detention basins where they could overflow into the marsh. This scenario would be possible if the residences currently planned for the area north of Wheeler Road (east of Sherman Avenue) are instead added to the development area south of Wheeler Road.

In addition, the existing stormwater flow path should be directed elsewhere than the marsh area.

Regarding groundwater extraction –

Earlier, Montgomery & Associates presented an analysis of the effects of additional pumping at Municipal Well UW-13 to serve the water needs of new residents. Because the regional hydrogeological model developed by the Wisconsin geological survey (WGNHS) and the USGS has not been updated or fine-tuned for the Cherokee Marsh area, the analysis was necessarily preliminary. The bottom line is that we do not know whether increased pumping at UW-13 will impact Cherokee fens, springs or wetlands generally. Evidence from other Madison municipal wells located near the lakes strongly suggests that there will be negative consequences to at least parts of the wetland environment.

The City should engage Wisconsin Survey (WGNHS) geologists, private consultants, or university students, to install strategically placed monitoring wells for water level measurements in order to establish baseline conditions, and later, to determine whether surface water is being drawn down to supply residents. An informed decision could be made to switch pumping to another municipal well (UW-7) should wetland features be compromised.

We recently learned that the Madison Water Utility and other agencies are likely to fund updating the hydrogeological model. Results from the new model should be used periodically to assess potential impacts to the marsh as the number of new residents in the area grows over time.

As proposed in the Eco-Alternate Development Plan, it would be most helpful if water usage in the area were limited both through the use of water efficient appliances, and by creation of native landscapes to minimize the extent of water-dependent lawns.

Sincerely,
Janet Battista

From: paul_noeldner@hotmail.com
To: paul_noeldner@hotmail.com; rroll@cityofmadison.com; masoffice@mailbag.com; joanne.herfel@dhfs.state.wi.us
Subject: Cherokee Marsh - Support for Friends Recommendation
Date: Thu, 4 Jan 2007 05:33:33 +0000

Dear Mr. Roll,

Since I will probably not be able to speak on behalf of Madison Audubon at the Plan Commission meeting regarding Cherokee Marsh, please include this statement on behalf of Madison Audubon Society. I understand this needs to reach your desk by Thursday. Please provide email or print copies of this statement and request for a friendly amendment, to appropriate City contacts and Plan Commission members.

The Madison Audubon Society recommends passage of the City of Madison plans for Cherokee Marsh protection and development with this friendly amendment:

Friendly Amendment: The Plan Commission also supports implementation of the recommendations of the Friends of Cherokee to the extent possible within the framework of the agreement with the Developer and within the discretion of City departments regarding administrative codes, to achieve mutual long term benefits to the City, the Developer, the Neighborhood, and the Environment as follows:
- maximize the ratio of upland acres to wetland acres to assure healthy, sustainable life cycle ecosystems
- preserve remaining woods and remaining open uplands to the extent possible
- work with the Developer and other parties to determine whether 100 upland acres north of Wheeler Road can be preserved through 3rd party purchase
- enforce maximum environmental regulations for sensitive ecosystems and watersheds, not just the minimum or average required for a development
- minimize impacts of runoff, plan in terms of 100 year floods, and assure runoff water quality does not degrade the ecosystem being preserved
- apply strong, current, and appropriate building and usage codes for sensitive natural areas related to lighting, noise, usage, and visibility of development
- apply Madison building density options (for example a P.U.D.) to locate and concentrate most development as far from the marsh as possible
- maximize open space for natural areas, parks and recreation to the extent possible to benefit the neighborhood and the entire area

To this effect, we request that Plan Commission members receiving this statement, please introduce, give due consideration, and vote to support this friendly amendment.

Madison Audubon Society would like to thank the City staff, the Developer, and the Friends of Cherokee for their hard work so far on this matter and look forward to helping provide further public input in the interest of the environment.

Paul Noeldner, Membership Chair
Madison Audubon Society
222 South Hamilton
Madison, WI 53702 608-255-2473
Phone 608-698-0104 Email paul_noeldner@hotmail.com

cc: Joanne Herfel, Madison Audubon Society President, MAS Office

---

From: Paul Noeldner [mailto:paul_noeldner@hotmail.com]
Sent: Thursday, December 21, 2006 11:30 PM
To: Roll, Rick
Subject: Cherokee Marsh - Upland Acres

Re: Cherokee Marsh - Upland Acres

STATEMENT FOR INPUT TO CHEROKEE MARSH DECISIONS

I've testified both as a private citizen, and on behalf of Madison Audubon, at a couple hearings related to Cherokee Marsh and am in general support of the plan, if done with opportunity for further refinement of details related to maximizing ecosystem preservation.

This is to emphasize a specific area of concern. My main concern is the importance of maintaining fully functional ecosystems that include significant upland habitat surrounding the wetland and peat habitat to support and sustain full life cycle activity and predator-prey food chains. Development cannot go right up near to wetlands and scientifically expect to preserve the very ecosystems people purport to want to preserve, instead they will almost certainly be degraded. In this case, with peat ecosystems that require very pure ground water, any development based runoff will change the chemistry and destroy the ecosystem unless substantial surrounding open upland is preserved.

An important scientific consideration is that while federal formulas help fund 'wetland' purchases use an often quoted ratio of 4:1 upland to wetland, the federal formula for targeting these dollars to the best projects is strongly biased (at a scale of 10:1) to projects that preserve significantly more additional upland acres (eg a half a mile) through additional zoning, planning, and funding sources. The reason is that development directly adjacent to a base of 4:1 surrounding uplands has been scientifically documented to result in significant degradation to the very wetlands that are targeted for preservation and enhancement.

Let's not end up degrading the very peat and marsh ecosystem we purport to try to maintain and recover, by putting development too close. Development should be concentrated as far from the marsh as possible, and surrounding remaining open upland should be preserved as much as possible.

INFORMATION REQUEST

Please advise me on the following important facts that are required to provide informed public input to the planning decisions. Also pass my comments in this email, and the figures you provide below, to the City committees that have held or will hold hearings related to Cherokee Marsh, and to the City Council, and to relevant County and Regional planning officials with a stake in preserving Cherokee Marsh as a viable habitat and watershed.

I expect you already have data that will quickly answer these questions, since upland to wetland ratios are critical to preservation.

1. What is the current ratio of undeveloped (public and private) upland acres around Cherokee marsh, relative to wetland and peat topology, out to a margin of the first developed roadways and buildings?

2. What ratio was recommended in City and County plans for the Cherokee Marsh area over the past 15 years?

3. What ratio would result under the current Cherokee Park development proposal, if development concentration is not further focused?

4. What ratio would result under the proposal from Friends of Cherokee that would focus development south of Wheeler Road?

5. What ratio would result if in addition to 4 above, no further development were done on the north end of Sherman in areas 5 and 6?

Thank you! Much appreciate the hard work the City is putting into this effort and the opportunities for public input.

Paul Noeldner 608-698-0104
136 Kensington
Maple Bluff, WI 53704

Subject: RE: Cherokee Marsh - Upland Acres
Date: Wed, 3 Jan 2007 13:50:03 -0600
From: RRoll@cityofmadison.com
To: paul_noeldner@hotmail.com

Paul: Thanks for your interest in the Cherokee Special Area Plan. As you know, Cherokee Marsh is located in many jurisdictions. Most of Cherokee Marsh is not located within the City of Madison. We don't have the data needed to answer your questions, with the exception of your question 2. Our response to your question 2 is as follows:

Protection of a large natural upland acreage adjacent to wetland is desirable for a variety of reasons: protection from runoff and pollution, better groundwater infiltration, wildlife habitat space and critical wildlife linkages to upland habitat, greater ecological diversity. Ecological studies can probably be found to support the value of ratios as high as 10 acres of upland per 1 acre of wetland, although the US Fish and Wildlife Service uses 4:1 as it's administrative limit that will be funded for protection by the Federal Wetland Reserve Program. The 4:1 ratio was developed based on waterfowl reproduction research. The 1981 Long Range Plan for Cherokee Marsh used a minimum buffer in most areas not already committed to other uses to recommend a proposed open space of 2,200 acres upland and 4,000 acres wetland (0.5:1). To reach the 4:1 ratio for Cherokee Marsh would require 16,000 acres of upland, which could be achieved with a 1-mile buffer around the entire Token Creek - Cherokee Marsh area."

Sincerely,

Rick

From: paul_noeldner@hotmail.com
To: rroll@cityofmadison.com; masoffice@mailbag.com; joanne.herfel@dhfs.state.wi.us
Subject: RE: Cherokee Marsh - Upland Acres
Date: Thu, 4 Jan 2007 06:09:21 +0000

Thanks, Rick for your reply below to my query regarding Cherokee Marsh upland to wetland ratios (current and planned).

The federal research behind the 4:1 ratio has documented that lower ratios will result in eventual degradation of the very resource being funded and preserved. This kind of degradation is sometimes imperceptibly gradual but in fact just as damaging as if done overnight, in terms of long range environmental viability.

The current estimated ratio of 0.5:1 upland acres surrounding wetlands in Cherokee that you indicated, is truly alarming. While the federally recommended minimum 4:1 upland to wetland acre ratio for funding preservation and recovery is not possible soley using City owned land, it is possible within the discretion of City departments and codes to help maximize options for housing density such as a P.U.D. and other plat arrangement and building structure options that will help to concentrate proposed development within the framework of the City and Developer agreements.

This means the City can in fact help preserve natural habitat and corridors to the extent possible alongside development areas and even within developments right up to buildings, both of which can help preserve upland acres. From an Audubon perspective, we need only look at similar planned concentrated developments that maximize surrounding habitat to see concrete results like significantly higher bird species counts.

Therefore the Plan Commission must in all honesty be advised by your office that whatever can be done within the framework of the Cherokee Marsh plans and development agreements to increase the upland ratio, should be done. Since the current estimated ratio of 0.5:1 is far below the recommended minimum 4:1, please pass along these comments to Plan Commission members, and include mention of this specific issue and environmental recommendation in your official input to the Plan Commission for their hearing January 8.

I have also sent you a statement on behalf of Madison Audubon Society, requesting the Plan Commission to approve a friendly amendment that would help maximize the upland ratio and other environmental protections. Thank you very much for your attention to these matters.

cc: Joanne Herfel, President, Madison Audubon Society, MAS office

Paul Noeldner 608-698-0104
/
\
(:>)
/
\

Roll, Rick

To: Paul Noeldner

Subject: RE: Cherokee Marsh - Upland Acres

Paul: Thanks for your interest in the Cherokee Special Area Plan. As you know, Cherokee Marsh is located in many jurisdictions. Most of Cherokee Marsh is not located within the City of Madison. We don't have the data needed to answer your questions, with the exception of your question 2. Our response to your question 2 is as follows:

Protection of a large natural upland acreage adjacent to wetland is desirable for a variety of reasons: protection from runoff and pollution, better groundwater infiltration, wildlife habitat space and critical wildlife linkages to upland habitat, greater ecological diversity. Ecological studies can probably be found to support the value of ratios as high as 10 acres of upland per 1 acre of wetland, although the US Fish and Wildlife Service uses 4:1 as it's administrative limit that will be funded for protection by the Federal Wetland Reserve Program. The 4:1 ratio was developed based on waterfowl reproduction research. The 1981 Long Range Plan for Cherokee Marsh used a minimum buffer in most areas not already committed to other uses to recommend a proposed open space of 2,200 acres upland and 4,000 acres wetland (0.5:1). To reach the 4:1 ratio for Cherokee Marsh would require 16,000 acres of upland, which could be achieved with a 1-mile buffer around the entire Token Creek - Cherokee Marsh area."

Sincerely,

Rick

From: Paul Noeldner [mailto:paul_noeldner@hotmail.com]
Sent: Thursday, December 21, 2006 11:30 PM
To: Roll, Rick
Subject: Cherokee Marsh - Upland Acres

Re: Cherokee Marsh - Upland Acres

STATEMENT FOR INPUT TO CHEROKEE MARSH DECISIONS
I've testified both as a private citizen, and on behalf of Madison Audubon, at a couple hearings related to Cherokee Marsh and am in general support of the plan, if done with opportunity for further refinement of details related to maximizing ecosystem preservation.

This is to emphasize a specific area of concern. My main concern is the importance of maintaining fully functional ecosystems that include significant upland habitat surrounding the wetland and peat habitat to support and sustain full life cycle activity and predator-prey food chains. Development cannot go right up near to wetlands and scientifically expect to preserve the very ecosystems people purport to want to preserve, instead they will almost certainly be degraded. In this case, with peat ecosystems that require very pure ground water, any development based runoff will change the chemistry and destroy the ecosystem unless substantial surrounding open upland is preserved.

An important scientific consideration is that while federal formulas help fund 'wetland' purchases use an often quoted ratio of 4:1 upland to wetland, the federal formula for targeting these dollars to the best projects is strongly biased (at a scale of 10:1) to projects that preserve significantly more additional upland acres (eg a half a mile) through additional zoning, planning, and funding sources. The reason is that development directly adjacent to a base of 4:1 surrounding uplands has been scientifically documented to result in significant degradation to the very wetlands that are targeted for preservation and enhancement.

Let's not end up degrading the very peat and marsh ecosystem we purport to try to maintain and recover, by putting development too close. Development should be concentrated as far from the marsh as possible, and surrounding remaining open upland should be preserved as much as possible.

INFORMATION REQUEST
Please advise me on the following important facts that are required to provide informed public input to the planning decisions. Also pass my comments in this email, and the figures you provide below, to the City committees that have held or will hold hearings related to Cherokee Marsh, and to the City Council, and to relevant County and Regional planning officials with a stake in preserving Cherokee Marsh as a viable habitat and watershed.

I expect you already have data that will quickly answer these questions, since upland to wetland ratios are critical to preservation.

1. What is the current ratio of undeveloped (public and private) upland acres around Cherokee marsh, relative to wetland and peat topology, out to a margin of the first developed roadways and buildings?

2. What ratio was recommended in City and County plans for the Cherokee Marsh area over the past 15 years?

3. What ratio would result under the current Cherokee Park development proposal, if development concentration is not further focused?

4. What ratio would result under the proposal from Friends of Cherokee that would focus development south of Wheeler Road?

5. What ratio would result if in addition to 4 above, no further development were done on the north end of Sherman in areas 5 and 6?

Thank you! Much appreciate the hard work the City is putting into this effort and the opportunities for public input.

Paul Noeldner 608-698-0104
136 Kensington
Maple Bluff, WI 53704
/
\
(:>)
/
\

Roll, Rick

From: Paul Noeldner [paul_noeldner@hotmail.com]
Sent: Thursday, January 04, 2007 12:09 AM
To: Roll, Rick; Madison Audubon; Joanne Herfel
Subject: RE: Cherokee Marsh - Upland Acres

Thanks, Rick for your reply below to my query regarding Cherokee Marsh upland to wetland ratios (current and planned).

The federal research behind the 4:1 ratio has documented that lower ratios will result in eventual degradation of the very resource being funded and preserved. This kind of degradation is sometimes imperceptibly gradual but in fact just as damaging as if done overnight, in terms of long range environmental viability.

The current estimated ratio of 0.5:1 upland acres surrounding wetlands in Cherokee that you indicated, is truly alarming. While the federally recommended minimum 4:1 upland to wetland acre ratio for funding preservation and recovery is not possible soley using City owned land, it is possible within the discretion of City departments and codes to help maximize options for housing density such as a P.U.D. and other plat arrangement and building structure options that will help to concentrate proposed development within the framework of the City and Developer agreements.

This means the City can in fact help preserve natural habitat and corridors to the extent possible alongside development areas and even within developments right up to buildings, both of which can help preserve upland acres. From an Audubon perspective, we need only look at similar planned concentrated developments that maximize surrounding habitat to see concrete results like significantly higher bird species counts.

Therefore the Plan Commission must in all honesty be advised by your office that whatever can be done within the framework of the Cherokee Marsh plans and development agreements to increase the upland ratio, should be done. Since the current estimated ratio of 0.5:1 is far below the recommended minimum 4:1, please pass along these comments to Plan Commission members, and include mention of this specific issue and environmental recommendation in your official input to the Plan Commission for their hearing January 8.

I have also sent you a statement on behalf of Madison Audubon Society, requesting the Plan Commission to approve a friendly amendment that would help maximize the upland ratio and other environmental protections. Thank you very much for your attention to these matters.

cc: Joanne Herfel, President, Madison Audubon Society, MAS office

Paul Noeldner 608-698-0104
/
\
(:>)
/
\

Subject: RE: Cherokee Marsh - Upland Acres
Date: Wed, 3 Jan 2007 13:50:03 -0600
From: RRoll@cityofmadison.com
To: paul_noeldner@hotmail.com

Paul: Thanks for your interest in the Cherokee Special Area Plan. As you know, Cherokee Marsh is located in

many jurisdictions. Most of Cherokee Marsh is not located within the City of Madison. We don't have the data needed to answer your questions, with the exception of your question 2. Our response to your question 2 is as follows:

Protection of a large natural upland acreage adjacent to wetland is desirable for a variety of reasons: protection from runoff and pollution, better groundwater infiltration, wildlife habitat space and critical wildlife linkages to upland habitat, greater ecological diversity. Ecological studies can probably be found to support the value of ratios as high as 10 acres of upland per 1 acre of wetland, although the US Fish and Wildlife Service uses 4:1 as it's administrative limit that will be funded for protection by the Federal Wetland Reserve Program. The 4:1 ratio was developed based on waterfowl reproduction research. The 1981 Long Range Plan for Cherokee Marsh used a minimum buffer in most areas not already committed to other uses to recommend a proposed open space of 2,200 acres upland and 4,000 acres wetland (0.5:1). To reach the 4:1 ratio for Cherokee Marsh would require 16,000 acres of upland, which could be achieved with a 1-mile buffer around the entire Token Creek - Cherokee Marsh area."

