It is expected that a Quorum of the Personnel Committee, Board of Public Works, Plan Commission and Administration Committee will be attending this meeting: (although it is not expected that any official action of any of those bodies will be taken)

CITY OF MENASHA SUSTAINABILITY BOARD Common Council Chambers 140 Main Street, Menasha

Tuesday, October 20, 2009

6:30 PM

AGENDA

- A. CALL TO ORDER
- B. ROLL CALL/EXCUSED ABSENCES
- C. PUBLIC COMMENTS ON ANY MATTER OF CONCERN TO THE SUSTAINABILITY BOARD (five (5) minute time limit for each person)
- D. MINUTES TO APPROVE
 - 1. Sustainability Board minutes, 9/15/09
- E. COMMUNICATIONS
 - 1. Sustainability in Your Community, WPPI Energy
 - 2. VHBA invite to Green building meeting (Linda Stoll)
- F. DISCUSSION ITEMS
 - 1. Downtown Market, Marina Place Market & Farm Market Surveys
 - 2. Wind Energy Ordinance
 - a. City of Menasha
 - b. Town of Menasha
 - 3. Salt usage for deicing city streets (Sadie Schroeder)
 - 4. MJSD Sustainability Proposal (Becky Bauer)
- G. ACTION ITEMS
 - 1. Set next meeting date
- H. REPORT OF COMMISSIONERS & STAFF
 - 1. Valley Transit Update (Roger Kanitz)
 - 2. Report on Demonstration projects Stormwater/Water quality, natural landscaping
 - 3. Report on Walking & Bike Audit (CDD Keil)
 - 4. Report on Neighborhood Electric Vehicle Ordinance (CDD Keil)
 - 5. Status of the "Sustainability Action Summit" (Roger Kanitz, et. al.)
 - 6. Department TNS presentations/Sustainability training
 - 7. Board presentation to Common Council (Linda Stoll)
 - 8. Energy Efficient Mortgages (Greg Keil)
 - 9. "First Impressions" program (Linda Stoll)
 - 10. "Answers to your Energy Questions" at the UW- Fox Valley (Roger Kanitz/ Mike Dillon)
- I. ADJOURNMENT

[&]quot;Menasha is committed to its diverse population. Our Non-English speaking population and those with disabilities are invited to contact the Menasha City Clerk at 967-3603 24-hours in advance of the meeting for the City to arrange special accommodations."

It is expected that a Quorum of the Personnel Committee, Board of Public Works, Plan Commission and Administration Committee will be attending this meeting: (although it is not expected that any official action of any of those bodies will be taken)

CITY OF MENASHA SUSTAINABILITY BOARD Common Council Chambers 140 Main Street, Menasha

Tuesday, September 15, 2009

MINUTES

A. CALL TO ORDER

Meeting called to order at 6:40 p.m. by Linda Stoll.

B. ROLL CALL/EXCUSED ABSENCES

Present: Mike Dillon, Sadie Schroeder, Linda Stoll

Excused: Trevor Frank, Becky Bauer Also Present: Jill Enos, CDD Greg Keil

C. PUBLIC COMMENTS ON ANY MATTER OF CONCERN TO THE SUSTAINABILITY BOARD (five (5) minute time limit for each person)
No one spoke.

D. MINUTES TO APPROVE

 Motion made by Mike Dillon, seconded by Sadie Schroeder to approve Sustainability Board Minutes of 8/18/09 The motion carried.

E. COMMUNICATIONS

None

F. DISCUSSION ITEMS

1. City of Menasha Redevelopment/Vision Plan

Linda Stoll described the "First Impressions" program and discussed potential reciprocal communities. Mike Dillon asked about expected outcomes. CDD Keil inquired about the steps to be taken after the impressions are gathered. Linda Stoll said she would contact Wis. Rapids to inquire about intent.

Commissioners also discussed conducting a community needs assessment, creating library displays, and conducting targeted surveys. Greg Keil is to provide the LPV survey and analysis as an example. Mike Dillion stated that he would be able to distribute aa CFL bulb as a reward for those retuning completed surveys. .

2. Proposing an initiative to work together with local Credit Unions to provide Energy Efficient Mortgages (Sadie Schroeder)
Sadie Schroeder –reported that she had come across information regarding credit unions offering incentives to customers for to increase affordability energy efficiency upgrades. Greg Keil is to contact Chip Coenen at Lakeview Credit Union and Menasha Utilities to discuss initiating a pilot program.

[&]quot;Menasha is committed to its diverse population. Our Non-English speaking population and those with disabilities are invited to contact the Menasha City Clerk at 967-3603 24-hours in advance of the meeting for the City to arrange special accommodations."

City codes related to sustainability
 Greg Keil reported that this was among the goals established in the city's
 Comprehensive Plan and suggested that this could be something that the Sustainability
 Board could work on in the next year.

4. Wind Energy Ordinance

Mike Dillon reported that the Town of Menasha recently adopted an ordinance related to wind energy and suggested that this would be a good prototype for the city. SCA Tissue is intending to conduct a wind energy site assessment in the city. Greg Keil is to obtain a copy from the ordinance from the Town of Menasha. To be discussed at next month's meeting.

- 5. Department TNS presentations/Sustainability training Greg Keil reported on the last session conducted by Mike Dillon and Bill Beachkofski. He reported that the session was well received and that the Police Department had initiated an energy assessment of tits building in response. The next session is to address green procurement.
- 6. Board presentations to Common Council
 Report to Common Council on Sustainability Board accomplishments and needs. Linda
 Stoll will make 5-10 minute presentation at next council meeting.

G. ACTION ITEMS

1. Sustainability Board Budget

Commissioners discussed potential expenditures for the farm market, community surveys, and planning meetings. They also discussed creating a communication plan. Jill Enos suggested that more money was needed for promoting sustainability initiatives.

- 2. Booth at the energy fair at the UW thru Cumulus Broadcasting Commissioners discussed Sustainability Board participation in the event.
- Set next meeting date Meeting set for October 20, 2009

H. REPORT OF COMMISSIONERS & STAFF

- 1. Valley Transit Update (Roger Kanitz)
 Roger Kanitz reported on potential route restructuring/extensions. Mike Dillon reported on the light rail initiative.
- 2. Report on Demonstration projects Stormwater/Water quality, natural landscaping Greg Keil reported that design work had been completed on the rain garden demonstration project and that installation was imminent.
- 3. Report on Walking & Bike Audit

Greg Keil reported that the initial inventory work was nearing completion.

Jill Enos commented on difficulties in safely accessing the entire community by bicycle.