Sincerely,

Rick

From: Paul Noeldner [mailto:paul_noeldner@hotmail.com]
Sent: Thursday, December 21, 2006 11:30 PM
To: Roll, Rick
Subject: Cherokee Marsh - Upland Acres

Re: Cherokee Marsh - Upland Acres

STATEMENT FOR INPUT TO CHEROKEE MARSH DECISIONS
I've testified both as a private citizen, and on behalf of Madison Audubon, at a couple hearings related to Cherokee Marsh and am in general support of the plan, if done with opportunity for further refinement of details related to maximizing ecosystem preservation.

This is to emphasize a specific area of concern. My main concern is the importance of maintaining fully functional ecosystems that include significant upland habitat surrounding the wetland and peat habitat to support and sustain full life cycle activity and predator-prey food chains. Development cannot go right up near to wetlands and scientifically expect to preserve the very ecosystems people purport to want to preserve, instead they will almost certainly be degraded. In this case, with peat ecosystems that require very pure ground water, any development based runoff will change the chemistry and destroy the ecosystem unless substantial surrounding open upland is preserved.

An important scientific consideration is that while federal formulas help fund 'wetland' purchases use an often quoted ratio of 4:1 upland to wetland, the federal formula for targeting these dollars to the best projects is strongly biased (at a scale of 10:1) to projects that preserve significantly more additional upland acres (eg a half a mile) through additional zoning, planning, and funding sources. The reason is that development directly adjacent to a base of 4:1 surrounding uplands has been scientifically documented to result in significant degradation to the very wetlands that are targeted for preservation and enhancement.

Let's not end up degrading the very peat and marsh ecosystem we purport to try to maintain and recover, by putting development too close. Development should be concentrated as far from the marsh as possible, and surrounding remaining open upland should be preserved as much as possible.

INFORMATION REQUEST

Please advise me on the following important facts that are required to provide informed public input to the planning decisions. Also pass my comments in this email, and the figures you provide below, to the City committees that have held or will hold hearings related to Cherokee Marsh, and to the City Council, and to relevant County and Regional planning officials with a stake in preserving Cherokee Marsh as a viable habitat and watershed.

I expect you already have data that will quickly answer these questions, since upland to wetland ratios are critical to preservation.

1. What is the current ratio of undeveloped (public and private) upland acres around Cherokee marsh, relative to wetland and peat topology, out to a margin of the first developed roadways and buildings?

2. What ratio was recommended in City and County plans for the Cherokee Marsh area over the past 15 years?

3. What ratio would result under the current Cherokee Park development proposal, if development concentration is not further focused?

4. What ratio would result under the proposal from Friends of Cherokee that would focus development south of Wheeler Road?

5. What ratio would result if in addition to 4 above, no further development were done on the north end of Sherman in areas 5 and 6?

Thank you! Much appreciate the hard work the City is putting into this effort and the opportunities for public input.

Paul Noeldner 608-698-0104
136 Kensington
Maple Bluff, WI 53704
/
\
(:>)
/
\

Roll, Rick

From: Paul Noeldner [paul_noeldner@hotmail.com]
Sent: Wednesday, January 03, 2007 11:34 PM
To: paul_noeldner@hotmail.com; Roll, Rick; Madison Audubon; Joanne Herfel
Subject: Cherokee Marsh - Support for Friends Recommendation

Dear Mr. Roll,

Since I will probably not be able to speak on behalf of Madison Audubon at the Plan Commission meeting regarding Cherokee Marsh, please include this statement on behalf of Madison Audubon Society. I understand this needs to reach your desk by Thursday. Please provide email or print copies of this statement and request for a friendly amendment, to appropriate City contacts and Plan Commission members.

The Madison Audubon Society recommends passage of the City of Madison plans for Cherokee Marsh protection and development with this friendly amendment:

Friendly Amendment: The Plan Commission also supports implementation of the recommendations of the Friends of Cherokee to the extent possible within the framework of the agreement with the Developer and within the discretion of City departments regarding administrative codes, to achieve mutual long term benefits to the City, the Developer, the Neighborhood, and the Environment as follows:
- maximize the ratio of upland acres to wetland acres to assure healthy, sustainable life cycle ecosystems
- preserve remaining woods and remaining open uplands to the extent possible
- work with the Developer and other parties to determine whether 100 upland acres north of Wheeler Road can be preserved through 3rd party purchase
- enforce maximum environmental regulations for sensitive ecosystems and watersheds, not just the minimum or average required for a development
- minimize impacts of runoff, plan in terms of 100 year floods, and assure runoff water quality does not degrade the ecosystem being preserved
- apply strong, current, and appropriate building and usage codes for sensitive natural areas related to lighting, noise, usage, and visibility of development
- apply Madison building density options (for example a P.U.D.) to locate and concentrate most development as far from the marsh as possible
- maximize open space for natural areas, parks and recreation to the extent possible to benefit the neighborhood and the entire area

To this effect, we request that Plan Commission members receiving this statement, please introduce, give due consideration, and vote to support this friendly amendment.

Madison Audubon Society would like to thank the City staff, the Developer, and the Friends of Cherokee for their hard work so far on this matter and look forward to helping provide further public input in the interest of the environment.

Paul Noeldner, Membership Chair
Madison Audubon Society
222 South Hamilton
Madison, WI 53702 608-255-2473
Phone 608-698-0104 Email paul_noeldner@hotmail.com

cc: Joanne Herfel, Madison Audubon Society President, MAS Office

---

/
\

Roll, Rick

From: Ellen Barnard [cherokeemarsh@gmail.com]
Sent: Thursday, January 04, 2007 7:26 AM
To: Murphy, Brad; Roll, Rick
Subject: Statement for Plan Commission Meeting 1/8

Dear Plan Commission Members:

I, and many other citizens, remain concerned about the impact of the Cherokee Special Area Plan. While the city staff has included important recommendations to help improve the way the development will interact with the area on which it is to be built, there are aspects which have continued to be downplayed or ignored. I commend the city for having the vision to acquire the 234 acres of wetland that has been neglected for many years. Unfortunately, when they considered that area, they did not look at the whole ecosystem, which includes the lowland and upland areas just south of the peat marsh that the city wishes to purchase. These areas have been identified as recommended open space by Dane County, and are linked to the wetlands in many ways.

Right now you have the opportunity to preserve one of the most important ecologies in Dane County. The Cherokee Marsh and its attendant lowlands and uplands perform critical functions for the Yahara River and all of our lakes downstream. It can also be used to help maintain or possibly improve our groundwater quality, if we choose to preserve and restore the whole so that it functions to its full capacity.

By allowing development on this area, the city is risking further damage to the peat marsh, as many experts have testified during this long process. While mitigation efforts will be made, such efforts are expensive, and do not always succeed. Certainly, you will be choosing to let go of a naturally-occurring part of our infrastructure, one that humans cannot come close to replicating or improving upon.

We are all approaching many tipping points in our human developments.
This is one, as the loss of this open space will permanently alter the area. I know that the city staff say that they will "protect the environment", but our human record on that is poor, and even when we mean well, engineered solutions and "mitigation" never work as well as allowing "nature" to do the work. Using the natural infrastructure of the whole marsh area will save us money, protect our water quality, and preserve (or hopefully improve) the health of Madison's very precious lakes.

The Friends of Cherokee Marsh ask you to amend the Special Area Plan so that we can pursue the option of maintaining Subarea 1 as open space, and eventually restoring it to its critical functions. We ask that you recommend that development be kept away from this are, and that all support be given to the Friends and the developer to find a solution that allows this to be open space. Because Subarea 4 is similarly environmentally delicate, we ask that you consider the same for this area. Whether it is through purchase, transfer of dwelling units to another location, or a combination of the two, we ask for the time and support to pursue the best options for these areas, rather than allow development to occur and leave us with a situation we may well regret in the future.

We also ask that you include a requirement for porous pavement for the service drive connecting Burning Wood Way and Subarea 5, and for all internal pavement (driveways, walkways around dwelling units, and
sidewalks) on Subarea 2, 3, 5 and 6. If development must occur in Subareas 1 and 4, we ask that porous pavement be required for everything other than streets in those areas.

All of us will be living with your decisions on this plan for a long time. Please consider taking the most cautious stance, and allow us to pursue options that will preserve this area for generations to come.

Ellen Barnard
Friends of Cherokee Marsh & Upper Yahara Watershed

Roll, Rick

From: THEODORE S COCHRANE [tscochra@facstaff.wisc.edu]
Sent: Thursday, January 04, 2007 9:31 AM
To: Roll, Rick
Subject: Cherokee Development Special Area Plan

January 4, 2007

Dear City of Madison Plan Commission:

We understand that the Friends of Cherokee Marsh and Upper Yahara Watershed are working to preserve 100 acres of open space adjacent to Cherokee Marsh. Anything that the Friends and their conservation-minded allies can do to secure a better plan on behalf of the marsh in light of adjacent proposed development should meet with the approval of every citizen in Dane County if not the state as a whole. Cherokee Marsh is crucial to the region's ecology and natural beauty and helps fill the need for open space, outdoor recreation, environmental education, and community water supply. Therefore, we support the proposal of the Friends to change the draft Cherokee Development Special Area Plan and related documents.

We are overjoyed by the city's desire to purchase about 254 acres of wetland and upland bordering its conservation park but at the same time are dismayed that the SAP also grants the developer the ability to build in remaining areas at densities as low as about two units per acre in some areas and at a maximum of 15 units per acre elsewhere.

The first priority should be for government agencies or other groups and the developer to work toward the purchase of additional publicly owned acreage bordering the marsh. However, if additional purchase cannot be arranged, development should be eliminated from at least two of the six proposed areas, and residences should be concentrated on uplands south of Wheeler Road, farther from the marsh. The Plan Commission needs to modify the draft SAP to allow for higher maximum densities.

More upland acreage adjacent to the Cherokee Marsh Natural Resource Area needs to be preserved to function as a buffer zone; to provide wildlife habitat and help protect the Yahara Watershed fisheries; to better protect the marsh, the Yahara River, and Starkweather Creek from storm water runoff by functioning as a natural infiltration area and by situating development farther from the marsh; to better preserve the landscape views of the marsh north from Wheeler Road; to reduce demands on municipal well water and potential negative effects on groundwater supply to the marsh by reducing lawn area close to the marsh; and to help preserve what little woodland remains.

These goals are met by the Friends' alternative development plan, which concentrates residences at higher maximum densities in uplands south of Wheeler Road. Please vote to modify the draft Cherokee Special Area Plan to incorporate the Friends' proposals.

Thank you for your concern for the future of Cherokee Marsh and for your careful consideration of the Friends' alternative plan.

Sincerely,

Theodore S. and Barbara A.Cochrane
449 Jean St.
Madison, WI 53703-1615

Theodore S. Cochrane
Senior Academic Curator

University of Wisconsin-Madison Herbarium
Rm 251 Birge Hall, 430 Lincoln Dr.
Madison, WI 53706-1381 USA
tel.: 608/262-2792; FAX 608/262-7509
www.botany.wisc.edu/wisflora

Roll, Rick

From: Janet Battista [janet@grammata.com]
Sent: Thursday, January 04, 2007 1:42 PM
To: Murphy, Brad; Roll, Rick
Subject: Comments re: Cherokee Plan Approvals

Brad or Rick,

Here is a version of my comments without typos. If there is time, I would appreciate your forwarding these comments to the PC.

Thanks so much,

Janet Battista

City of Madison Planning Commission

Janet Battista: Comments Regarding Cherokee Park Development Approvals

The Planning Commission should modify the Cherokee Marsh Strategic Area Plan, up for consideration on January 8, 2007, in order to allow for increased housing densities south of Wheeler Road. Ideally, new purchasers and a willing seller would enable more open space north of Wheeler Road to be preserved. However, if additional purchasers do not materialize, a modification allowing for higher densities, may satisfy the developer's need for development units to be built, while protecting important open space near the marsh.

I have testified and commented numerous times before this body and others, about the potential damage that might accrue from allowing detention basins to be built north of Wheeler Road to serve development there, and about the possible effects of additional groundwater extraction at Municipal Well #13 on groundwater supported springs, seeps, fens and marsh watertables.

How might this happen with engineering review and many ordinances in place to manage stormwater and groundwater? Historically, engineers have addressed the water functions of a landscape without consideration of the ecology. Comments from Dr. Quentin Carpenter, the one scientist most knowledgeable about the ecology of Cherokee Marsh, are revealing. In a recent e-mail message to me regarding detention ponds near the marsh he said "A brief tour at the outfall of any recently-built detention pond that empties into a marsh will educate one on what really happens. Take a look at the outfall of the detention ponds at the end of "Sedge Meadow Road" in east Pheasant Branch to see what detention pond water does to a marsh or sedge meadow. Check out the one below the Target store south of Easttown which the WRM students studied a couple of years ago. Ask [the consultant] for a list of their ponds that are five to ten years old in the Madison area. A few photos and species lists could be enlightening as to whether or not "filtered" detention pond water is good for the marshes affected."

The truth is that effects from these activities may not be catastrophic or sudden. They may not be apparent in our lifetimes or may only be noticeable by experts and naturalists - people who can tell the difference between a grass and a sedge, for example, or can recognize subtle changes to the water chemistry of lakes. We are talking about a slow, incremental erosion of the wetland functions served by Cherokee Marsh.

The proposed development has the potential to degrade all the important wetland functions of Cherokee Marsh, but one important function served by open, green space has had little mention. That is, the value to Madison citizens of having a large expanse of native wildlife habitat close at hand. More and more children grow up without any experience of wilderness, who think green space is a golf course or mowed park. Let's make our community one the next generations will be proud of.

Background

Cherokee Marsh is strategically located to serve many important wetland functions in the Yahara Watershed. The marsh improves water quality in the Yahara River and its associated lakes by discharging large volumes of cold, clean groundwater into them. At the same time, the marsh acts as a filter capturing some of the runoff from upstream agricultural and construction sites in Dane County, thereby reducing sediment loads, nutrients and pollutants that enter the lakes. In times of high precipitation, the marsh acts as a sponge, tempering high flood surges before they enter the lakes. Cherokee Marsh contains many acres of deep peat that can absorb great quantities of water.

Cherokee Marsh also contains large areas of native wetland vegetation, including groundwater-fed fen communities that contain many rare plant species. These communities depend on the relatively high pH, calcium carbonate based groundwater. The marsh also provides habitat for a rich variety of wildlife including birds, waterfowl, reptiles, and amphibians.

The Marsh is a place to learn about wetland ecosystems and to experience a sense of being close to nature. Many educators and naturalists use the outstanding diversity of the marsh to educate students and the public. Development in Dane County has threatened the few remaining areas of native wetland ecosystem, making Cherokee Marsh especially important.

Roll, Rick

From: Quentin Carpenter [qcarpent@wisc.edu]
Sent: Thursday, January 04, 2007 11:05 AM
To: Roll, Rick
Subject: Proposed Cherokee Development / detention basins

Dear Rick,

A few days ago, Janet Battista, a former student, asked for my opinion on detention basins in the Madison area and their suitability in the Cherokee Marsh area, where I have conducted research since 1992. I have not reviewed the particulars of the Cherokee proposal; rather, my comments reflect my experience with observing and studying detention basins in the Madison area. Some of this work should be in your files as it was distributed to City agencies following an EPA-funded project (EPA Water and Watersheds grant R-82801001, 2000 to 2003, Ken Potter, Jean Bahr, Joy Zedler and Richard Lathrop, principal investigators).
She has asked me to forward these comments to you, which I have done below.

On runoff water...
I have great difficulty thinking of an instance where runoff water (from a subdivision) was "good" for a marsh. I am not familiar with where exactly the remaining five parcel are located but I doubt any marsh associated with Cherokee Marsh is lacking water. First, the primary input to almost all the marsh (presettlement) would have been precipitation and the second most important input would have been groundwater (in many but not all sections). There may have been some overbank runoff at high water times in the vicinity of the Yahara (but remember that it was not backed up like now by the altered lake levels), and there may have been some localized runon from the adjacent drumlins, but these would have been minor compared to the vast, flat expanse of the marsh. A paper soon to be published in _Wetlands_ (Kurtz et al.
2007 (?)) will provide more information on this. This study took place in the City Conservation Park area at the terminus of Sherman Ave.