4. Report on Neighborhood Electric Vehicle Ordinance Greg Keil reported that he had spoke with representatives of the regional planning commission and Town of Harrison. The RPC has prepared a map of the Fox Cities indicating where it is permissible to operate NEV's. The Town of Harrison is receptive to creating an NEV ordinance, but it is not seen as a priority at this time. 5. Status of the "Sustainability Action Summit" and the additional TNS event Roger Kanitz reported on the planning for this upcoming event.

I. ADJOURNMENT

Motion made by Mike Dillon and seconded by Sadie Schroeder to adjourn at 8:25 p.m. Motion carried.



Sustainability in Your Community

Why enhancing economic development through sustainability is important

Tuesday, November 3, 2009

Agenda

Welcome

Roy Thilly President & CEO

The Public Power Advantage

Peggy Jesion Key Accounts Manager

What is a Carbon Footprint?

Valy Goepfrich Power Supply Economist

Renewable Energy Program

Beth Carlson Energy Services Coordinator

Marketing & Promoting Public Power Communities

Gerald Allison Wisconsin Marketing & Management Association

Energy Efficiency Programs for Your Community Businesses

Jake Oelke Asst. Vice President Energy Services

How Communities Can Become Green Sustainability Leaders through LEDO Efforts

Roundtable Discussion Steve Sobiek ED/Energy Sustainability Director, City of Columbus

Lunch

You have the significant role of carrying out your community's economic development strategy whether it's business retention and expansion, industry attraction, support services or anything in between.

Electric costs are a significant part of a business's operating budget. Through membership in WPPI Energy, your local public power utility provides reliable, reasonably priced power and innovative energy services to meet the needs of businesses large and small.

Simply put, your utility is a tremendous asset and can greatly enhance your current economic development efforts.

Join your colleagues from our 51 member communities as WPPI's energy experts and account management professionals show you how to enhance economic development through sustainability at this FREE workshop.

Customer-owned utilities are committed to making their communities better places to live, work and conduct business - a brighter, more sustainable, economic future for all!

Who should attend?

The workshop is intended for economic development representatives from local, county, regional or state organizations and others who carry out similar functions in WPPI Energy member communities. Please share this invitation with your local partners.





WPPI Energy is a regional power company serving 51 customer-owned electric utilities. Through WPPI Energy, these public power utilities share resources and own generation facilities to provide reliable, affordable electricity to more than 192,000 homes and businesses in Wisconsin, Upper Michigan and Iowa.



Sustainability in Your Community

Tuesday, November 3, 2009

Holiday Inn Madison at the American Center 5109 West Terrace Drive Madison, WI www.holidayinn.com/madisonwi

8:30 a.m. to 12:30 p.m.

RSVP

Name	
Title	
Organization	
Community	
Telephone number	

Please fax RSVP to Kelly Simonsen at 608.837.0274 or send via email to ksimonsen@wppienergy.org



WPPI MEMBER UTILITIES

Alger Delta CEA Algoma Baraga, MI Black River Falls Boscobel Brodhead Cedarburg Columbus Crystal Falls, MI Cuba City Eagle River Evansville Florence Gladstone, MI Hartford Hustisford Independence, IA Jefferson Juneau Kaukauna L'Anse, MI Lake Mills Lodi Maguoketa, IA Menasha Mount Horeb Muscoda Negaunee, MI New Glarus New Holstein **New London New Richmond** Norway, MI Oconomowoc Oconto Falls Plymouth Prairie du Sac Preston, IA Reedsburg Richland Center River Falls Slinger Stoughton Sturgeon Bay Sun Prairie Two Rivers Waterloo Waunakee Waupun Westby Whitehall

Kristin Sewall

From:

Stoll, Linda [Linda.Stoll@uwsp.edu]

Sent:

Thursday, October 15, 2009 1:44 PM

To:

Becky Bauer (BauerB@mjsd.k12.wi.us); Catherine Neiswender

(catherine.neiswender@ces.uwex.edu); Don Merkes; Greg M. Keil; Kristin Sewall; Michael J Dillon (michael.dillon@sca.com); Roger Kanitz (rkanitz@new.rr.com); Sadie Schroeder; Trevor Frank

(tfrank@sehinc.com)

Subject: FW: Invitation to Green Building Committee Meeting Nov 17

Greetings,

We have been invited to attend the meeting below. There is a possibility that I will be out-of-state for

work on that day. Can anyone else attend?

Thanks Linda

Linda Stoll, AICP

Outreach Specialist
Center for Land Use Education
University of Wisconsin Stevens Point
800 Reserve Street
Stevens Point, WI 54481
Phone (715)346-4853
Fax (715)346-4038
linda.stoll@uwsp.edu
www.uwsp.edu/cnr/landcenter/

From: Christine Ulness [mailto:Christine@idesignarchitectural.com]

Sent: Wednesday, October 07, 2009 10:37 AM

To: Stoll, Linda

Cc: 'Megan Lindsey'; christine@vhba.com

Subject: Invitation to Green Building Committee Meeting Nov 17

Dear Linda,

I am the co-chair for the Valley Home Builders Association's (VHBA) Green Building committee. The VHBA represents builders, designers, developers and other members of the building industry who work in the greater Fox Cities area. My purpose in writing is to invite you, and all members of the City of Menasha's sustainability committee to our next Green Building committee meeting on November 17, 2009 at 9:00 a. m., to be held at the VHBA building at 920 W. Association Dr., Appleton, WI 54914. (http://www.vhba.com/) This is our first meeting reaching out to area municipal sustainability committees and its intent is to begin an open dialog so we can all work together for a sustainable future.

Our committee desires to network with other community organizations who are committed to promoting sustainability. We feel by learning what each other is doing, supporting each other and communicating each other's needs and objectives, we can help each other and strengthen our momentum and presence in the Fox Valley. I will also be contacting sustainable committee members from the City of Neenah and Town of Menasha. If you know of others who should attend, please extend this invitation to them as well or contact me and I will

directly invite them.

We look forward to making this meeting a success and collectively working together toward a common goal. I look forward to meeting you and truly hope you will be able to join us on November 17th, 2009. Please let me know if you will be able to attend.

Sincerely,

Christine Ulness VHBA Green Building Committee

Residential Designer

idesign ARCHITECTURAL DESIGN, LLC 920-858-9234 christine@idesignarchitectural.com

WIND ENERGY ORDINANCE

SEC. 13-1-82 SPECIAL USE PERMITS REQUIRED--WIND ENERGY SYSTEMS.

- (a) **APPROVAL REQUIRED.** No owner shall, within the City, build, construct, use or place any type or kind of wind energy system without holding the appropriate conditional use permit for said system.
- (b) **SEPARATE PERMIT REQUIRED FOR EACH SYSTEM.** A separate conditional use permit shall be required for each system. Said permit shall be applicable solely to the systems, structures, use and property described in the permit.
- (c) **BASIS OF APPROVAL.** The Plan Commission shall base its determination on general considerations as to the effect of such grant on the health, general welfare, safety and economic prosperity of the City and, specifically, of the immediate neighborhood in which such use would be located, including such considerations as the effect on the established character and quality of the area, its physical attractiveness, the movement of traffic, the demand for related services, the possible hazardous, harmful, noxious, offensive or nuisance effect as a result of noise, dust, smoke or odor and such other factors as would be appropriate to carry out the intent of the Zoning Code.
- (d) **FEES.** The Common Council shall, by resolution, establish fees for the processing and issuance of wind energy special use permits under this Article.
- (e) **DEFINITIONS.** "Wind energy systems" shall mean "windmills" which are used to produce electrical or mechanical power.

SEC. 13-1-83 PERMIT PROCEDURE--WIND ENERGY SYSTEMS.

- (a) **APPLICATION.** The permit application for a wind energy system shall be made to the Zoning Administrator on forms provided by the City. The application shall include the following information:
 - (1) The name and address of the applicant.
 - (2) The address of the property on which the system will be located.
 - (3) Applications for the erection of a wind energy conversion system shall be accompanied by a plat or survey for the property to be served showing the location of the generating facility and the means by which the facility will provide power to structures. If the system is intended to provide power to more than one (1) premises, the plat or survey shall show all properties to be served and the means of connection to the wind energy conversion system. A copy of all agreements with system users off the premises shall accompany the application. The application shall further indicate the level of noise to be generated by the system and provide assurances as to the safety features of the system. Energy easements shall accompany the application.
 - (4) An accurate and complete written description of the use for which special grant is being requested, including pertinent statistics and operational characteristics.
 - (5) Plans and other drawings showing proposed development of the site and buildings, including landscape plans, location of parking and service areas, driveways, exterior lighting, type of building material, etc., if applicable.
 - (6) Any other information which the Zoning Administrator may deem to be necessary to the proper review of the application.
 - (7) The Zoning Administrator shall review the application and, if the application is complete and

contains all required information, shall refer it to the Plan Commission.

- (b) **HEARING.** Upon referral of the application, the Plan Commission shall schedule a public hearing thereof as soon as practical and the Plan Commission shall notice said hearing as deemed appropriate.
- (c) **DETERMINATION.** Following public hearing and necessary study and investigation, the Plan Commission shall, as soon as practical, render its decision in writing and a copy made a permanent part of the Commission's minutes. Such decision shall include an accurate description of the special use permitted, of the property on which permitted, and any and all conditions made applicable thereto, or, if disapproved, shall indicate the reasons for disapproval. The Plan Commission may impose any conditions or exemptions necessary to minimize any burden on the persons affected by granting the special use permit.
- (d) **TERMINATION.** When a special use does not continue in conformity with the conditions of the original approval, or where a change in the character of the surrounding area or of the use itself cause it to be no longer compatible with surrounding areas, or for similar cause based upon consideration for the public welfare, the special grant may be terminated by action of the Plan Commission following a public hearing thereon.
- (e) **CHANGES.** Subsequent change or addition to the approved plans or use shall first be submitted for approval to the Plan Commission and if, in the opinion of the Board, such change or addition constitutes a substantial alteration, a public hearing before the Plan Commission shall be required and notice thereof be given.
- (f) **APPROVAL DOES NOT WAIVE PERMIT REQUIREMENTS.** The approval of a permit under this Article shall not be construed to waive the requirement to obtain electrical, building or plumbing permits prior to installation of any system.

SEC. 13-1-84 SPECIFIC REQUIREMENTS REGARDING WIND ENERGY SYSTEMS.

- (a) **ADDITIONAL STANDARDS.** Wind energy conversion systems, commonly referred to as "windmills," which are used to produce electrical power, shall also satisfy the requirements of this Section in addition to those found elsewhere in this Article.
- (b) **APPLICATION.** Applications for the erection of a wind energy conversion system shall be accompanied by a plat of survey for the property to be served showing the location of the generating facility and the means by which the facility will provide power to structures. If the system is intended to provide power to more than one (1) premises, the plat of survey shall show all properties to be served and the means of connection to the wind energy conversion system. A copy of all agreements with system users off the premises shall accompany the application. The application shall further indicate the level of noise to be generated by the system and provide assurances as to the safety features of the system. Energy easements shall accompany the application.
- (c) **CONSTRUCTION.** Wind energy conversion systems shall be constructed and anchored in such a manner to withstand wind pressure of not less than forty (40) pounds per square foot in area.
- (d) **NOISE.** The maximum level of noise permitted to be generated by a wind energy conversion system shall be fifty (50) decibels, as measured on a dB(A) scale, measured at the lot line.
- (e) **ELECTROMAGNETIC INTERFERENCE.** Wind energy conversion system generators and alternators shall be filtered and/or shielded so as to prevent the emission of radio-frequency energy that would cause any harmful interference with radio and/or television broadcasting or reception. In the event that harmful interference is cause subsequent to the granting of a conditional use permit, the operator of the wind energy conversion system shall promptly take steps to eliminate the harmful interference in accordance with Federal Communications Commission regulations.
- (f) **LOCATION AND HEIGHT.** Wind energy conversion systems shall be located in the rear yard only and shall meet all setback and yard requirements for the district in which they are located and, in addition,

shall be located not closer to a property boundary than a distance equal to their height. Wind energy conversion systems are exempt from the height requirements of this Chapter; however, all such systems over seventy-five (75) feet in height shall submit plans to the Federal Aviation Administration (FAA) to determine whether the system is to be considered an object affecting navigable air space and subject to FAA restrictions. A copy of any FAA restrictions imposed shall be included as a part of the wind energy conversion system conditional use permit application.

- (g) **FENCE REQUIRED.** All wind energy conversion systems shall be surrounded by a security fence not less than six (6) feet in height. A sign shall be posted on the fence warning of high voltages.
- (h) **UTILITY COMPANY NOTIFICATION.** The appropriate electric power company shall be notified, in writing, of any proposed interface with that company's grid prior to installing said interface. Copies of comments by the appropriate utility company shall accompany and be part of the application for a conditional use permit.