On "filtered" runoff"
During the construction phase, a
detention pond could be very helpful in reducing the initial sediment pulse when the ground is bare. After that, the pollutants are most likely lawn fertilizers and herbicides, and crud from the street system. You can check with someone like David Liebl or Ken Potter to get some data on what typical performance standards for detention pond look like. My observations are that they do a pretty good job on sediment from small storms but as the storm magnitude and intensity increases, they pass-through an increasing proportion of the stormwater "unfiltered." These infrequent storms are, unfortunately, the ones that move the bulk of the sediment in any case. There is plenty of data around on what happens to the soluble fraction of the pollutants. I do not have the data in front of me, but I think that the general story is that detention ponds do little if any "treatment" on soluble pollutants - they simply do not stay in the system long enough. A typical detention pond is designed to empty to its base level in 12 to 24 hours. Soluble pollutants include various forms of nitrogen, lesser amounts of phosphorus and potassium, and in the winter, lots of chlorides. In addition, there are the ubquitous petrochemicals associated with cars etc. All of these typically go right through the "filters" and are dumped into the marsh, which becomes the defacto "treatment" area. If the runoff is to be treated or filtered, then the design really needs to include a "treatment wetland" on the applicant's property to ensure that the applicant, not the public, does the treatment of their effluent before it is dumped into the public's waters.

A brief tour at the outfall of any recently-built detention pond that empties into a marsh will educate one on what really happens. Take a look at the outfall of the detention ponds at the end of "Sedge Meadow Road" in east Pheasant Branch to see what detention pond water does to a marsh or sedge meadow. Check out the one below the Target store south of Easttown which the WRM students studied a couple of years ago. Aside from the trash plume, you will see a dramatic change in vegetation along the normal path of the detention pond effluent. In general, the alteration is caused by 1) increased wetness and 2) increased nutrient availability. Typical increasing species are hybrid cattail and reed canary grass, both of which are "wetland" species but ones which we really don't need to

encourage!

I hope this helps you.

Regards,

Quentin Carpenter
Senior Lecturer, Gaylord Nelson Institute for Environmental Studies University of Wisconsin - Madison

Roll, Rick

From: Galen Smith [sgsmith2@wisc.edu]
Sent: Thursday, January 04, 2007 11:23 AM
To: Roll, Rick
Subject: Cherokee Marsh Natural Resource Plan

Dear City of Madison Plan Commission:

I support the proposal of the Friends of Cherokee Marsh & Upper Yahara River to change the draft Cherokee development Special Area Plan and related documents.

From a land-use, conservation and environmental point of view, the Friends' proposals will

*preserve 100 acres of upland areas adjacent to the Cherokee Marsh Natural Resource Area, allowing restoration as biologically important uplands for marsh wildlife

* better protect the marsh's deep peat marsh, fens, and other natural features from storm-water runoff by situating development at a more suitable distance from the marsh border

* lower the chance of storm-water runoff entering the Yahara River (including the marsh) or Starkweather Creek watersheds by creating a large natural infiltration area while markedly reducing impervious surface area (approximately 50%)

* preserve all or most of an existing 20-acre woodland and enhance its function as an ecological corridor

* better preserve the viewshed across both the eastern and western portions of the marsh, north from Wheeler Road

* preserve wildlife habitat and help protect the Yahara Watershed river and lakes' fisheries

* by reducing lawn area, reduce demands on the municipal well water and potential related negative effects on groundwater supply to the marsh.

Please vote to modify the draft Cherokee Special Area Plan to incorporate the Friends' alternative development plan, which concentrates residences at higher maximum densities in uplands south of Wheeler Road.

Thank you for your careful consideration of the Friends' proposals and the future of Cherokee marsh, an irreplaceable natural and community asset.

Sincerely,
S. Galen Smith, Ph.D.
Professor Emeritus (biology), University of Wisconsin-Whitewater Board member, Wisconsin Wetlands Association
218 DuRose Terrace
Madison, WI 53705

Roll, Rick

From: Carol Pope [cpope@recsports.wisc.edu]
Sent: Thursday, January 04, 2007 11:09 AM
To: Roll, Rick
Subject: Please help secure land adjacent to Cherokee Marsh

Hi Mr. Roll,

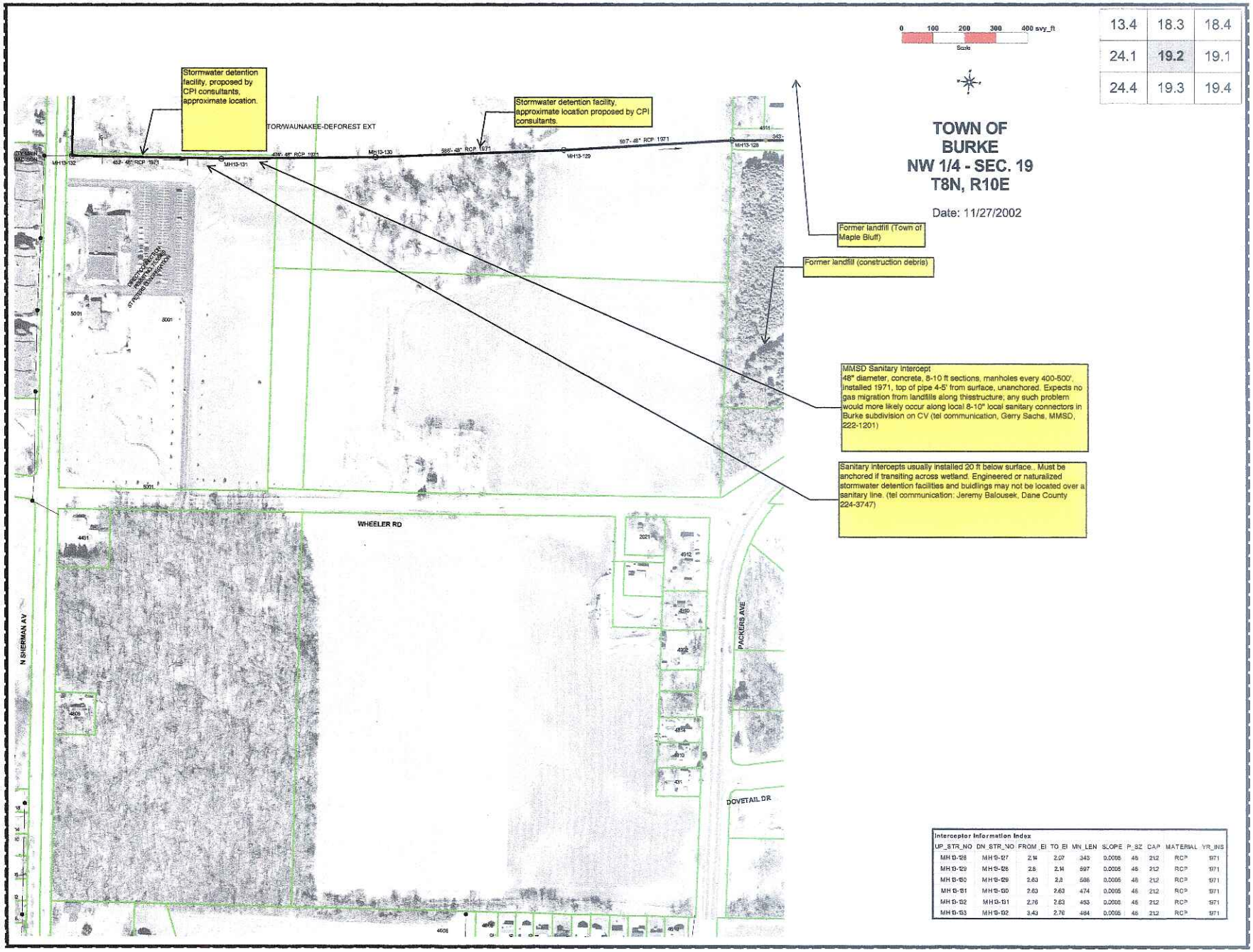
I saw in the paper that there are plans to fund land purchase adjacent to the Cherokee Marsh to help preserve this unique Dane County area from the impacts of land development.

Our family has enjoyed our visits to the marsh and love that this area is available for recreational use to the members of our communities.
Having the upland areas around the Marsh protected from development will enhance the experience and the beauty of the area.

I am a Friend of the Yahara Parkway, and as I have worked, since 2000, to improve the quality and appeal of the parkway I have come to understand pressures on one part of the watershed affect the water, wildlife and quality of life for all of the watershed area.

Thanks for your help!

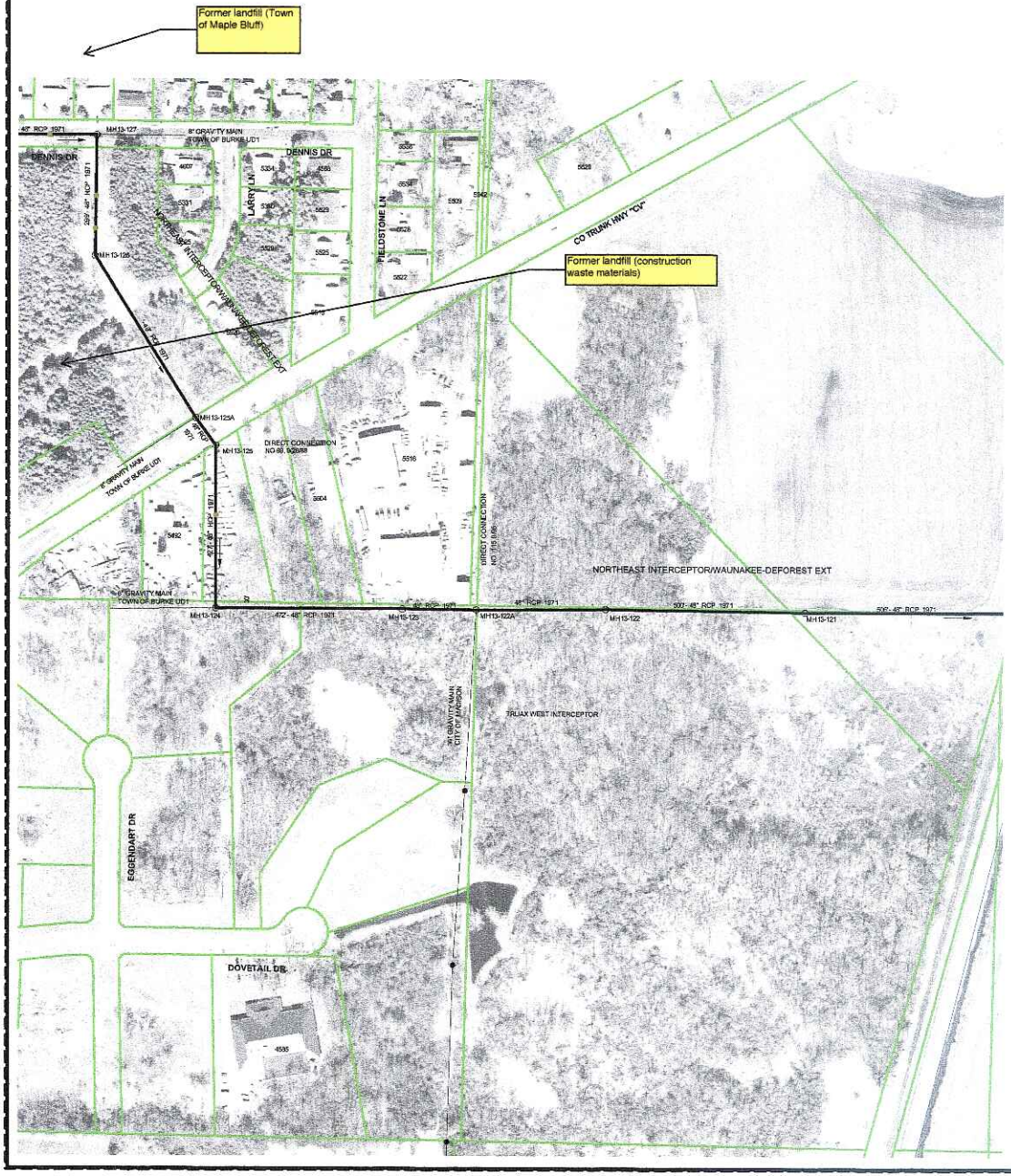
Carol Pope
2038 East Main St.



13.4	18.3	18.4
24.1	19.2	19.1
24.4	19.3	19.4

Interceptor Information Index

UP_STR_NO	DN_STR_NO	FROM_EL	TO_EL	MN_LEN	SLOPE	P_SZ	CAP	MATERIAL	YR_INS
MH13-128	MH13-127	2.14	2.07	343	0.0005	48	212	RCP	1971
MH13-129	MH13-128	2.8	2.14	597	0.0005	48	212	RCP	1971
MH13-130	MH13-129	2.83	2.8	586	0.0005	48	212	RCP	1971
MH13-131	MH13-130	2.83	2.83	474	0.0005	48	212	RCP	1971
MH13-132	MH13-131	2.76	2.83	453	0.0005	48	212	RCP	1971
MH13-133	MH13-132	3.43	2.76	484	0.0005	48	212	RCP	1971



0 100 200 300 400 svy_ft
Scale

18.3	18.4	17.3
19.2	19.1	20.2
19.3	19.4	20.3

TOWN OF BURKE
NE 1/4 - SEC. 19
T8N, R10E

Date: 11/27/2002

Interceptor Information Index

UP_STR_NO	DN_STR_NO	FROM_EI	TO_EI	MN_LEN	SLOPE	P_SZ	CAP	MATERIAL	YR_INS
MH 13-121	MH 13-120	0.91	0.56	309	0.0005	48	212	RCP	1971
MH 13-122	MH 13-121	0.97	0.91	500	0.0005	48	212	RCP	1971
MH 13-122A	MH 13-122		0.97			48	212	RCP	1971
MH 13-123	MH 13-122A	12				48	212	RCP	1971
MH 13-124	MH 13-123	121	12	472	0.0005	48	212	RCP	1971
MH 13-125	MH 13-124	1.59	121	427	0.0005	48	212	RCP	1971
MH 13-125A	MH 13-125		1.59			48	212	RCP	1971
MH 13-126	MH 13-125A	1.95				48	212	RCP	1971
MH 13-127	MH 13-126	2.07	1.95	299	0.0005	48	212	RCP	1971
MH 13-128	MH 13-127	2.14	2.07	343	0.0005	48	212	RCP	1971

Case Study:
Highlands' Garden Village

Mixed Use P.U.D.

CIVITAS

Highlands Garden Village

Project Size: 27.39 acres (Total housing units: 326)

Gross Density: 11.9 du/ac (open space 3.2 acres)

CIVITAS

Single Family Housing

52 dwelling units

2,000 – 4,000 s.f.

Typical lot size: 40' x 80' = 3,200 s.f

Net Density (streets and alleys not included): 10 du/ac

Gross Density (includes open space): 6.8 du/ac

CIVITAS

Multifamily Housing

124 dwelling units

600 – 1,400 s.f.

Net Density (streets and alleys not included): 77 du/ac

Gross Density (includes open space): 49 du/ac

CIVITAS

Townhomes / Condominiums

54 dwelling units

1,300 – 2,200 s.f.

Net Density (streets and alleys not included): 43 du/ac

Gross Density (includes open space): 14 du/ac

CIVITAS

Senior Housing

63 dwelling units

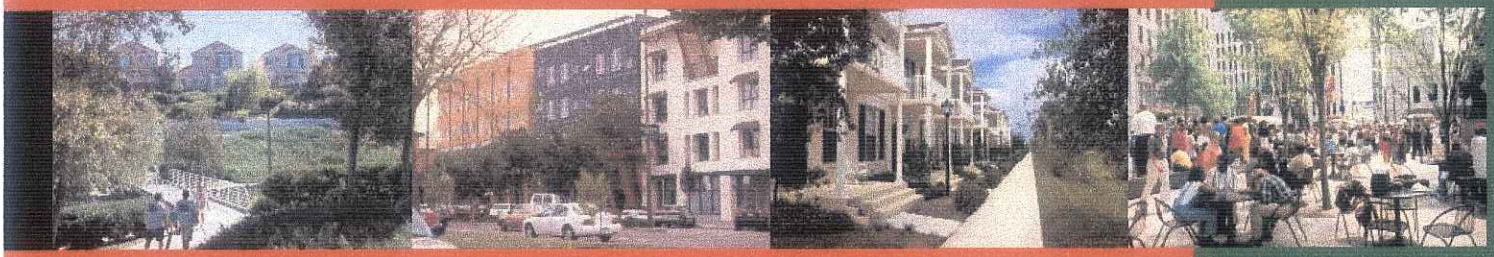
500 – 1,200 s.f.

Net Density (streets and alleys not included): 88 du/ac

Gross Density (includes open space): 38 du/ac

CIVITAS

Creating Great Neighborhoods:



Density in Your Community

produced by
Local Government Commission
in cooperation with
U.S. EPA

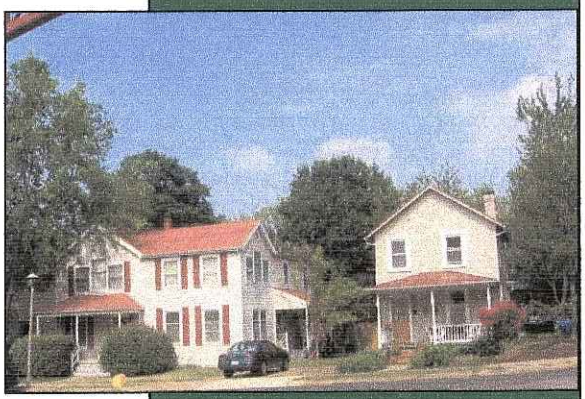
REALTOR®
NATIONAL ASSOCIATION OF REALTORS®
The Voice for Real Estate

Real Strength.
Real Advantages.