Town of Menasha Community Development Department

MEMO

To: Town Planning Commission Members

From: Community Development Department Staff

Date: June 2, 2009

Re: New Business Item 2 – Winnebago County Town-County Zoning Ordinance Amendment –

Renewable Energy for Wind and Solar

Proposed Amendment

Winnebago County is proposing an amendment to the Town-County Zoning Ordinance to regulate renewable energy (see attachment). This ordinance, if adopted, will regulate both commercial and non-commercial wind farms. It will also regulate solar panels. Commercial wind farms are defined as one or more wind-driven machines that convert wind energy into electrical power for sale, resale or offsite use. Non-commercial wind farms are defined the same except that the system size must be 100 kw or less.

This ordinance includes a provision that the Winnebago County Sheriff's Department must review all commercial and non-commercial wind projects. There is no information in this ordinance about what criteria the Sherriff's office will use for this review and what time frame will be used for the review.

This ordinance also prohibits commercial wind systems from a district other than an agricultural district. This prohibition is overly restrictive and would prohibit municipal complexes, manufacturing firms or others from implementing wind farms larger than 100 kw. The Town of Menasha is exploring the installation of a system larger than 100 kw as are other businesses in the Town.

In addition, there is a requirement for evaluation of endangered species and historical resources that is more restrictive than would be required for a major industrial development that could have a much greater impact. This requirement specifically targets renewable energy as having a greater environmental impact than other forms of development and thus is unreasonable unless the same standards are applied to all new development. It should also be noted that there are many types of wind turbine systems. The Town of Menasha's Wind System Ordinance more fairly regulates wind energy systems. The County's proposed ordinance will discourage renewable wind energy production.

One final issue is that the state is now working on legislation that will regulate renewable energy production. This legislation will undoubtedly supersede the overly restrictive provisions of the

County's proposed ordinance. Staff also contends that the County's ordinance, as now drafted, does not comply with current state law that says, in part, that local units of government may not place any restrictions on the installation of a renewable energy system that incorporates solar collectors or wind energy systems unless the restrictions are for reasons of health and safety and as long as the restrictions do not reduce the efficiency or increase the cost of the system. Additionally, as can be seen below, there are some examples of wind turbine systems which should not require any review other than to be considered part of an existing structure.

Rotary Wind Turbines





Staff Recommendation

Staff recommends that the ordinance as proposed be denied or withdrawn and revised to be brought back for a new review. An ordinance needs to be developed that more fairly regulates renewable energy without discouraging it. Staff recommends that the County use the Town's ordinance as a template for its ordinance. Staff also feels that the proposed new ordinance does not comply with current state law on renewable energy. In addition, since the state legislature is now developing standards for wind energy systems that may supersede this ordinance, it would be prudent to wait until decisions are made on state legislation.

One final note from staff is that discouraging green jobs and the production of renewable energy is an environmental and economic mistake. The ordinance, as proposed, would prohibit the Town from

installing wind turbines at its municipal complex and it would prohibit other commercial and industrial sites from doing so if they desire to install a wind energy system larger than 100kw. In times of environmental and economic uncertainty we need to encourage, not discourage, the use and production of new technologies that decrease our impact on the environment and that help broaden our economic base.

RESOLUTION

of the

Town Board of the Town of Menasha , Winnebago County, Wisconsin

RE: Petition of Planning & Zoning Committee for the proposed zoning amendment change affecting the Winnebago County Zoning Ordinance and the Official Map of the Town of

DESCRIPTION OF SUBJECT	SITE:
Owner(s) of Property: Applicant(s):	N/A Planning & Zoning Committee
Location of Premises Affected:	N/A
• • • •	dment to delete and recreate Section 17.36 of the gy; to delete and recreate Section 17.37, Historic on 17.38, Definitions.
RESOLVED, by the Town Board of the Wisconsin, that the above indicated proving Ordinance be and the same i	proposed amendment to the Winnebago County
[] APPROVED [] DISAPPR	OVED Signed:
TOWN FINDINGS (REASONS): 1. 2.	
3.	
4.	
5.	
	k of the above named town, hereby certify that the f a resolution adopted by the Town Board of the
DATED THIS DAY OF June, 20	09.

WINNEBAGO COUNTY PLANNING & ZONING DEPARTMENT

Date: June, 2009

To Whom It May Concern:

Below is a Notice of Public Hearing being published in the <u>Oshkosh Northwestern</u>. The Notice presents a general description of a proposed action which is regulated by the Winnebago County Town/County Zoning Ordinance. This application or petition for action affects area in the immediate vicinity of property which you own.

Notice of Public Hearing

The Planning & Zoning Committee of Winnebago County will hold a Public Hearing in the *Lounge Room* of the Winnebago County Courthouse, Oshkosh, Wisconsin, on *Tuesday, June 30, 2009 at 6:30 p.m.* to consider the following case:

DESCRIPTION OF SUBJECT SITE:

Owner(s) of Property:

N/A

Applicant(s):

Planning & Zoning Committee

Location of Premises Affected:

N/A

EXPLANATION:

Applicant is requesting a Text Amendment to delete and recreate Section 17.36 of the Zoning Ordinance, Renewable Energy; to delete and recreate Section 17.37, Historic Structures/Sites; and to create Section 17.38, Definitions.

All interested persons wishing to be heard at the Public Hearing are invited to be present. For further detailed information concerning this notice, contact the Town Clerk or the Winnebago County Zoning Office.

WINNEBAGO COUNTY PLANNING & ZONING COMMITTEE

STAFF REPORT TO: Planning & Zoning Committee

Date: June, 2009

FILE NUMBER:

09-ZC-017

SUBJECT: ZONING CHANGE

I. Explanation:

Applicant is requesting a Text Amendment to delete and recreate Section 17.36 of the Zoning Ordinance, Renewable Energy; to delete and recreate Section 17.37, Historic Structures/Sites; and to create Section 17.38, Definitions.

II. Geographic Background Information

A. Property Owner(s):

N/A

B. Applicant(s) Name:

Planning & Zoning Committee

C. Location:

N/A

III. SECTION 17.33 OF THE ZONING ORDINANCE.

Part 1 Commercial and Non-commercial Wind Farms

1.1 Purposes

It is the purpose of these regulations to promote the safe, effective and efficient use of Commercial and Non-commercial Wind Farms.

Winnebago County finds that wind energy is an abundant, renewable, and nonpolluting energy resource and that its conversion to electricity will reduce dependence on nonrenewable energy resources and decrease the air and water pollution that results from the use of conventional energy sources.

1.2 Definitions

For the purpose of this section the following words and terms as used herein shall be defined as follows:

APPLICANT: The person, corporation or entity that is responsible for Wind Farm development and operation and has a property interest in the land.