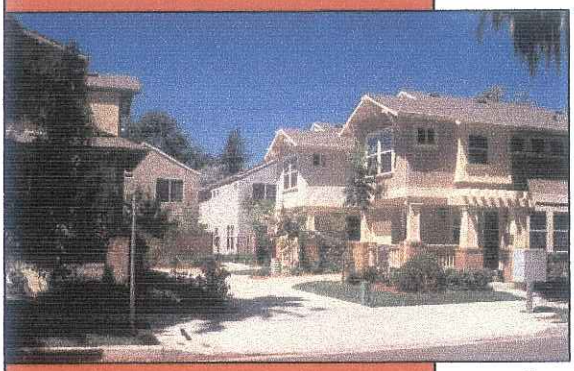
How Density Creates Great Places to Live

Arlington's experience illustrates the growing public realization that adding density in appropriate locations can create great places to live. More and more people understand that to achieve their community goals and create a vibrant place to live, the community needs different types of development – different types of density. It cannot thrive over the long-term with only one development choice.

To achieve this balance, many communities are concentrating development in key locations, offering residents the opportunity to live in different types of neighborhoods, walk, drive or ride transit as they choose and enjoy great places to live. By balancing density in the community, these goals can be met.



Transit-oriented development has enabled Arlington County, Virginia, to provide a diversity of urban and suburban housing types.



Proximity of housing to retail neighborhood allows residents of Sacramento's Metro Square to walk to meet many of their daily needs (see "Design Principles").

Density helps create walkable neighborhoods

Part of the challenge of making a neighborhood genuinely walkable is providing attractive destinations nearby, such as shops or restaurants. However, ensuring that those places are both walkable and economically viable requires density. Research suggests that densities of seven units per acre or higher are needed to support a small corner store; a small supermarket requires 18 units per acre.[2]

Retail destinations located within a short walk of residences typically include markets, cafes, dry cleaners and convenience stores, all of which partially depend upon pedestrian traffic for their customer base.

Higher density development contributes to the viability of a wider range of businesses, ultimately resulting in more destinations for residents to walk to.

Shops, houses, restaurants and schools may be located close to each other, allowing people to go out to eat, walk to school or purchase a quart of milk within a reasonable (5-10 minute) walk.

Density supports housing choice and affordability

Communities that allow only low-density development limit housing choices and may drive up housing costs. By balancing lower, medium and higher-density projects, communities can offer a wider range of housing types.

In contrast to conventional development in which housing tends to be similar in style and size, higher density projects can provide townhouses, apartments, accessory units and even live-work spaces to accommodate a broader range of lifestyles.

This greater range of housing types expands housing choices within a neighborhood. This allows residents to choose housing that meets their changing

Walkability Indicators in Higher vs. Lower Density

■ Sacramento Neighborhoods

In 2000, NRDC compared two Sacramento, California, area neighborhoods, one notably higher in density than the other. The comparisons are dramatic.

	Metro Square (20 du/acre)	North Natomas (6 du/acre)
Distance to:		
Convenience store	815 ft.	15,388 ft.
Supermarket	1,941 ft.	14,458 ft.
School	1,962 ft.	17,181 ft.
Bus Stop	666 ft.	11,055 ft.
Parks	347 ft.	702 ft.
Jobs in 1 mile	29,266	0

du = dwelling units [2,640 feet = 1/2 mile]

source: Natural Resources Defense Council, *Environmental Characteristics of Smart Growth Neighborhoods: An Exploratory Case Study*

Old mall, new transit-oriented development

The Crossings

Mountain View, California

The Crossings in the city of Mountain View, 30 miles south of San Francisco in the middle of Silicon Valley, transformed a failing 1980s auto-oriented mall, the Old Mill Mall, into a vibrant neighborhood that offers a variety of housing and transportation choices. The 18-acre infill project by TPG Development replaced the demolished shopping mall with housing units, retail shops, and a daycare center, all oriented toward the new San Antonio Avenue CalTrain commuter rail station.

Single-family homes in The Crossings

Home to the decaying mall until 1995, the 18-acre site is bounded by commercial space on two sides (including a supermarket), a rail line and expressway on a third side, and condominiums on the fourth side, with a local school nearby. When CalTrain announced its plans for a new commuter station, the city of Mountain View began to work with adjacent communities and local residents to rezone the mall parcel for residential development, working out a joint Precise Plan to help direct the project.

TPG Development's original proposal envisioned an auto-oriented mixed-use development. The city rejected the proposal, and the design firm of Calthorpe Associates was hired. TPG and Calthorpe Associates engaged the community in designing the new mixed-use development.

The project leveraged the existing retail business, particularly the supermarket, as an asset for the new housing units, while providing diverse housing choices to the Silicon Valley community.

The first phase included 47 single-family detached houses. Thirty units sold before construction was finished, at $249,000 per unit. Resale value reached $600,000 per unit in 2002.

Completed in 2000, the development contains 359 units – 102 small-parcel detached houses, 129 rowhouses and 128 condominiums – for a total of about 1,000 residents.

The development includes a community center and pool, small retail businesses facing the CalTrain station, and 200 parking spaces for rail commuters. The gross density is 21 units per acre, with a net density of 30 units per acre – compared to an average overall density of 7 to 10 units per net acre in the rest of the city.

The housing types range from a density of 11 units per acre to 70 units per acre. The 5,000 square feet of retail is within a five-minute walk of the rail station. Although priced at market rates, the compact design made the units relatively affordable in

the high-cost Silicon Valley real estate market. At first sale, about 80 percent of the units sold below the median home price in Mountain View.

Architectural integrity and access to transportation options were key elements of the Crossings' design plan. Designed in the "Palo Alto Cottage" vernacular, buildings feature 5-foot setbacks, which brings homes closer to the street and helps integrate the neighborhood into the surrounding community. Houses with front porches stand close together on narrow lots.

Retail and office use are concentrated near the transit station; the lowest density is farthest from the station, but still within a 5-minute walk to all services.

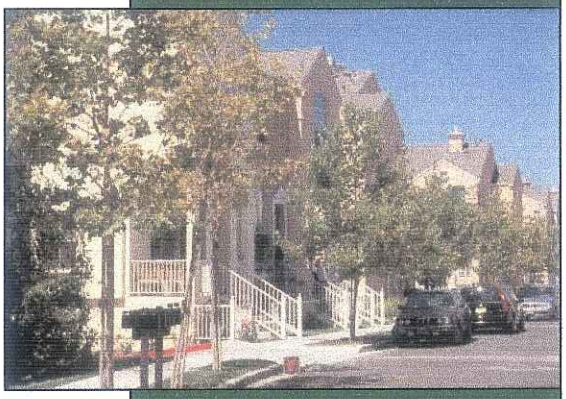
Residential parking is located behind units, deeply set back from the housing fronts, or underground.

Apartments are organized around common courtyards; two small parks are positioned close to all the homes, and a bandstand and tot lots are part of the intimate environment.

Amenities such as a day care center and a pool help create an enriching community.

Short blocks on a small grid system help facilitate various modes of transportation. Streets are lined with trees to provide shade and protection to the neighborhood pedestrians. On-site redwood trees were preserved.

The Crossings is a walkable neighborhood that connects surrounding commercial and residential uses to a new transit station. It offers pedestrian-friendly streets, diverse housing choices at moderate prices, and three times the average city density. The new rail station is integrated into the community, surrounding infrastructure is optimized, the city's tax base is increased, and new development is accommodated close to retail and community destinations.



Residential development

Project Profile

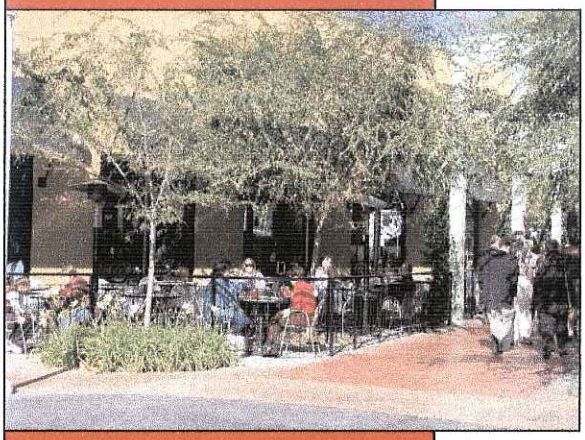
- Suburban reuse site: old mall
- Total area: 18 acres in Silicon Valley
- Mixed-use project includes 102 single-family detached houses, 129 rowhouses and 128 condominiums
- Residential density: 30 units/acre net
- Parking: 200 spaces for CalTrain commuters
- Built 1995-2000
- Developer: The Plymouth Group
- Designer: Calthorpe and Associates

University mixed use benefits community

Aggie Village and Davis Commons

Davis, California

Completed in 1997, the vibrant mixed-use, infill Aggie Village in Davis occupies a 10-acre tract that sat vacant for nearly 30 years, until the mid-1990s. Located within the city's downtown core, east of the University of California's Davis campus, Aggie Village provides needed housing for university employees. Together with Davis Commons, an adjacent 3.5-acre commercial development opened in 1998, Aggie Village has significantly expanded Davis' downtown tax base.



Café in Davis Commons

Beginning in the mid-1990s, both the city and UC Davis planners grew interested in the vacant tract as a site for possible development. Town leaders and university officials saw the site as a means to expand and diversify Davis' commercial tax base without impairing the character or the retail, social, and cultural primacy of downtown.

University officials also saw the site as an opportunity to meet expected housing demand. Faculty was expected to increase by 500 people over the next 10 to 15 years, and the university wanted to ensure that new faculty would have the option to both live and work in Davis. Housing costs were on the rise, and without additional affordable housing within town limits, new faculty would likely be priced out of the market.

The planning of Aggie Village involved 14 public workshops, resulting in a special Planning Citizens Committee of 22 people appointed by the city and the university. The final outcome is 54 Craftsman, Victorian and Mission-style homes – 21 single-family homes, 16 duplex townhomes and 17 accessory dwelling units or cottages – at a residential density of 17 units per acre.

The single-family homes have recessed garages, with accessory dwelling units to the rear of lots. The accessory units face each other and overlook a series of bicycle and pedestrian paths or alleys.

Townhomes, concentrated on the north of the site, are consistent with the scale of fraternity and sorority houses directly across the street.

Original sale prices for detached single-family ranged from $175,000 to $250,000, with duplexes selling for $150,000 to $160,000. The cottages are rented out, currently for between $650 and $800 per unit – compared to the city's market rate of $975 for a two-bedroom rental.

Several bus stops, a multi-use path along First Street, and the Putah Creek Greenway, which abuts the housing development to the south, allow quick bus and bicycle access to the campus and downtown.

By design, Aggie Village is a socially vibrant neighborhood, where residents can sit on front porches and talk with pedestrians, where the streets, sidewalks and alleys serve as gathering places as well as transportation routes.

Facilitating interaction between residents meant turning the streets, alleys, and paths into public spaces that welcomed and encouraged neighborly interaction. Consequently, all single-family and accessory units have narrow setbacks and front porches, and overlook a street, alley or path.

Garages are recessed so as not to intrude on the sidewalk. Street trees and on-street parking buffer automobile traffic. Alleys are reserved for pedestrians and bicyclists.

The density of Aggie Village changes depending on proximity to the university or downtown. Areas near downtown have higher density, with the multi-story duplex, townhomes and retail center. Areas near the campus and its facilities (arboretum and greenway) are less dense, with cottages and single-family homes.

The neighborhood extends the downtown street grid and integrates its bike and pedestrian network into the existing paths that run along the Putah Creek Green-way and First Street. This establishes strong transportation connections between the campus and the downtown.

The addition of Aggie Village and Davis Commons has been good for the university, local business, and the tax base, attracting new retail and strengthening existing stores. Yet, the developments have also enhanced the small town feel of the community, both easily accessible on foot or a bike.

Aggie Village has galvanized community support for additional higher density residential development within the downtown core. It has motivated the community to shift from its former "slow growth" attitude toward support for smart growth, with most residents recognizing this as a way to strengthen downtown and add to, rather than detract from, local quality of life.

Single-family homes adjacent to bike path, with retail behind

"Everything has 'eyes on it' and everything has activity. That's the most interesting part of the site plan to me."

—University planner Bob Seager, in the "Places" column in California Planning and Development Report, March 1997

Project Profile

- Mixed-use infill development (vacant lot)
- Total area: 10.8 acres (4.5 residential, 3.5 retail, 15,000 square feet of open space)
- 54 residential units (21 single-family homes, 17 cottages, 16 duplex units)
- Residential density: 17 units/acre net
- Parking spaces per unit: 1.9
- Housing completed in 1997, retail opened 1998
- Developer: University of California, Davis
- Designer: Calthorpe and Associates

Prairie Crossing *A Conservation Community*

Prairie Crossing gets a percentage of its energy from a wind turbine. Find out how much energy the PCWT is currently generating.

Station Square at Prairie Crossing:
New Condominiums, Shops, and Restaurants

New Maintenance Free Condominiums

Living at Prairie Crossing

Prairie Crossing is the critically-acclaimed 'Conservation Community' that was designed to combine responsible development, the preservation of open land and easy commuting by rail. It is now considered a national example of how to design our communities to support a better way of life.

Instead of the thousands of homes that could have been built on the beautiful prairie, there will be only 395 homes at Prairie Crossing: 359 single-family homes and 36 condominiums. The first homeowners moved to Prairie Crossing 10 years ago and the new construction single-family homes have all been sold. The 36 new condominiums in the Station Square neighborhood are the last opportunity to purchase a new home at Prairie Crossing.

Condominium owners at Prairie Crossing will enjoy a maintenance-free lifestyle with luxury features and security, all within the nationally-recognized conservation community. They will be able walk to two Prairie Crossing/Libertyville Metra stations with easy access to downtown Chicago and O'Hare Airport. Retail shops and restaurants will be part of the 'Station Square' neighborhood, in addition to easy access to Libertyville and Grayslake.

Condominium owners are welcome at Prairie Crossing's many activities and events: concerts and gatherings at the historic Byron Colby Barn, boating, fishing and swimming at Lake Aldo Leopold's sandy beach, walking, biking and cross country skiing on the 10 miles of trails. The Prairie Crossing Farm Market features a delicious locally grown and organic produce, honey and eggs. Click here to learn more about the Prairie Crossing community.


The Condominiums at Station Square


The Byron Colby Barn


The Organic Farm and Farm Market


The Charter School

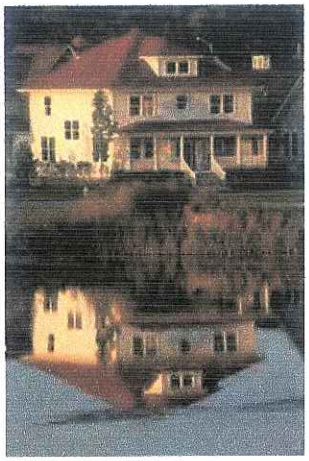
Main Page
Community Overview
Homes for Sale
Life at Prairie Crossing
Guiding Principles
Transportation
PC in the News
Contact or Visit Us

About Prairie Crossing

Prairie Crossing, the nationally recognized Conservation Community is now selling 36 condominiums. It has sold the last of its 359 new construction single-family homes. The community was designed to combine responsible development, the preservation of open land and easy commuting by rail. It is now considered a national example of how to design our communities to support a better way of life.

Living at Prairie Crossing
Homeowners at Prairie Crossing will share in the rich sense of community already in place. They are welcome at Prairie Crossing's many activities and events: gatherings at the historic Byron Colby Barn, gazebo concerts, farm markets, swimming and cookouts at the beach in the summer, ice skating, sledding and cross country skiing in the winter. Homeowners enjoy boating, fishing or skating on the community's lakes, and swimming at the sandy beach. The Prairie Crossing Farm Market features a delicious locally grown and organic produce, honey and eggs. Residents with children can apply for admission to the on-site Prairie Crossing Charter School, a public elementary school where learning is focused on the natural environment. A cooperative of homeowners with horses manages the small stable.

Single-Family Homes at Prairie Crossing
The single-family homes of Prairie Crossing are well known for excellent design and architecture. Accomplished architects were asked to look at beautiful old Lake County homes, both in nearby towns and on farms, and come up with new designs based on the Midwestern architectural tradition. This has resulted in the distinctive look of the Prairie Crossing single-family homes. Close to twenty-five single-family home plans were offered at Prairie Crossing since its inception, and there is an integrated feel to the architecture because each plan is grounded in the history of the area. Despite their traditional look, the homes at Prairie Crossing designed for modern living and are 50% more energy-efficient than comparable homes in the Chicago area, thanks to U. S. Department of Energy-approved "green" construction techniques.



All 359 new construction single-family homes at Prairie Crossing have been sold. Interested buyers can purchase single-family homes on the 'resale' market through the homeowners or a realtor. If you would like a referral to a realtor that works with many Prairie Crossing single-family homeowners, please contact the Information & Sales Center at 847.548.5400 and we would be happy to provide a referral.