ANEMOMETER: An instrument, usually located on a tower, that measures wind speed.

A-WEIGHTED SOUND LEVEL (dbA): A measurement of sound pressure level, which has been filtered or weighted to progressively de-emphasize the importance of frequency components below 1000 Hz and above 5000 Hz. This reflects the fact that human hearing is less sensitive at low frequencies and at extremely high frequencies, relative to the mid-range of the frequency spectrum. This area of sensitivity also corresponds to the human speech band. This measurement is the most commonly used filter in both industrial noise applications (OSHA) and community noise regulations.

C-WEIGHTED SOUND LEVEL (dbC): The measurement of sound pressure level which is designed to be more responsive to low-frequency noise. C-weighting is intended to represent how the ear perceives sound at high decibel levels and is also used for evaluating impact or impulse noise such as demolition or mining blasting, artillery firing and bomb explosions using conventional explosives of less than approximately one ton.

DECIBEL: The measurement of a sound pressure relative to the logarithmic conversion of the sound pressure reference level often set as 0 db (A-weighted). In general, this means the quietest sound we can hear is near 0 db (A-weighted) and the loudest we can hear without pain is new 120 ad (A-weighted). Most sounds in a typical

environment range from 30 to 100 db (A-weighted). Normal speech at 3 feet averages about 65 db (A-weighted).

NACELLE: The enclosure located at the top of a wind turbine tower that houses the gearbox, generator and other equipment.

PURE TONE: A sound whose instantaneous sound pressure is a simple sinusoidal function of the time and is characterized by a single frequency or singleness of pitch. For the purpose of these regulations, a pure tone shall exist if the one-third octave band sound pressure level in the bandwidth of the tone exceeds the arithmetic average of the sound pressure levels on the two contiguous one-third octave band by 5 db for center frequencies of 500 Hz and above, and 8 db for center frequencies between 160 and 400 Hz, and by 15 db for center frequencies less than or equal to 125 Hz.

PROJECT IMPACT REVIEW: A review of existing public professional literature, maps and other information regarding possible impacts that may be related to Wind Farm development and possible impact mitigation techniques and measures. Such information sources may include, among others, federal, state, and local agencies.

PLANNING AND ZONING COMMITTEE: The Planning and Zoning Committee is the five member committee appointed by the County Board of Supervisors to review and make recommendations to the Board on planning and land use issues as authorized by Wisconsin Statutes. The Planning and Zoning Committee is also know as the P&Z.

ROTOR: The rotating part of a turbine, including the turbine blades.

STALL-CONTROL: A braking mechanism on wind turbines where the rotor blades are bolted onto the hub at a fixed angle. The rotor blade profile is aerodynamically designed to ensure that the moment the wind speed becomes too high it creates turbulence on the side of the rotor blade which is not facing the wind. This stall prevents the lifting forces of the rotor blade from acting on the rotor.

TOWER: With regards to wind energy system, the structure on which the wind system is mounted.

TURBINE: A wind drive machine that converts wind energy into electrical power, also known as a wind energy conversion system.

UPWIND ROTOR: A design in which the rotor on a wind turbine tower faces into the wind.

WELL-DESIGNED BRAKING SYSTEM: The primary braking system, which uses a mechanical brake, pitch-control of the turbines blades, or stall-control to bring the turbine to stop in such a way that stall-induced vibrations/ noise are avoided.

WIND ENERGY SYSTEM: A wind driven machine that converts wind energy into electrical power.

WIND FARM, COMMERCIAL: A single wind driven machine or a collection of wind driven machines or turbines that convert wind energy into electrical power for the primary purpose of sale, resale or offsite use.

WIND FARM, NON-COMMERCIAL: A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 100 kW and which is intended to primarily reduce onsite consumption of utility power. If all applicable regulations are met a Non-Commercial wind farm may contain more than one wind energy conversion system. A community wind farm, such as for a subdivision, designed for on-site consumption, shall be considered a non-commercial wind farm.

WIND FARMS, TOTAL HEIGHT: The highest vertical point on the machines, including the rotor blades tips, measured from the tower base.

1.3 Anemometers:

Anemometers: An Anemometer is a wind speed measuring device used to determine the viability of an area for a Non-Commercial or Commercial wind farm development. This use is permitted in all zoning districts by obtaining an approved Winnebago County Zoning Permit through the permit process described in Section 1.4 of these regulations.

1.4 Non-Commercial Wind Farm(s)

Non-Commercial Wind Farm(s) shall be an Accessory Structure in all base zoning districts, and shall be permitted by the issuance of an approved Winnebago County Zoning Permit. A zoning permit will not be issued for any Non-Commercial Wind Farm until the Winnebago County Sheriff's Department has approved, in writing, the proposed location of the proposed Non-Commercial Wind Farm. The approval of the Winnebago County Zoning Permit is also subject to compliance with the standard application requirements and compliance with all of the following Non-Commercial wind farm requirements as set forth below:

(a) Total Height: There is no limitation on tower height, except as imposed by setback, clear zone and FAA regulations.

- (b) Setback: The wind energy system shall be set back a distance equal to one hundred ten (110) percent of the combined height of the tower plus the length to the tip of the blade from all adjacent property lines. Additionally, no portion of the small wind energy system, including guy wire anchors, may extend closer than ten (10) feet from the property line.
- (c) Clear Zone: The wind energy system shall maintain a circular clear zone that has a radius which is equivalent to one hundred ten (110) percent of the combined distance of the tower height plus the length to the tip of the blade. This clear zone shall be maintained free of any occupied structures, tanks containing combustible/ flammable liquids, and above ground utility/ electrical lines.
- (d) Noise: Wind energy systems shall not exceed 60 dBA, as measured at the closest neighboring inhabited dwelling. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms.
- (e) Tower Security: Any climbing apparatus must be located at least 12 feet above the ground, and the tower must be designed to prevent climbing within the first 12 feet.
- (f) Lighting: Wind energy systems shall not be artificially lighted with accent lighting. For the protection of the flight patterns of aircraft and the protection of helicopters, airports and landing strips, wind energy systems must be lighted in accordance to the regulations and guidelines of the Federal Aviation Administration (FAA) regulations or appropriate authorities.
- (g) Signs/Advertising: No tower should have any sign, writing, or picture that may be construed as advertising.
- (h) Multiple Wind Energy Systems: Multiple wind energy systems are allowed on a single parcel as long as the owner/ operator complies with all Non-Commercial wind farms regulations contained in these regulations. Units shall be installed in compliance with minimum setback and clear zone requirements, as defined by these regulations. The minimum distance between wind energy systems shall be equivalent to one hundred ten (110) percent of the combined height of the tower plus the blade length.
- (i) Certified Wind Turbines: At the time of application, the applicant must present a certification from the manufacturer that the system's turbine and other components equal or exceed the standards of one of the following national certification programs such as the: National Electrical Code (NEC), American National Standards Institute (ANSI), Underwriters Laboratories (UL), or any other small wind certification program recognized by the American Wind Energy Association.