The Condominiums at Prairie Crossing
Prairie Crossing has recently introduced 36 condominiums located in Station Square, a new area within the Prairie Crossing community. These maintenance-free 2 and 3 bedroom one-level residences are set around a town square, steps from shops and the train. Click here for more information about the Condominiums or call the Prairie Crossing Information & Sales Center at 847.548.5400.

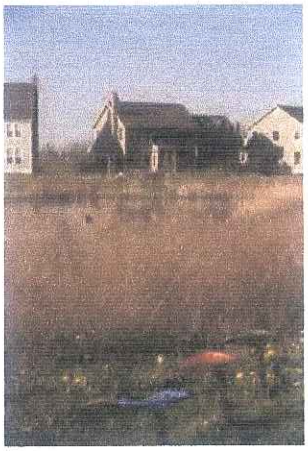
Train Access to Prairie Crossing
Two Metra commuter lines cross on the Illinois prairie next to Prairie Crossing. These two lines - with connections to Chicago and O'Hare International Airport - are just a few minutes walk from Prairie Crossing. Residents can walk to the train and be in downtown Chicago in an hour on the Milwaukee District North Line, or at O'Hare in 35 minutes on the North Central Line.

Open Space & Trails
At Prairie Crossing people live in ways that

are good for them and healthy for the land. Over 60 percent of the 677-acre site is protected open land that is actively used by people and wildlife. Ten miles of trails wind through a landscape of farm fields, pastures, lakes and ponds, native prairies and wetlands. Residents use them to walk, run, bike, ski, ride horseback, and watch the many species of birds, butterflies and other wildlife that are attracted to a healthy ecosystem and native landscaping. In addition, Prairie Crossing is linked by regional trails to the Liberty Prairie Reserve, over 3,200 acres of legally protected land.

The Prairie Crossing Organic Farm

A certified organic farm, in operation for over a decade, provides homeowners with views over cultivated fields of vegetables and flowers and a seasonal on-site Farm Market. At the market, residents and the general public buy vegetables, fruits, flowers and other products like honey and eggs -- all produced without pesticides or herbicides.



A Sense of Place

One of the ten guiding principles that have directed Prairie Crossing since its inception is "A Sense of Place." To reinforce the community's sense of its Lake County roots, historic buildings were preserved for current use. One of these is the Byron Colby Barn, a dairy barn built nearby in 1885. It was taken down timber by timber and transported to Prairie Crossing, where a barn raising and renovation took place in 1996. The barn now serves as a community center and site for weddings, parties, concerts, school assemblies and conferences.

The sense of place is further enhanced by the colors of the houses, which echo the earth tones and warm colors of the native prairie landscaping in the common areas and help create an inviting and cohesive community. Street at Prairie Crossing, named after the plants that once spread across Illinois, such as such as Blazingstar, Coneflower, and Prairie Orchid, provide other reminders of the Midwest heritage of the community.

Native Prairie Landscaping

Prairie Crossing is well known for its beautiful native prairie landscaping. With more than 165 acres of restored prairies, 20 acres of restored wetlands, and 16 acres of historic hedgerows, the Prairie Crossing landscape is contributing to the restoration of the native ecology of the region. Many Prairie Crossing residents integrate these native plant communities into their own landscaping to showcase their houses in formal groupings or planted as wild meadows. Native landscaping also serves an important function in cleansing the storm water on the site and protecting the water quality of lakes. Hardier and more sustainable, it requires less water and labor than traditional lawns or more formal plantings, prevents flooding and lowers maintenance costs.

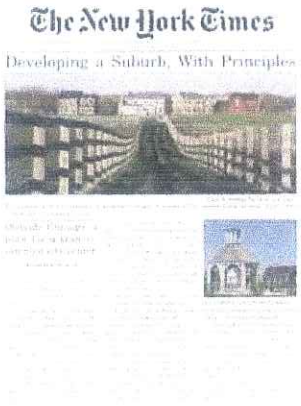
Lake Aldo Leopold

Due to a site design that filters storm water runoff through the prairies and wetlands, the water in Prairie Crossing's Lake Aldo Leopold (named after the great Wisconsin conservationist and author), is pure enough to swim in. Residents gather at the popular community beach and also canoe, kayak and sail on the lake. The water quality is such that the Illinois Department of Natural Resources selected Prairie Crossing as a site for stocking endangered native minnows that are critical to a healthy biodiversity in our streams and lakes.

The Developers

The land that is Prairie Crossing was purchased in 1987 by a group of neighbors who wanted to preserve open space and agricultural land. They formed a company with the goal of developing this beautiful 677 acres responsibly, with a total of only 359 single-family homes and 36 condominiums as

opposed to 2,400 homes that were planned by another developer. George and Victoria Ranney, a husband and wife team, have guided the development of Prairie Crossing since its inception.


The New York Times

Developing a Suburb, With Principles

Critical Acclaim for Prairie Crossing
Prairie Crossing has been nationally recognized for its innovations in planning and community design. It has been featured in the New York Times, the Wall Street Journal, the Chicago Tribune, the Daily Herald, Landscape Architecture, and the National Geographic. Its houses and native landscaping have been highlighted in Country Living, Midwest Living, and Better Homes and Garden's Perennials.

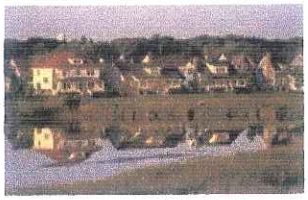
These articles and more information are available at the Prairie Crossing Information and Sales Center. The office can be reached at (847) 548-5400.

main page | community overview | homes for sale | amenities
guiding principles | commuter info | PC in the news | contact or visit us

Prairie Crossing *A Conservation Community*

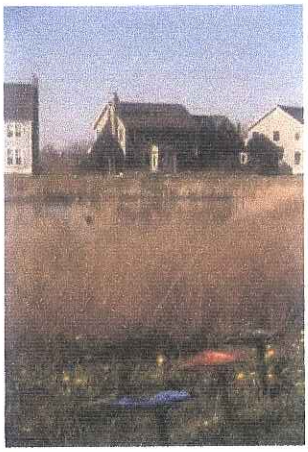
Main Page
Community Overview
Homes for Sale
Life at Prairie Crossing
Guiding Principles
Transportation
PC in the News
Contact or Visit Us

Guiding Principles for Prairie Crossing



Houses along Levi Baxter Street on a still evening

Ten important principles established by the community's founders have guided Prairie Crossing since its inception. Together, these Guiding Principles provide the framework for a way of life that respects the environment and enables residents to experience a strong connection between community and the land.



Lake Aldo Leopold supports a variety of native flora and fauna

Environmental protection and enhancement
Prairie Crossing's land was purchased to safeguard its open spaces. 350 of its acres are legally protected from development. Prairie Crossing is part of the Liberty Prairie Reserve, over 5,000 acres of publicly and privately held land that includes nature and forest preserves, farms and trails. At Prairie Crossing itself, greenways have been constructed and houses placed to protect the environment, native vegetation and wildlife of the Midwest.

A view of Potawatomi Road from the steps leading to Lake Aldo Leopold

A healthy lifestyle
More than ten miles of trails, a stable, and a large lake with beach and dock provide opportunities for healthy outdoor exercise. The farm supplies fresh organic vegetables, flowers, and fruits to the community. Individual garden plots are available at a small cost. Lake Forest Hospital has built a new facility at Prairie Crossing.

Colbee Benton Road in the Village Green

A sense of place

Prairie Crossing is squarely rooted in its central Lake County location. Landscape and architecture are inspired by the prairies, marshes, and farms of the area. Streets are named after prairie plants and early settlers who frequented the site. A palette of rich house colors derives from the warm tones of the native landscape. The community buildings - an historic barn, a schoolhouse, and a farmhouse - remind us that others have lived on this land before, and that others, to whom we have responsibility, will live here after us.

Coneflowers at Prairie Crossing

A sense of community

In the belief that community and conservation can go hand in hand, the trails and gardens of Prairie Crossing are designed to be places where people can meet to enjoy and care for the land. The Homeowners Association has taken responsibility for the community amenities, design review, and other aspects of community life at Prairie Crossing. Volunteer stewardship activities are organized by the Liberty Prairie Conservancy, which conducts environmental programs throughout the Liberty Prairie Reserve. From the outset Prairie Crossing has sought to work collaboratively with its neighbors, seeking to achieve unusual synergies with homeowner associations, public officials, and local businesses.

Family biking at Prairie Crossing Trails

Economic and racial diversity

Prairie Crossing welcomes residents of all races. Its founders believe that a mix of incomes and races is essential to the future of our society. They have attempted to keep costs and prices down so that some homes will be within the range of families needing affordable housing in Lake County.

The Prairie Crossing Station

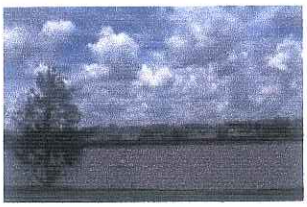
Convenient and efficient transportation

Prairie Crossing is approximately an hour from Chicago by train or car. There is rail service to Chicago and O'Hare Airport from two stations adjoining the site. Prairie Crossing lies within a triangle of three major roads: Routes 45, 137, and 120. Trails lead to the train station, the College of Lake County, the University Center of Lake County, the Liberty Prairie Reserve, Grayslake High School, and local stores and restaurants.

Prairie flowers and the north pond at Prairie Crossing

Energy conservation

Homes at Prairie Crossing have been constructed with techniques that reduce energy consumption by approximately 50 percent in comparison to new homes in the area. Community-wide recycling and composting programs are in effect. Prairie Crossing is designed to encourage walking and biking as alternatives to short trips by automobile. A wind turbine provides power to the farm. The new buildings of the Prairie Crossing Charter School are designed to Leadership in Energy and Environmental Design (LEED) standards.



Rowboat on Lake Aldo Leopold

Lifelong learning and education

The Prairie Crossing Charter School offers elementary education based on an environmental curriculum to children from two local school districts. Informal learning takes place at the Liberty Prairie Conservancy, the Prairie Crossing Institute, the Farm and the Byron Colby Barn community center. The College of Lake County and the University Center of Lake County are both located within two miles.

Sail boat on Lake Aldo Leopold

Aesthetic design and high-quality construction

Professionals who are highly accomplished in their fields have been responsible for land planning and architecture. High standards of design and execution throughout Prairie Crossing are a priority. Prairie Crossing has received national attention for its beauty and design that combines town and landscape planning.

The prairies at Prairie Crossing

Economic viability

Prairie Crossing is being developed by families who wish to see the conservation community concept replicated elsewhere. They have made every effort to ensure that the project is economically feasible and have carefully budgeted for long-term success.

main page | community overview | homes for sale | amenities
guiding principles | commuter info | PC in the news | contact or visit us

Prairie Crossing *A Conservation Community*

Main Page
Community Overview
Homes for Sale
Life at Prairie Crossing
Guiding Principles
Transportation
PC in the News
Contact or Visit Us

New Condominiums at Prairie Crossing

The Wacker, Burnham, and Bennett Buildings

Prairie Crossing, the nationally recognized conservation community in Grayslake, is now presenting 36 condominiums. These condominiums in the new Station Square neighborhood of Prairie Crossing are the last opportunity to purchase a new home in the community.

The 36 new condominiums will be located in Station Square, a new area within the Prairie Crossing community. Station Square lies at the point where the rural amenities of Prairie Crossing - its trails and long views, lakes, prairies and farm fields - meet its urban access: Route 137 and two commuter train lines that lead to downtown Chicago and O'Hare International Airport. In addition to the new condominiums, Station Square will offer convenient shopping and friendly, informal gathering places around a landscaped square.

The three condominium buildings uphold the standards for high-quality architecture for which Prairie Crossing has become known. The Burnham, the Bennett and the Wacker Buildings, named to commemorate three great urban planners in Chicago's history, were designed by Worn Jerabek Architects, a Chicago-based firm with a strong background in environmental design. Mr. Worn himself was named as one of the top one hundred architects in the world by Architectural Digest magazine. He is known for his attention to detail and ability to integrate attractive living spaces with energy efficiency and other 'green' features. (Find out more information on Prairie Crossing's ongoing Commitment to Energy-Efficient Building and the 'green' features of the Condominiums.)

At the head of the landscaped Station Square will stand the Burnham Building, with twenty condominiums on three floors overlooking the square to the south and the Wild Indigo garden to the north. Flanking Station Square on either side will be the Bennett and Wacker Buildings, each with eight spacious condominiums on two floors above first-floor shops and offices. Building sites adjacent to these two buildings are reserved for retail, which may include a small market or restaurant.

The Station Square condominiums have been planned with care. Each of the 15 floor plans has two or three bedrooms. (See the floor plans and more details.) The square footage of the condominiums ranges from 1,596 to 2,720 and prices start at $329,000.

All condominiums come standard with the following features:

- Maintenance-free lifestyle
- Master and guest suites that ensure privacy for you and your guests
- Abundant windows with views of open space
- Private balconies - at least one per condominium
- Spacious, well-designed kitchens with Energy Star appliances and maple cabinets (Find out more about our kitchens.)
- Generous closets and in-unit laundry rooms
- Utility rooms for each unit accessible from the hallways
- Interior parking space
- Storage unit
- Elevators in each building

- Find out more about the exceptional amenities included with every condominium.

The condominium names -- such as the Goldfinch, the Meadowlark and the Heron -- are birds seen at the Liberty Prairie Reserve, the 5,800-acre open space reserve anchored by the Prairie Crossing community.

The condominiums at Prairie Crossing are ideal for people who seek well-designed, maintenance-free living along with access to the community's numerous amenities: ten miles of trails through more than 350 acres of open land, a lake and beach, a stable and pastures, a working organic farm and farm market, and the Byron Colby Barn, a community center with frequent concerts, workshops, and other events. The residents of Station Square will enjoy being part of Prairie Crossing, with its 359 single-family homes in neighborhoods on 676 acres. A regional trail connects the community with the 5000-acre Liberty Prairie Reserve to the east. The condominiums are also within easy walking distance of two train stations, where over 200 trains stop each week, providing unparalleled service to Chicago, other suburbs, and O'Hare.

Find out more about the floor plans and details to see which condominium fits your lifestyle.

For more information on the Condominiums at Prairie Crossing, including the most the most up-to-date information on which condominiums are still available, please visit or call the Information & Sales Center at (847) 548-5400.

Prairie Crossing is happy to work with Agents! Click here for Realtor Registration.

main page | community overview | homes for sale | amenities
guiding principles | commuter info | PC in the news | contact or visit us

Prairie Crossing *A Conservation Community*

- Main Page
- Community Overview
- Homes for Sale
- Life at Prairie Crossing
  - Organic Farm
  - Charter School
  - Byron Colby Barn
  - Homeowners
  - Stable
  - Liberty Prairie Reserve
  - Site Plan
- Guiding Principles
- Transportation
- PC in the News
- Contact or Visit Us

Current Weather at Prairie Crossing

Find out more about Energy Efficiency at Prairie Crossing.

Prairie Crossing Amenities

From the site design to the old fashioned porches, Prairie Crossing in Grayslake, IL, offers natural ways for people to come together. Residents gather at the renovated, century-old Byron Colby Barn for concerts, meetings and social events, or meet at the Prairie Crossing Farm to buy fresh organic vegetables, eggs honey and flowers. Lake Aldo Leopold attracts residents of all ages. They swim at the sandy beach, fish, canoe, or sail in summer and ice skate in winter. Neighbors meet to horseback ride, walk, bike or ski the trails. Horse owners manage the Prairie Crossing stable and adjoining pastures. The Prairie Crossing Charter School, a public elementary school to which Prairie Crossing homeowners may apply, emphasizes citizenship and learning from experiences of the natural environment. Prairie Crossing offers natural ways for people to come together. Residents gather at the Byron Colby Barn for concerts, meetings and social events, or meet at the Prairie Crossing Farm Market to buy fresh organic vegetables, eggs, honey and flowers. Lake Aldo Leopold attracts residents of all ages. They swim at the sandy beach, fish, canoe, or sail in summer and ice skate in winter. Neighbors meet to walk, bike, horseback ride or ski the 10 miles of trails within the community and in the 5,800-acre Liberty Prairie Reserve. Horse owners manage the Prairie Crossing Stable and adjoining pastures. The Prairie Crossing Charter School emphasizes citizenship and learning from experiences of the natural environment.

Prairie Crossing *A Conservation Community*

Main Page
Community Overview
Homes for Sale
Life at Prairie Crossing
Guiding Principles
Transportation
PC in the News
Contact or Visit Us

Learn about conservation development and more at the Prairie Crossing Institute.

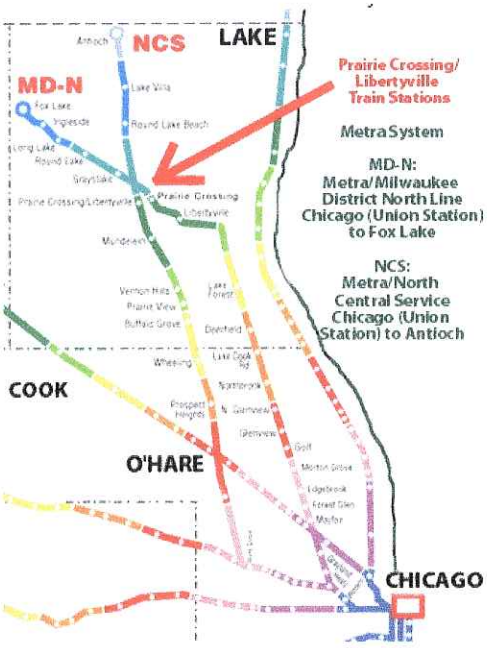
Transportation Options at Prairie Crossing

One of Two Prairie Crossing/Libertyville Train Stations

The Federal Transit Administration announced in 2005 that **at least one-quarter of all American households is likely to seek housing near transit over the next 20 years**. Cities such as Boston, Chicago, Dallas, Los Angeles, New York and San Francisco will offer the biggest increases in demand near mass transit stops. This is predicted to be "the biggest shift in housing since Americans flocked to the suburbs after World War II".

Prairie Crossing is unique in this respect - two Metra stations are within easy walking distance of the community. Often cited as a 'transit oriented development', Prairie Crossing is named after the two Metra commuter lines that cross next to the community. Many residents of Prairie Crossing have already chosen to live here due in part to its access to transit.

The two Libertyville/Prairie Crossing Metra stations offer a wide range of transit options. From one station, passengers can reach Chicago's Union Station in a little over an hour on Metra's North line. From the other station, passengers can get to O'Hare International Airport in 35 minutes as well as to downtown Chicago on Metra's North Central line. Almost 300 trains a week stop at the two Prairie Crossing/Libertyville stations, offering virtually unprecedented rail access for a suburban community.

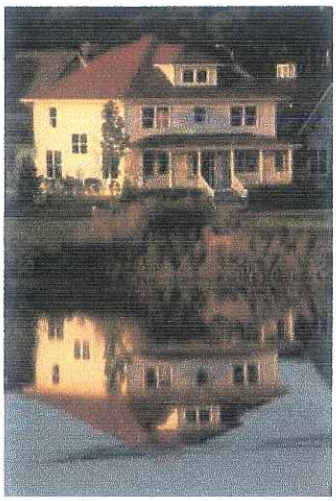


main page | community overview | homes for sale | amenities
guiding principles | commuter info | PC in the news | contact or visit us

Prairie Crossing *A Conservation Community*

Main Page
Community Overview
Homes for Sale
Life at Prairie Crossing
Guiding Principles
Transportation
PC in the News
Contact or Visit Us

Critical Acclaim for Prairie Crossing



'Foursquare' reflecting off Lake Aldo Leopold

Prairie Crossing has been nationally recognized in the press as one of the nation's leading conservation communities and for its innovations in planning and community design. These reviews by third party experts include dozens of articles and editorials in periodicals such as The New York Times, The Wall Street Journal, The Chicago Tribune, Crain's Chicago Business, The Daily Herald, Landscape Architecture, and The National Geographic. The Prairie Crossing houses and native landscaping have been featured in Country Living, Midwest Living, and Better Homes and Garden's Perennials. Prairie Crossing has also received repeated coverage on National Public Radio and on numerous television stations including WTTW Public Television and CNN.

We invite you to read these articles in their entirety, as well as many others that discuss Prairie Crossing, at the Prairie Crossing Information and Sales Center.

[The] Prairie Crossing project already breaks so many rules of conventional development that it has drawn national attention far out of proportion to its small size... [The houses] resemble homesteads. With gabled roofs, jaunty pediments, deep porches, clapboard siding, sash windows and white trim against a palette of rustic colors, they exude so much Americana they almost bring an Aaron Copland melody to mind.
"Developing a Suburb, with Principles" by David W. Dunlap, The New York Times, July 11, 1999.

This 677-acre development, with only 20 percent of its total acreage devoted to homes, certainly lives up to its kudos and it exceeded my own expectations...Prairie Crossing looks serene, clean and, most of all, inviting. Just seeing all those big porches, so many with wood or wicker rockers, made this house hunter want to go and sit awhile and just ponder the good things in life...Am I taken with this place? Well, yes...For people interested in the environment, in handsomely furnished homes with three to five bedrooms and multiple baths, Prairie Crossing is a very special place.
"Serene and Clean" by Genevieve Buck, The Chicago Tribune, June 3, 2000.

'The egrets come right up there,' Carol Sonnenschein says, gesturing toward the prairie grasses and sedges that roll into the lake a few feet from her porch. Off to the right, she points to where red-winged blackbirds blanketed a marsh in summer. Geese use the wetlands as a flyaway, she notes proudly, and at night coyotes can be heard baying at the moon...In Prairie Crossing, as the community is known, the environment is king.
"New Communities Make It Easy Being Green" by Stefan Fatsis, The Wall Street Journal, November 10, 1995.

This experiment in conservation is also an experiment in transportation. That's because of Prairie Crossing's unique location, with two commuter railroads crossing just outside of the property. Homes are just a short walk or bike ride from the existing Metra station and a new one that is planned...Chicago's first suburbs grew up in the 19th Century around rail

stops. Now Prairie Crossing is trying to copy that successful pattern of the past.
"Experiment on the Prairie: Transportation and conservation separate this development from rest of suburbia" by John Handley, The Chicago Tribune, September 29, 2002.

Prairie Crossing...may offer the Midwest's first contemporary alternative to subdivision planning...Prairie Crossing is...'a stepping-stone model,' an innovative experiment that bears repeating. Prairie Crossing may indeed provide a national and regional model urban development shaping the commissions of Midwestern planners and designers for years to come.
"Riverside Revisited?" by Frank Edgerton Martin, Landscape Architecture, August 1995.

In central Lake County, the development looks like a well edited version of the Midwest, knitting together the best of our small towns, suburbs, farms and open lands all together on some 670 acres. Big suburban houses look out onto restored prairies and wetlands. Kids from those houses can wander into a 150-acre organic farm to pick up some produce for the family. Their parents can walk to the Metra station along old farm hedgerows, listening to the resident birds chatter. The subdivision is at the western end of the 2,500-acre Liberty Prairie Reserve, a quilt of public land and various privately owned conservancy parcels that form a huge swath of preserved semirural land that stretches east to the Des Plaines river... Prairie Crossing's developers want to demonstrate that open space and land conservation can become selling points.
"To Serve and Protect," cover article on Vicky Ranney, Developer of Prairie Crossing, by Dennis Rodkin, The Chicago Tribune Magazine, May 23, 1999.

Scores on the latest state tests show 95 percent of [the Prairie Crossing Charter School's] pupils performing at or above state standards [making it one of the top ten performing schools in the State.] [The Prairie Crossing Charter School] grew to 220 students this fall from 160 after adding 5th grade. There, educators don't rely on textbooks; rather they use original sources like history books and selections from fiction, said Principal Kathy Johnston.
"2002 School Report Cards" by Michael Martinez and Darnell Little, The Chicago Tribune, November 16, 2002.

Homeowner Chuck Birch: 'I don't look at Prairie Crossing as anything new...It's a return to creating a community network of support that was part of American culture before World War II.'
"At Home in Prairie Crossing" by Steve Slack, Midwest Living, April 1998.

Prairie Crossing unquestionably shows that people and nature can live together... 'What's it like living at Prairie Crossing? You really feel like you're part of a rural community because everyone is so close together,' homeowner Mike Sands says. 'There are lots of small park areas where kids can play, so not everyone feels they need to have a backyard. A trail system has separate pedestrian and car circulation systems. And the landscaping just enhances it all, because you constantly have a sense of being outside in a natural area that doesn't feel managed, even though it is.'"
"Prairie Crossing Home: Native landscaping is becoming the norm in one Illinois Subdivision" by Camille Lefevre, Better Homes and Garden's Perennials, Summer 2001.

Links

- Water Quality & Storm Water Management: A Case Study
- Terrain.org, A Journal of the Built and Natural Environments: "Unsprawl" Case Study
- Liberty Prairie Conservancy
- Department of Energy
- Building Science Corporation
- Environmental Protection Agency
- United States Department of Agriculture
- Energy and Environmental Building Association
- LocalHarvest.com
- National Gardening

Dane County
Flood Mitigation Plan

Prepared by

Dane County Department of Emergency Management
Public Safety Building, Room 2107
115 West Doty Street
Madison, WI 53703-3202

In Cooperation With
The Dane County Lakes and Watershed Commission

Adopted by the Dane County Board of Supervisors
July 22, 2004

flooding that had recently inundated the Midwest. This was not the first conversation about Wisconsin and Midwest flooding, and it certainly was not the last.

Much of the attention surrounding flooding in Wisconsin occurs along the Mississippi River, and for obvious reasons. However, the same storms and ice melts that cause that river to rise, also impact more eastern rivers such as the Wisconsin, Yahara, Kickapoo, Pecatonica, Platte and Rock Rivers, as well as the hundreds of lakes that dot the landscape. Creeks are at risk as well. In 1960, citizens in Dane County were complaining about flooding in Starkweather Creek northeast of Madison, as well as the creek's resident insects and putrid odor. Additionally, basements were flooding and sewers were backing-up in the area and there were calls for dredging of the Creek. Dane County is not a newcomer to flooding.

Dane County received Presidential disaster declarations for widespread flooding twice in the last decade: 1993 and 2000. Significant damages were also recorded in 1996. Cumulative losses for these three years exceed $42 million, including private, public and agricultural damages. Damage assessment summaries for those years are shown in **Table 3.**

Past Flood Damages		
1993	Private losses:	$11.5 million (est.)
	Public losses:	$1.1 million (actual)
	Agricultural:	$10 million (est.)
1996	Private losses:	$6.8 million (est.)
	Public losses:	$1.7 million (est.)
	Agricultural:	$2.5 million (est.)
2000	Private losses:	$5.0 million (est.)
	Public losses:	$1.1 million (actual)
	Agricultural:	$3.2 million (est.)
	3 year total	**$42.9 million (est.)**

Source: Dane County Emergency Management

Table 3: Losses caused by widespread flooding have been substantial. Private and public losses shown as "estimated" are based on a compilation of local damage assessment figures. Public and private losses shown as "actual" are based on FEMA public and private assistance program payments. Agricultural losses are based on Dane County UW-Extension and USDA Farm Service Agency (FSA) estimates.

A brief description of past flood events, and their impacts is found below.

2001

2001 started very dry, beginning in the fall of 2000, with all regions of the state below 50 percent of the October precipitation average. Beginning in the winter, precipitation was highly variable and the state went through a series of wet and dry spells. However, by May

The Committee's analysis of survey, GIS, and interview information revealed that flooding is the result of a combination of highly complex factors that can be distinguished by four main categories: contributing influences, resulting impacts, conflicts, and complicating factors. The category of contributing influences can be further broken down into controllable variables and uncontrollable variables.

Controllable variables are those that can be adjusted or modified through regulation of human behavior. Uncontrollable variables are those that are difficult if not impossible to manipulate. In describing the flooding problem, the uncontrollable variables are those that describe the natural process and the lay of the land. None of these variables are problematic in themselves, but combined, they provide an accurate portrayal of where and what kinds of problems are likely to occur. Even so, these factors only become problematic when structures or developments are located in areas of vulnerability. Likewise, none of the controllable variables are problematic unless the uncontrollable variables indicate a risk if a certain use or practice is instituted at a certain site or location. The controllable variables can be adjusted depending on the conditions presented or likely to be presented by the uncontrollable conditions.

Contributing influences to flooding in the County include:

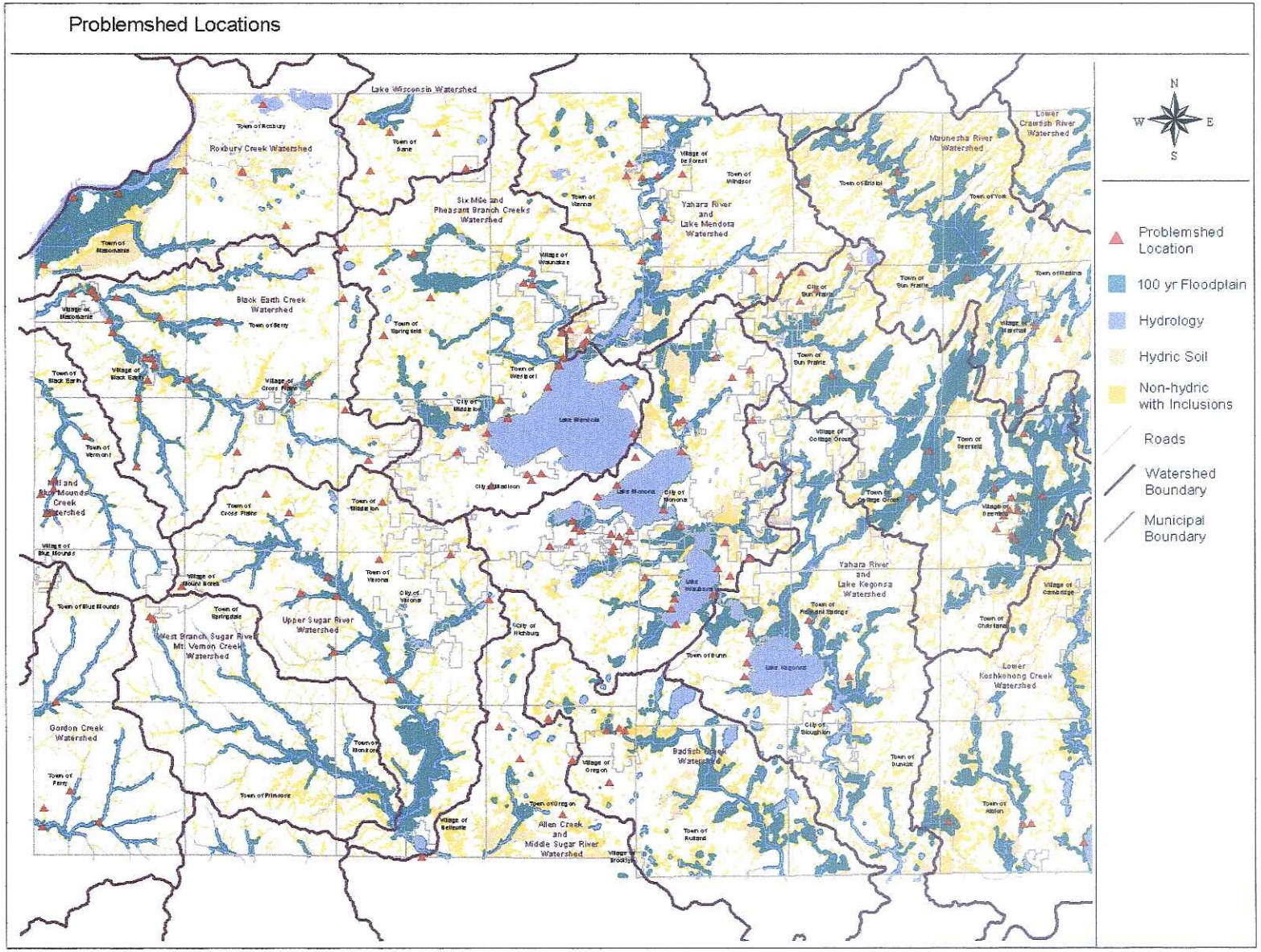
- Controllable
  - land use;
  - zoning regulations;
  - erosion control management practices;
  - building codes;
  - education;
  - amount of impervious surfaces;
  - general engineering practices;
  - loss of wetlands;
  - insufficient capacity for stormwater;
  - debris in streams;
  - and development in high-risk areas.

- Uncontrollable
  - soil type;
  - local topography;
  - depth of the water table;
  - floodplains;
  - weather events;
  - and climate change.

Resulting impacts of flooding include:

- residential and commercial flooding;
  - flooded basements;
  - sewer backups;
  - structural damage to buildings;
  - damage to the contents of buildings.

Map 4:


Problemshed Locations
Lake Wisconsin Watershed
Roxbury Creek Watershed
Six Mile and Pheasant Branch Creeks Watershed
Yahara River and Lake Mendota Watershed
Black Earth Creek Watershed
Upper Sugar River Watershed
West Branch Sugar River Mt. Vernon Creek Watershed
Gordon Creek Watershed
Allen Creek and Middle Sugar River Watershed
Badfish Creek Watershed
Yahara River and Lake Kegonsa Watershed
Lower Koshkonong Creek Watershed
Lower Crawfish River Watershed
Maunesha River Watershed
N
W
E
S
Problemshed Location
100 yr Floodplain
Hydrology
Hydric Soil
Non-hydric with Inclusions
Roads
Watershed Boundary
Municipal Boundary

St., and Manitou Way. Streetlights shorted, auto accidents were reported. Rain and debris frustrated street crews. Monona police reported flooding in Maywood Park and stalled motorists on Lake Monona shoreline streets. The federal government began offering funding for repairs due to flooding, but only to those units of government with a flood plain ordinance. Dane County and most incorporated areas did not comply with Federal regulations.