- (j) Onsite Electrical Use: On the Zoning Permit application, the applicant must certify that the proposed system will be used primarily to reduce onsite consumption of electricity.
- (k) Compliance with FAA Regulations: Non-commercial energy systems must comply with applicable FAA regulations, including any necessary approvals for installations close to airports.
- (I) Installation A non-commercial energy system including tower shall comply with all applicable state construction and electrical codes, and the National Electric Code.
- (m) Utility Notification and Interconnection: No non-commercial energy system shall be installed until evidence has been given that the utility company has been informed of the customer's intent to install an interconnected customerowned generator. Non-commercial energy systems that connect to the electric utility shall comply with the Public Service Commission of Wisconsin's Rule 119, "Rules for Interconnecting Distributed Generation Facilities. Off-grid systems shall be exempt from this requirement.
- (n) Removal of Defective or Abandoned Wind Energy Systems: Any wind energy system found to be unsafe by an authorized County official shall be repaired by the owner to meet federal, state, and local safety standards or removed within six months. If any wind energy system is not operated for a continuous period of 12 months, the County will notify the landowner by registered mail and provide 45 days for a response. In such a response, the landowner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the County deems the timetable for corrective action as unreasonable, they must notify the landowner and such landowner shall remove the turbine within 120 days of receipt of notice.

1.5 Commercial Wind Farms

Commercial Wind Farms (hereby known as CWF's) require a Conditional Use Permit in Agricultural zoning districts whether they are developed and/or operated by a public utility, private company or individual. They are not allowed in any other zoning district. A Conditional Use Permit will not be approved for any Commercial Wind Farm until the Winnebago County Sheriff's Department has approved, in writing, the proposed location of the proposed Commercial Wind Farm.

1.51 Application Requirements

Prior to submitting an application for a CWF, the applicant shall arrange a preapplication meeting with the Winnebago County Zoning Department. All applications for a Wind Farm shall be accompanied by the following information:

- (a) Owner Consent: Evidence that the applicant is the owner of the property or has written permission of the owner(s) to make such application;
- (b) Applicant/Owner Information: Name, address, and phone number of the applicant and owner and the applicant's contact person for the project.
- (c) Project Rationale: Relevant background information on the project, including timeframe and project life, phases of development, likely markets for the electricity produced and the possibilities for future expansion.
- (d) Plot and Development Plan: A conceptual development plan of the proposed CWF drawn to scale and in sufficient detail to provide a clear description of the project:

Requirements:

- 1) Drawing sheets must show the scale, a north arrow and the number of sheets in the sequence. Ten copies (no larger than 11" x 17") of the development plan must be submitted with the application.
- 2) Property description which includes a general vicinity map of the project and a legal description of the project boundary (e.g. NW ¼ SE ¼ Section 2, T18N, R16E), property acreage, and a tax parcel number.
- 3) Structure location showing setbacks, use, and means of access for the following structures:
 - (a) Existing Structures within Project Boundary.
 - (b) Existing Structures outside Project Boundary: All occupied/ manned structures and all non-occupied structures within 1,500 feet of the project boundary.
 - (c) Proposed Accessory Structures: Accessory structures include support offices, facilities, and other structures related to the operation of the CWF. A general statement of how the developer will address potable water, sewage/ waste disposal, and fire protection for these accessory structures is required.
 - (d) Proposed Wind Turbine Towers: Include a conceptual site plan of a typical individual wind turbine site and a map showing the exact location of each turbine. For review purposes all wind turbines shall be assigned a reference number.
 - (e) Existing Utilities, Pipelines and Related Structures. Show the location of all existing underground and above ground utilities, electrical lines, transmission lines, pipelines and any accessory support facilities.
 - (f) Proposed Utilities, Electrical/ Transmission Lines and Related Structures. Show all proposed utilities, electrical lines, transmission lines and any related accessory support facilities:

State the approximate voltage of each electrical/ transmission line and whether the facilities are proposed to be located above or below ground. Provide a general region/ area wide map clearly showing the proposed route of proposed transmission lines and their accessory facilities.

- 4) A map showing wind characteristics and dominant wind direction, which is the direction from which fifty (50) percent or more of the energy contained in the wind flows.
- 5) A map showing the location of any delineated 100-year floodplains or wetlands.
- (e) Visual Simulation: Provide an accurate visual simulation of the project components by showing:
 - 1) A scaled, two dimensional drawing showing an example of a proposed tower as it relates to humans, structures, and the general landscape of the project area.
- (f) Impacts and Mitigation Measures: In the absence of a required environmental analysis by a state or federal agency, which encompasses the entire project area, provide a project impact review and a proposed impact mitigation plan. The project impact review and mitigation plan shall address all of the following:

Environment:

- 1) Any endangered or threatened species on the site and in a biologically significant area surrounding the site.
- 2) Historic, cultural, or archaeological resources within wind farm project area.

Commercial Wind Farm:

- 3) A-weighted and C-weighted noise levels at the residence nearest to the project boundary and at the property line of such residence nearest to the project boundary.
- 4) Any waste, either municipal solid waste or hazardous waste, generated by the project.
- 5) Electromagnetic fields and communications interference generated by the project.
- 6) Public safety in regard to the potential hazards to adjacent properties, public roadways, communities, aviation, etc. that may be created.

- g) Life of Project and Final Reclamation of Project: Provide a statement of the useful life of the project, a general description of the decommissioning, and the final land reclamation plan in the event the project is abandoned or terminated. Evidence, acceptable to the P & Z Committee, shall be presented demonstrating that the developer has entered into an agreement with the property owner that ensures proper final reclamation of the CWF project. If the developer does not have a reclamation agreement with the land owner that is suitable to the Committee, the developer shall comply with all the provision of 1.5.5 of these regulations.
- h) Conceptual Transportation Plan for Construction and Operation Phases: Provide a conceptual Construction and Operation Transportation Plan that shows the following:
 - 1) Locations of the project's service road ingress and egress access points onto State or County Roads. Any proposed access onto the State or County road system must meet respective requirements.
 - 2) The layout of the proposed CWF service road system and the extent to which roads are planned to be upgraded.
 - 3) The plan for utilizing existing roadways to service the project area. To the greatest extent possible, the applicant must make use of existing roadways.
 - 4) The proposed methodology of assuring that repairs and on-going maintenance of public roads and bridges to be used in both the construction and operation phases will be carried out.
- i) A commercial drainage plan will need to be submitted and approved by the Zoning Department as part of the approval of the Conditional Use Permit.