Lake Levels

Lake levels in the Yahara Chain of Lakes are one of the main indicators of the degree of damages that will be caused by flooding. Historical data shows that the lake levels are becoming more volatile. The lakes were at record or near record high levels for all three of the major flooding events of the past decade. Record levels were set in 1993, broken in 1996, and then broken again in 2000. **Table 4** indicates the levels of the lakes with respect to the base flood elevations shown in FEMA's Flood Insurance Rate Maps for Dane County.

Lake Levels in Peak Flood Years

Lake	Base Flood Elevation	Pre-1990 Peak Elevation	1993 Peak Elevation	1996 Peak Elevation	2000 Peak Elevation
Mendota	852	851.5 (Set in 1978)	852.25	851.46	852.74*
Monona	848	847.2 (Set in1929)	847.13	847.26	847.48*
Waubesa	847	Unknown	846.69	846.72*	847.05
Kegonsa	845	Unknown	844.84	845.35*	845.04

* Record High Level

Source: Dane County Public Works, 2003 FEMA Flood Insurance Rate Maps, Wisconsin State Journal

Table 4: Lake Levels in the Yahara Chain of Lakes are becoming more volatile.

The data shown in Table 4 highlights an interesting element of the flooding in Dane County. It doesn't take a 100-year rainfall event for the Yahara Lakes to reach the mapped 100-year flood levels. For Dane County, a 100-year rainfall event is defined as 6 inches of rain falling over 24-hours. Peak rainfalls in a single day approached this level in 1996, but the rainfall was much more spread out in the other flood years. Yet in all of these years, the lake levels for all four lakes were very near or above the base flood elevation. This helps to underscore the fact that 100-year rainfall events are different from 100-year flood events. From the perspective of lake level response to storm events, circumstances such as soil saturation and frequency and duration of the rainfall events are as significant or more significant than 24-hour rain intensity.

the central and southern portions of the state had received 160 percent of normal precipitation. After a July dry spell, severe thunderstorms on August 1-2 dumped heavy rain over a large portion of Dane County. Most areas of the County received between 2 and 5 inches of rain. The heaviest rainfall was centered over the northwest portion of Dane County. A credible report to the National Weather Service indicated that an 11-inch capacity rain gage had overflowed in the Village of Black Earth. Flash flooding occurred in the Black Earth Creek with significant impact to the Villages of Black Earth and Mazomanie. Flash flooding also occurred in Roxbury Creek, causing a significant impact on the village area in the Town of Roxbury.

2000

The month of May 2000 was a particularly wet month in the southern half of the state. Data from the National Weather Service indicates that it was the wettest May ever recorded for most locations in southern Wisconsin, including Dane County. Generally, 8 to 12 inches of precipitation was measured, with some locations in Dane and Iowa Counties unofficially receiving between 16 and 18 inches. Normal rainfall for May is 3.14 inches. Finally, the wet rainy weather culminated in a series of severe thunderstorms and heavy rains that began on May 26 and continued into early June. Those storms dumped nearly 6 inches of rain on already saturated soils. This caused most, if not all of the rainfall to run off instead of infiltrating into the ground. The result pushed most area rivers over flood stage, raised all of the Yahara Lakes to record or near record levels, and caused severe, widespread flooding. Dane County received a presidential disaster declaration and was eligible for public and private assistance programs.

1996

The County experienced widespread flooding in 1996, largely as a result of a June 16-18 storm. Over this period of time, heavy rains fell over most of the region of southern Wisconsin. The National Weather Service recorded 5.25 inches of rain in Madison. The Sun Prairie Wastewater Treatment Plant recorded 5.77 inches over this same time period. Lake levels of the Yahara Chain of Lakes were within inches of all-time record highs and most rivers and streams were at or above flood stage. The flooding that resulted caused severe problems on agricultural lands as well as in the City of Madison, the City of Monona, the City of Sun Prairie, the Villages of Mazomanie and Black Earth. In the Department of Emergency Management's damage assessment, nearly every local unit of government in the County reported at least some damage to public and private facilities.

1993

Flooding was also widespread across the County in 1993. The flooding in 1993 was a result of above average precipitation for each month from March through August, as recorded by the National Weather Service. The primary significance of the 1993 storm events was not the intensity, but the frequency. Most days during June and July had at least a minor rainfall event. Between June 28 and July 11, there were only two days out of 14 with no rain. There was also one significant individual storm during this time period, a 3.75-inch rainfall event on July 5, 1993. This was approximately a 5- to 10-year storm (10% to 20% annual probability) event. The total precipitation for this 14-day period was 7.86 inches while the average is 1.83 inches. Therefore, during most of June and July, the soils of the County

chain of lakes is another such exception. Flooding around the chain of lakes is not typical riverine flooding, however, the impact of flooding can be readily predicted given lake level elevations.

Development in Flood-prone Areas (Areas with inherent flood risk)

There are areas of the County that if developed, have an inherent risk of flooding and resulting flood damage. These typically are areas, that in their natural state, are associated with floodplains, low lying shorelands, wetlands (existing or drained) and steep slopes with highly erodible soils.

Floodplains

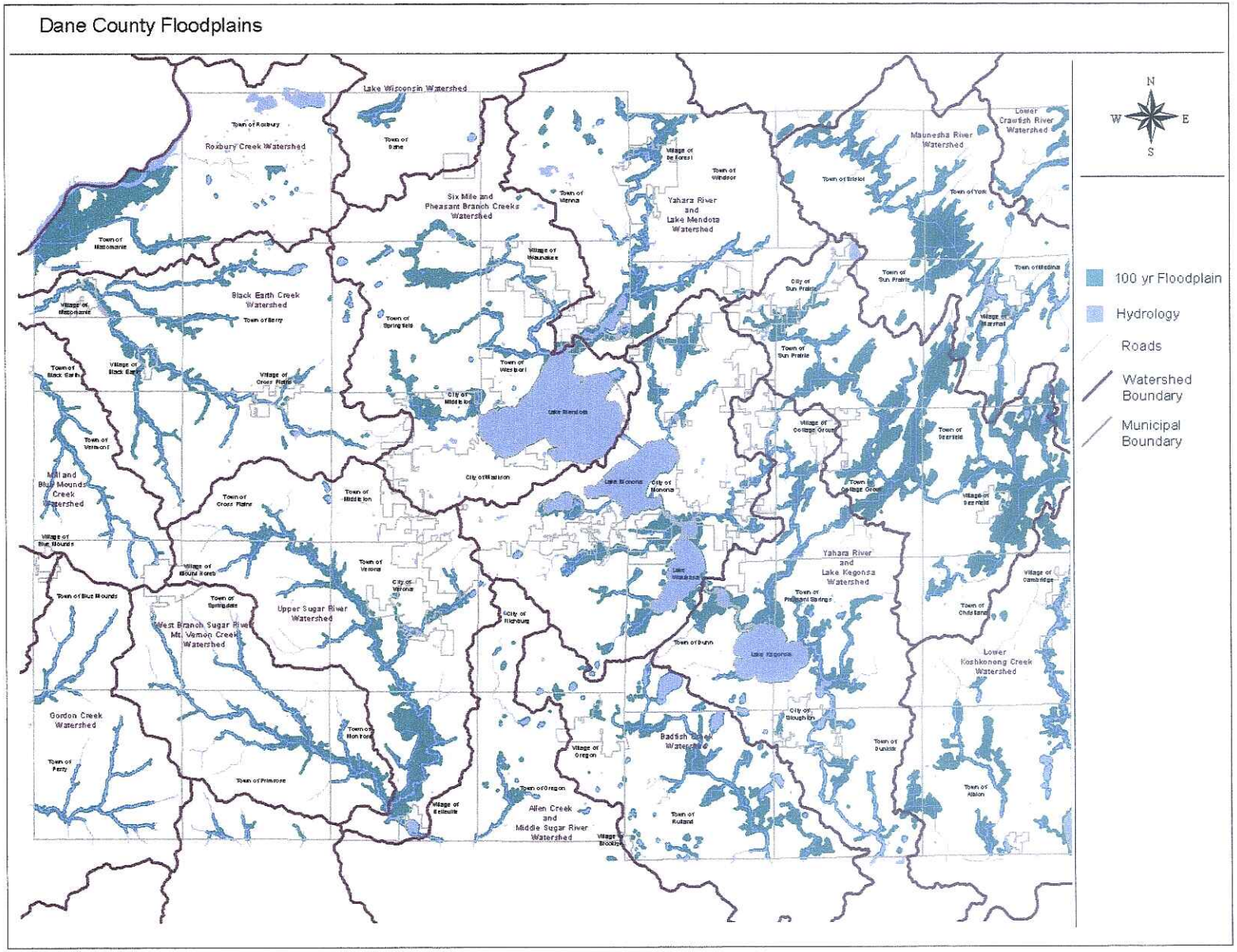
Developing and building in areas with a natural flood risk is a well-documented cause of subsequent flood damages. The floodplain is very simply the land that has been or may be covered by floodwater during a flood. To build or develop in a floodplain exposes the owner to an inherent risk of flooding at some point in the future.

The locations and delineation of floodplain boundaries, however, are not static. Floodplains change over time. Though they are represented as a line on a Flood Insurance Rate Map (FIRM), floodplains and flood risk are not black and white. The floodplain maps are designed to indicate areas with a risk of flooding, but those areas are constantly changing. Increasing impervious surface areas with new development, soil saturation, rainfall intensity, stream conditions, shoreland and wetland modifications (both restoration and degradation), and stormwater management practices all affect the extent to which flooding will occur. And these influences are constantly changing as well. The survey identified frequent reports of areas that never flooded in the past, but do flood now.

In addition to this, there is a widely held perception that the 100-year floodplains shown on a FIRM represent a clear boundary of flood risk. On one side of the line, there is a flood risk, on the other side, there is not. This is not what the maps are intended to show. Flood risk is a continuous spectrum and the floodplains shown on the FIRM represent but one increment of that spectrum, the 1% probability of flooding. For regulatory and insurance purposes, a line has to be drawn somewhere. There is a danger in using this line as the end-all in determining flood risk. The maps are intended to represent the risk as accurately as possible, but they are merely a prediction of the extent of flooding that could occur in the future, based on a snapshot of present and past conditions.

Nevertheless, the location of mapped floodplains is a major indicator of where flooding will occur in the County and it is a major indicator of subsequent damages. While the accuracy of FEMA's Flood Insurance Rate Maps (FIRM) has been the subject of much debate, these maps still provide the best information available regarding the location of floodplain boundaries. Map 5 shows the locations of the floodplains of Dane County

Map 5:


Dane County Floodplains
Lake Wisconsin Watershed
Roxbury Creek Watershed
Six Mile and Pheasant Branch Creeks Watershed
Yahara River and Lake Mendota Watershed
Maunesha River Watershed
Lower Crawfish River Watershed
Black Earth Creek Watershed
Upper Sugar River Watershed
West Branch Sugar River Mt. Vernon Creek Watershed
Gordon Creek Watershed
Allen Creek and Middle Sugar River Watershed
Badfish Creek Watershed
Yahara River and Lake Kegonsa Watershed
Lower Koshkonong Creek Watershed
Mill and Blue Mounds Creek Watershed
N
W
E
S
100 yr Floodplain
Hydrology
Roads
Watershed Boundary
Municipal Boundary

Hydric Soils

Though mapped/regulatory floodplains are a good predictor where flooding occurs, floodplains do not account for all of the flooding in the County. The location of certain soil types, hydric soils in particular, is also a good predicator of where flooding is likely to occur. Hydric soils are formed in the presence of water and are a good indicator of the historic locations of wetlands or other wet areas. As such, development in areas with hydric soils is another prime indicator of where flood damages are likely to occur, especially in areas where urbanization has not altered the natural hydrology of the area. **Map 6** shows the locations of hydric soils in Dane County.

Topography

The topography of the County affects the spatial extent of flooding. In the western portion of the County where topography is most exaggerated, flooding occurs in small areas, yet the water flow rate is much higher than in the eastern part of the County. There, landowners experience expansive flooding, since the water is able to stretch across the landscape more easily. This contributes to greater crop loss. Topography and hydric soils are useful indicators of the frequency and extent of flooding outside the floodplain.

Impediments to the Flow of Water

Changes in stream conditions and impediments to the flow of water were identified as a significant factor in increasing flood problems along the rivers and streams of the County. Impediments to flow reduce the overall capacity of the stream to convey water and cause water to back-up behind the blockage. These impediments include blockages caused by accumulation of sediment, over growth of weedy, non-native vegetation, or excessive debris in the stream channel. Reduced conveyance capacity and blockages can and do occur in all components of the natural and human-made components of the drainage system, including detention ponds, stream channels, drainage ditches and culverts.

Debris in the Drainage System

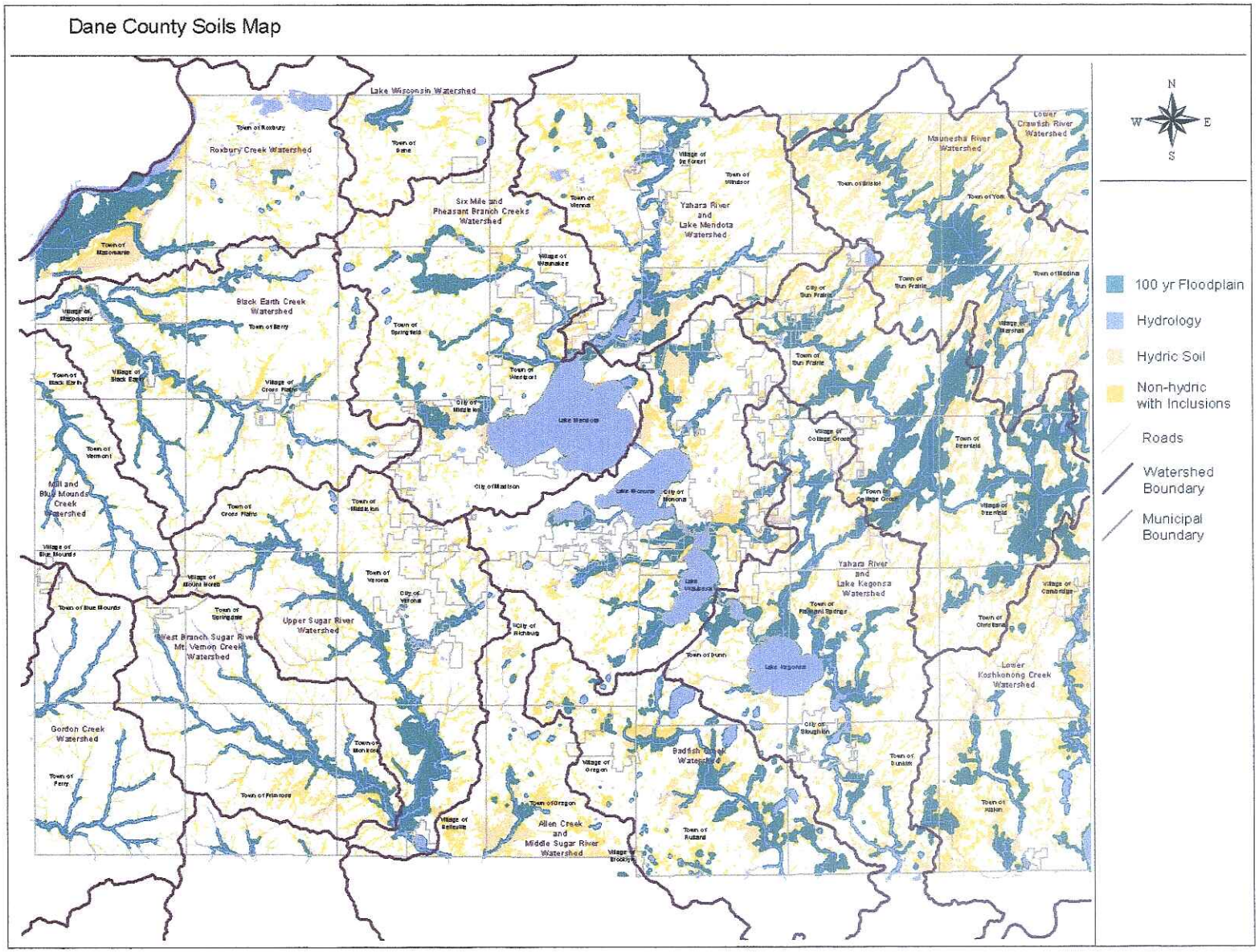
Debris in streams has been identified as a significant problem in numerous areas of the County. Debris refers to a wide range of materials that may include tree limbs and branches that may accumulate naturally or garbage and trash that has been dumped into channels or drainage ditches. There is often a very fine line between debris that should be removed to improve conveyance capacity and natural material that is necessary for fish and wildlife habitat.

Silt and Sediment

Silt and sediment has also been identified as a significant impediment to flow in numerous streams and ditches of the County. Farmlands and construction sites typically contain large areas of exposed soil. Surface water runoff can erode soils from these sites and carry sediment into downstream waterways. Erosion also occurs along streambanks and shorelines as the volume and velocity of flow destabilizes the banks and washes away the soil.

Sediment suspended in the water tends to settle out where the flowing water slows down. It can clog storm sewers, culverts, and ditches and reduce the water conveyance capacity of

Map 6:


Dane County Soils Map
Lake Wisconsin Watershed
Roxbury Creek Watershed
Six Mile and Pheasant Branch Creeks Watershed
Yahara River and Lake Mendota Watershed
Maunesha River Watershed
Lower Crawfish River Watershed
Black Earth Creek Watershed
Mill and Blue Mounds Creek Watershed
Upper Sugar River Watershed
West Branch Sugar River Mt. Vernon Creek Watershed
Yahara River and Lake Kegonsa Watershed
Lower Koshkonong Creek Watershed
Gordon Creek Watershed
Badfish Creek Watershed
Allen Creek and Middle Sugar River Watershed
N
W
E
S
100 yr Floodplain
Hydrology
Hydric Soil
Non-hydric with Inclusions
Roads
Watershed Boundary
Municipal Boundary

rivers and streams. Not only is the drainage system less able to carry water, but the sediment in the water also reduces light, oxygen, and water quality and often carries agricultural chemicals and other pollutants into the water.

The erosion control elements of the County's Stormwater Management and Erosion Control ordinance are designed to address these issues. Even with the ordinance in place, however, streams that are currently restricted by sediment will remain restricted unless the existing sediment is removed.

Human Constructed Impediments to Flow

Bridges, culverts, and drainage ditches that are improperly sized have been noted as a significant factor in restricting the flow of water and exacerbating flood problems. This does not appear to be a systematic problem, but rather one that occurs in a few isolated areas of the County.

Loss of Wetlands

Wetlands are often found in floodplains and low-lying areas of a watershed. Many wetlands receive and store floodwaters, thus peak flows and volumes of floodwaters. Wetlands also serve as a natural filter, which helps to improve water quality. Wetland loss has affected all of Dane County. Wetlands have been tiled and drained to produce fertile farm fields and they have been filled and paved to prepare for development. Wetlands on the Yahara Chain of Lakes have also been lost during recent flood events as rising floodwaters detach and lift sections of marsh. The floating marsh sections have been subsequently removed to eliminate the navigational hazards they posed. Lakes in the Yahara Chain of Lakes have lost between half and nearly all of the wetlands associated with them since 1835.

Healthy wetlands have the potential to store large volumes of floodwater. As wetlands become destroyed or degraded, their capacity to store water may be reduced. Water that would otherwise have been stored in the wetlands then contributes to increasing flood levels and flows. The maintenance and restoration of wetlands has the potential to be a very effective flood management tool.

Upland Development and Stormwater Issues

Dane County is among the fastest growing and developing counties in the State of Wisconsin. The challenges of managing this rapid development are wide-ranging, however, one of the more significant impacts is the effect of development on the hydrology of the watershed. The effect of upstream development on downstream properties was widely recognized as significant contributing factor in Dane County's flood problems. In fact, development and other changes to the landscape in areas far outside the floodplain can have a profound impact on the magnitude and frequency of downstream flooding. This is a highly complex issue that includes elements of land-use decision-making, property rights, intergovernmental cooperation (or lack of), as well as the hydrology of the watershed and stormwater management practices. Many of these elements are well beyond the scope and charge of this Plan, however, the issues as related to stormwater management can at least be framed here.

The Effects of Urbanization

Urbanization is one of the most severe land use impacts in terms of its lasting effects on hydrology, due to the much higher percentages of impervious or paved areas covering the land. Rural land surfaces are almost completely pervious, while about one-third of the land surface in urban areas is covered by rooftops and paved areas. The main effects of urbanization on the hydrology of an area include:

- An increase in the total amount of rainfall running off the surface of the land;
- A decrease in the amount of rainfall infiltrating into the soil;
- More rapid runoff and much higher peak flows; and
- Reduced baseflows in streams during dry weather periods.

In addition to generating more surface runoff, which erodes the land surface and washes off more pollutants, the hydrologic effects of urbanization have less direct but more important downstream impacts. The increased peak storm runoff rates and reduced base flow associated with urbanization have serious negative impacts on receiving streams, usually resulting in erosion, sedimentation, streambank instability, and flooding. Combined with reduced base flow, the scenic, recreational and habitat values of the receiving streams can be seriously degraded unless a vigorous effort is made to provide management practices and programs to counter the effects of urbanization. A summary of those practices can be found in Appendix G.

Stormwater Management

Stormwater management in urban areas has traditionally focused on safely conveying and temporarily storing and slowly releasing water runoff to control peak flows and downstream flooding. This has been accomplished largely through "dry" and, to a lesser extent, "wet" detention basins. Management practices emphasizing stormwater infiltration and groundwater recharge have not received significant attention until recent years. Infiltration practices can, however, provide significant groundwater recharge, pollution control, and floodwater control benefits, depending on the degree of storage and infiltration achieved.

The County's stormwater management ordinance includes provisions for regulation of peak flow rates leaving developments adding over 20,000 square feet of new impervious surface area. The ordinance has been in effect for a little more than one year as of the writing of this Plan and its effectiveness has not yet been evaluated. The survey and public input process did, however, identify a number of concerns that should be further evaluated:

- There is no restriction of the total volume of water allowed to leave new developments. Peak flow rates are restricted, but volumes are not. Urbanization and increasing impervious surface areas tend to increase both the rate and the volume of stormwater runoff. Particularly in the case of the Yahara Lakes, it appears that the lakes are acting as a large wet detention basin, holding ever-increasing volumes of stormwater runoff. The rate of flow into the lakes may be the same as pre-developed conditions, but the overall volume of water fed to the lakes appears to be increasing. Since the system can drain at only a relatively low rate, the effect is that in heavy rains, or sustained rains with saturated soils, the lake levels rise quickly and lower

slowly. This is viewed as one of the more significant of several contributing factors in sustained flooding along the Yahara system.

- The ordinance restricts flow from the 2- and 10-year storms. Many comments received indicated that to reduce downstream flood damages, the flow from larger storms, up to the 100-year storm should be restricted.
- There is no requirement for coordination of drainage among developments. Numerous developments in the same watershed may all deliver stormwater to the same stream channel. Each of the developments could be in compliance with the ordinance, however, the cumulative effect could be a significant overloading of the conveyance capacity of the stream. Survey respondents and other public comments have indicated a concern with this cumulative effect on increasing downstream flood conditions.

Climate Change

The earth's climate is predicted to change because human activities are altering the chemical composition of the atmosphere through the buildup of greenhouse gases – primarily carbon dioxide, methane, nitrous oxide, and chlorofluorocarbons. The heat trapping property of these greenhouse gases is undisputed. Although there is uncertainty about exactly how the climate will respond to the increased concentrations of greenhouse gases, observations indicate that detectable changes are already occurring. There will most likely be increases in temperature and changes in precipitation, soil moisture, and sea level, which will likely have adverse effects on many ecological systems as well as on human health and economy.[2]

Water resources are affected by changes in precipitation as well as by temperature, humidity, wind, and sunshine. Changes in streamflow tend to magnify changes in precipitation. Because evaporation from streams and lakes is likely to increase with warmer climate, it could result in lower river flow and lower lake levels, particularly in the summer. In addition, there is also a trend toward fewer, but more intense rainfall events, which in turn could lead to both increased droughts and increased flooding. Groundwater supplies could also be reduced if streamflow and lake levels drop. This increasing variability has to be considered in water resource planning for the future.

Impacts of Flooding

The impacts of flooding in Dane County are far ranging. Specific examples of how floods negatively impact Dane County are summarized below:

- Floods cause damage to private property that often creates financial hardship for individuals and families;
- Floods cause damage to public infrastructure resulting in increased public expenditures and demand for tax dollars;
- Floods cause loss of personal income for agricultural producers that experience flood damages;

[2] "Climate Change and Wisconsin," 1999, United States Environmental Protection Agency, Office of Policy, Planning, and Evaluation. EPA Website accessed September 2003.

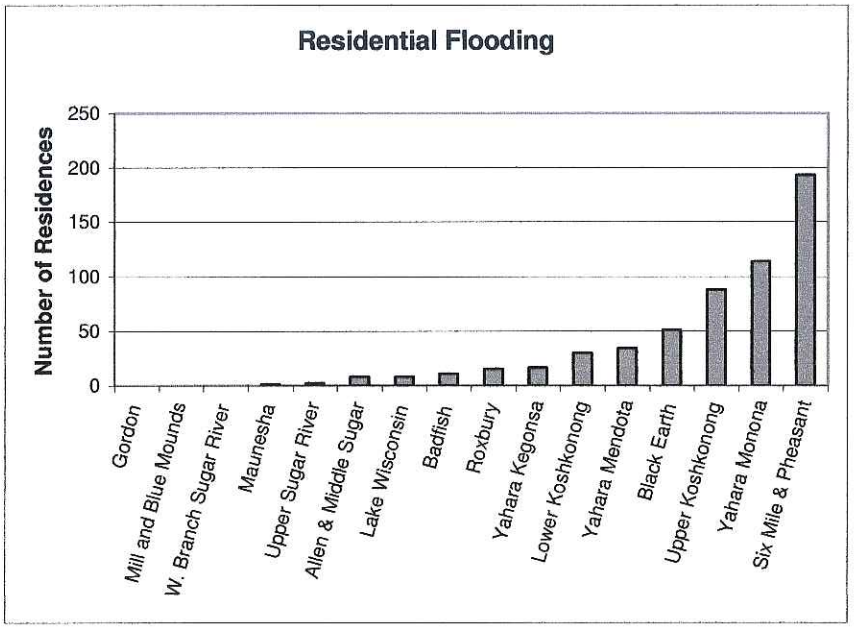
- Floods cause loss of income to businesses relying on recreational uses of County waterways;
- Floods cause emotional distress on individuals and families;
- Floods can cause injury and death.

High Lake Levels

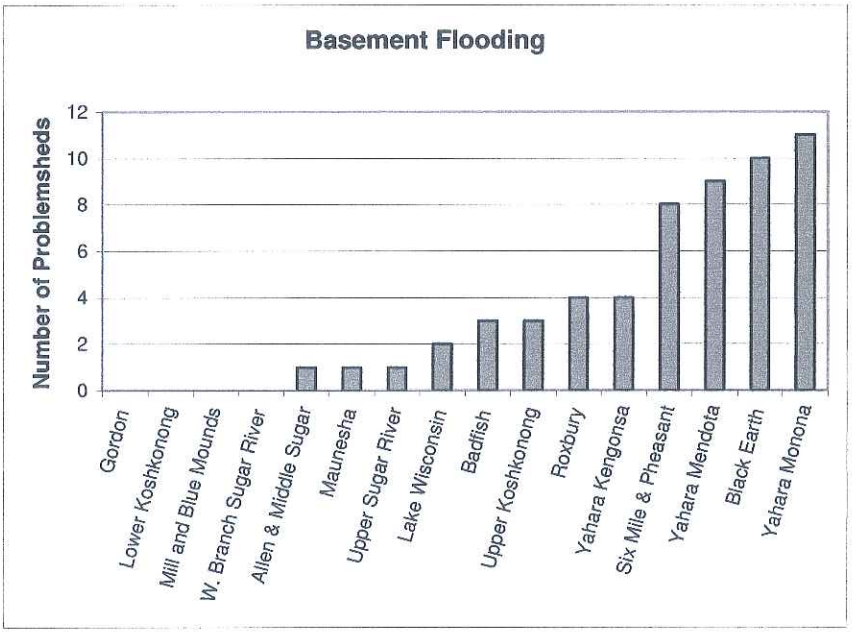
The Yahara Chain of Lakes runs directly through the most urbanized areas of the County. Flooding occurs in low areas surrounding many of the lakes when lake levels rise. Survey data collected indicated that lakeshore flooding is a significant problem, especially in the Yahara River and Lake Monona watershed. High lake levels in the Yahara Chain of Lakes during and after major storms events has affected 100's of homes, flooding basements or first floors and damaging unimproved property. Total damages to residences along the lakes were by far the highest reported.

Residential Flooding

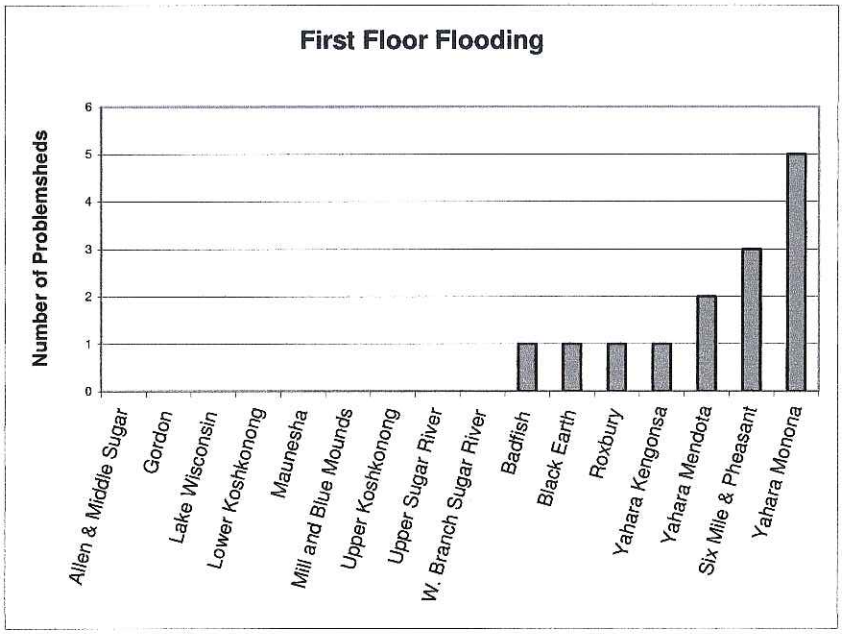
Flooding of residential structures in Dane County is a major concern (Graph II). This type of flooding has several causes: river flooding, high lake levels, sewer backups, stormwater runoff from urban areas as well as farmland, and high groundwater. Effects include flooded basements (Graph III) and first floor flooding (Graph IV). Combinations of these elements have damaged many structures and put even greater numbers at risk.



Graph II shows the number of residences in each watershed that have been impacted by flooding. Source is the flood mitigation planning survey.



Graph III shows the number of problemsheds in each watershed that have been impacted by flooded basements. Source is the flood mitigation planning survey.



Graph IV shows the number of problemsheds in each watershed that have been impacted by first floor flooding. Source is the flood mitigation planning survey.

Building Damage

In terms of numbers of people affected and total economic losses, damage to buildings, especially residences is usually the County's largest single flood problem. Due to the relatively shallow flood depths, soaking causes the most common type of damage inflicted by a flood. When soaked, many materials change their composition or shape. Wet wood will swell and, if dried too quickly, will crack, split or warp. Plywood can break apart. Gypsum drywall will fall apart if it is bumped before it dries out. The longer these materials are wet, the more moisture, sediment and pollutants they will absorb. Walls present a special problem: a "wicking" effect pulls water up through wood and wallboard, soaking materials several feet above the actual high-water line.

Soaking can also cause extensive damage to household goods. Wooden furniture may become so badly warped that it cannot be used. Other furnishings such as upholstery, carpeting, mattresses, and books usually are not worth drying out and restoring. Electrical appliances and gasoline engines will not work safely until they are professionally dried and cleaned. In short, while a building may look sound and unharmed after a flood, the waters can cause a lot of damage. To properly clean a flooded building, the walls and floors should be stripped, cleaned, and allowed to dry before being recovered. This is expensive and can take weeks.

Structural damage to buildings has not been a common problem.

Sewer and Wastewater

Sewer and wastewater service and infrastructure are compromised during flooding events in many locations around the County with consequences for homes (Graph V). Sewer backups in residential basements are the primary result of overtaxed wastewater systems. Survey respondents reported 100's of residences that have had sewer backup problems. During major storm events, flows to the treatment plants increase, and in some cases triple due to water infiltration into the piping system. Failing pumps, and inflow meter damage, are also a problem. Additionally, flooded roads inhibit the timely repair of pumping stations.

Murphy, Brad

From: Van Rooy, Paul
Sent: Friday, January 05, 2007 11:31 AM
To: Murphy, Brad
Subject: Cherokee Special Area Plan (SAP)

Brad:

Please distribute the following notes to the Plan Commission prior to the January 8th Meeting.

I have followed closely the development of the Cherokee Special Area Plan (SAP) as it evolved over the past two years. This process started with a proposed development plan from the Cherokee Park Inc.(CPI) development team. As you know, there ensued a long process of planning and negotiation between City staff from various city Departments and the CPI development team.

I firmly beleive that the SAP, the Annexation Agreement and the Memorandum of Understanding between the City of Madison and CPI that resulted from those negotiations represents a good compromise between the position of the Friends of Cherokee Marsh and CPI. I appreciate and respect the concern and sincerity of the Friends of Cherokee Marsh in their desire to protect the marsh, however, the current proposal does, in my opinion, offer adequate protection to the marsh while still allowing development to occurr in an appropriate manner that will be compatible with current development in the area.

I urge you to adopt the SAP, the Annexation agreement and the MOU as they have been negotiated and appear before you. These agreements have been carefully negotiated and represent a development proposal that will be a well planned and welcome development for the Northside.

Sincerely,

Paul J Van Rooy
Alderman, District 18
113 Sauthoff Rd.
Madison, WI 53704
Email: pvanrooy@cityofmadison.com
Phone: 663-9500