1.5.2 Performance Standards

The following standards are to be achieved by each CWF project without exception. Because they are standards, they are considered to be requirements of any CWF project. The final decision on whether or not a particular standard is achieved by the Wind Farm project shall be made by the Planning and Zoning Committee.

Noise Management – The noise level caused by the operation of the project, measured at five (5) feet above ground level at the property line coincident with or outside the project boundary, shall not exceed 65 decibels (A-weighted) and shall not exceed 50 decibels (A-weighted) if it is determined that a pure tone noise is generated by the

project. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms. Upon receipt by the Winnebago County Planning & Zoning Department of a complaint regarding noise from an existing CWF project, the Department will investigate the complaint. If the Department determines the complaint to be reasonable, the project owner shall be required, at the owner's expense, to have prepared, by an independent acoustical consultant approved by the Department, an acoustical study that shall demonstrate compliance with the above noise standard on the basis of equivalent sound pressure levels. "Equivalent sound pressure levels" means the steady sound level that, over 10-minute measurement periods, would produce the same energy equivalence as the fluctuating sound level actually occurring.

CommercialWind Farm Design: At the time of application, the applicant must present a certification from the manufacturer that the system's turbine and other components equal or exceed the standards of one of the following national certification programs such as: National Electric Code (NEC), American National Standards Institute (ANSI), Underwriters Laboratories (UL), or any other small wind certification program recognized by the American Wind Energy Association.

Natural & Biological Resources – No perches are permitted on the nacelles of turbines. CWF towers shall not be lattice-type construction or other designs that provide perches for avian predators.

Visual Impacts – To provide visual order to a CWF project, all individual turbines shall have the same number of rotor blades and all rotor blades shall spin in the same direction (i.e., clockwise or counter-clockwise) in relation to the wind. To promote visual uniformity, all turbines at a similar ground elevation shall have the same height from blade tip to the ground. Except during construction, re-construction or removal, outdoor storage is not permitted within the project boundary except at locations that are screened from view. Inverters and pendant power cables shall be located inside the wind turbine tower, nacelle or structure. No telecommunications dishes antennas, cellular telephone repeaters or other similar devices shall be attached to wind turbine towers. Aircraft obstruction markings of the turbines by use of alternating red and white bands shall be prohibited. No billboards, logos, and advertising signs of any kind shall be located on the turbines.

Soil Erosion & Water Quality – Construction and maintenance shall be done in strict accordance with the stormwater and erosion control plan submitted with the Conditional Use Permit so as to minimize soil erosion and damage to existing vegetation. If vegetation is damaged during construction, in areas not occupied by the CWF and

related facilities and roads, it shall be restored after construction is complete. Disturbed areas shall be reseeded.

Safety –Individual wind turbines shall be set back from all property lines coincident with or outside of the project boundary a distance equal to one hundred ten (110) percent the total hub height. Individual wind turbines shall be set back from all public roads a distance equal to at least one hundred ten (110) percent the total hub height. Individual wind turbine heights and markings shall comply with Federal Aviation Administration (FAA) regulations. If lighting of turbines, or other structures, is required, "daytime white-nighttime red" shall be the only type of lighting allowed unless prohibited by law. All turbines and towers shall be a shade of white in color.

1.5.3 Review and Approval

Upon approval of the Conditional Use Permit for a CWF project, the developer will submit to the Zoning Department a <u>complete</u> Winnebago County Zoning Permit application that includes all of the following:

- 1) All of the special conditions outlined in the Conditional use Permit authorization.
- 2) A site plan(s), drawn to a suitable scale, which is based on the survey detail used to prepare exhibits for private leases and rights-of-way, as prepared by a professional land surveyor. This site plan must include the site plan information required by the Conditional Use Permit Application. The site plan shall include a legal description based on actual survey of individual tower sites, and a typical footprint detail for each tower site, including the blades.
- 3) A final plan for site security
- 4) A final decommissioning and reclamation plan
- 5) Documentation of the establishment of the Account/ Bond for reclamation; and documentation that the project is in compliance with all of the requirements of all jurisdictional state and federal agencies.
- 6) As -built drawings, prepared by a Wisconsin Licensed surveyor, verifying the location and setbacks of all structures must be submitted to the County prior to wind farm operation.

After Land Use Department receives a complete Zoning Permit application, the Department will review it for compliance, and, if approved, the Department will issue a Zoning Permit to the developer.

The term of the CWF Conditional Use Permit expires within 5 years of its date of approval by the Board of County Supervisors unless:

1) The developer has substantially commenced CWF Construction under an approved Winnebago County Zoning Permit.

The P & Z Committee may renew the Conditional Use Permit once up to one additional 5 year term. If the project is still not complete after the Board's renewal has ended, and the applicant still wishes to proceed with the project, a new Conditional Use Permit must be applied for.

1.5.4 Final Project Reclamation

Final Project Reclamation Requirements:

A reclamation bond shall be furnished to Winnebago County at the time of Zoning Permit application construction that will be used to restore the site surface to a condition consistent with the pre-construction environment. The purpose of the reclamation bond is to assure that adequate funding is available to pay the costs of site reclamation, including removal of individual turbines and other above-ground project improvements subject to permit in the event of abandonment of individual turbines or the entire project. The reclamation bond shall be in an amount equal to one hundred (100) percent of such costs, where such amount is determined by the County Board of Supervisors based upon estimates from knowledgeable contractors, except that the landowner should be given the option to maintain access roads for demonstrated ranching or farming purposes as approved by the County Board of Supervisors. The reclamation bond may not be cancelled, released or in any way terminated, without prior written approval from Winnebago County, and shall continue as long as such turbines or other above-ground improvements exist. The reclamation bond must be written so as to survive any sale or other form of transfer of ownership of such turbines and other improvements. The company providing the reclamation bond must be authorized to provide bonds in the State of Wisconsin and be acceptable to the Board of Supervisors.

All underground equipment and foundation systems of CWF's shall be removed.

2.1 Purposes

It is the purpose of these regulations to promote the safe, effective and efficient use of the collection of sunlight in order to convert to electricity.

2.2 Definitions

For the purpose of this section the following words and terms as used herein shall be defined as follows:

SOLAR PANNELS: A group of connected solar cells, used to either convert light from the sun into electricity or which uses the sun's energy to heat water.

2.3 Free Standing Solar Panel(s)

Free standing solar panels are considered accessory structures, shall be allowed in any district, and shall meet the minimum setback and height requirements for accessory structures.

2.4 Non-Free Standing Solar Panels

Non-free standing solar panels are considered part of a principal structure, shall be allowed in any district, and shall meet the minimum setback and height requirements for principal structures.

DATE: OCTOBER 1, 2009

TO: PETER PFUNDTNER

MENASHA JOINT SCHOOL DISTRICT SCHOOL BOARD OF

DIRECTORS

FROM: BECKY BAUER AS A CITY OF MENASHA SUSTAINABILITY

BOARD MEMBER, AND ON BEHALF OF TEACHERS AT

MENASHA HIGH SCHOOL

RE: SUSTAINABILITY PROPOSAL

ACTION REQUESTED:

**(wording will depend on the level of formality with which the School Board adopts this concept)

The City of Menasha Sustainability Board and teachers at Menasha High School are requesting the Board of Directors of the Menasha Joint School District to consider a (proclamation/resolution/Board Goal/Board Policy)** regarding sustainability concerns for the Menasha Joint School District. This proclamation** would initiate the consideration of sustainability issues and alternative sustainable actions in all aspects of District oversight as well as create a district-wide "Green Team" to initiate, develop, implement, and evaluate current district policies/practices, contracts, curriculum, and day-to-day administration. In addition, the "Green Team" would consist of students, staff, administrators, Board Members, and members of the public to provide representation and review from all areas of the District's operation and administration. The Menasha Joint School District would consider the feasibility and cost/benefit analysis of implementing recommended changes which would increase the district's and community's awareness of sustainability and lead the Menasha Joint School District to attain a greater level of sustainability in its areas of control. Please see attached "Green Team" job description.

BACKGROUND/HISTORY

"In November of 2007, the Common Council of Menasha had the vision to pass a resolution supporting the Eco-Municipality Concept. As part of this resolution the city created a Sustainability Board to prepare a suitable community plan following the guidelines of *The Natural Step for Eco-Municipalities* and to advise the Mayor and Common Council on implementation of sustainable practices."

(http://www.cityofmenasha- wi.gov/content/departments/community development/(5)sustainability board/)

Like many other municipalities and communities in the Fox Valley, in Wisconsin, and within the nation, Menasha has begun the process of citizen/employee awareness of this

framework by holding study circles, attending conferences/workshops, and evaluating current practices in regards to sustainability. As part of this, the City of Menasha has been reaching out to form partnerships with local business and industry to increase local sustainability. During the next step of this outreach, the City of Menasha Sustainability Board wants to promote the Natural Step Sustainability Framework within the Menasha Joint School District. MJSD is not only one of the City's largest employers, but because of its mission, will be crucial to promoting awareness and education within the community. Currently the city and school district work jointly on projects within the community.

In the spring of 2009, the Menasha Joint School District also hosted a university course "NR 734: School Building Energy Efficiency" offered by UW-Stevens Point. Several district teachers, representing most schools took the course and worked to include this information in the curriculum they teach. Teachers at Menasha High School, enthusiastically want to take this further and evaluate the practices of the high school and district to reduce our environmental impacts and create a cost-savings for the district. As part of their coursework, teachers produced a 20 min. video and shared this with staff during inservice last June. Included are my plans for implementing a district-wide plan for sustainability. These plans will coordinate and enhance work that is already going on within the City of Menasha. In order to begin work in these areas, I feel it is crucial to have the "official" support of both the School Board and district administrators. (see Becky Bauer's Energy/ Sustainability Action Plan)

The Natural Step Framework / Sustainability Resources

(HOME PAGE) http://www.naturalstep.org/en
(FAQ's) http://www.naturalstep.org/en/faq
(OVERVIEW) http://www.naturalstep.org/our-approach#quick-overview
(4-SYSTEM CONDITIONS) http://www.naturalstep.org/the-system-conditions

The Natural Steps for Communities—How Cities and Towns can Change to Sustainable Practices, Sarah James and Torbjörn Lahti, New Society Publishers, 2004.

ECOS of the Fox Valley http://ecos-fv.blogspot.com/

1000 Friends http://www.1kfriends.org/Eco-Municipalities.htm

Sustainability Program of EPA's Office of Research and Development http://www.epa.gov/Sustainability/

Toward a Sustainable Community: A Toolkit for Local Government http://www4.uwm.edu/shwec/publications/cabinet/reductionreuse/SustainabilityToolkit.p df

MENASHA JOINT SCHOOL DISTRICT

"GREEN TEAM"



JOB DESCRIPTION: Team members will agree to meet with the district and/or school committee 4-6 times per year. Team members would agree to serve for at least 1 school year. Areas of involvement might include:



*serve as a building liaison for energy/environment announcements between district staff and individual building staff



*develop energy saving ideas/practices/policy recommendations for a school and/or the school district



*assist with development of student curriculum and teacher resources to teach about energy/environmental content



*assist the school district with obtaining and implementing grants to achieve improved energy efficiency.



*promote/assist with joint environmental events and projects between Menasha Joint School District and community groups.



*create, review and/or revise district landscaping plans on all properties in regards to location of gardens, upkeep, student participation, inclusion within curriculum, etc. (ie. review and improve the district's "Green Spaces")



*investigate Wisconsin's Green and Healthy Schools program for possible implementation, certification, and recognition of the Menasha Joint School District.



*help the Menasha Joint School District improve its overall sustainability in its use of all resources by becoming familiar with the Natural Step framework and identify ways to apply the framework to all practices within the district.

ENERGY/SUSTAINABILITY ACTION PLAN

for

Menasha Joint School District/City of Menasha

Becky E. Bauer

Menasha High School 420 Seventh St. Menasha WI 54952 (920) 967-1800 x 4319 bauerb@mjsd.k12.wi.us

Environmental Science/Spanish/German (Grades 9-12)

May 16, 2009

Background Information

A little over a year ago, the City of Menasha Common Council passed a Sustainability Resolution which committed the City of Menasha to investigating, supporting, and implementing sustainability practices within City of Menasha Departments and local businesses and organizations. [web link to City of Menasha Sustainability Resolution] As part of this commitment, the City established an "Sustainability Board." I was invited to become part of the Sustainability Board and act as a liaison between the Board and the Menasha Joint School District. During the first year, the Sustainability Board has worked mostly on educating itself, determining priorities, and providing beginning awareness and education for the City Department Managers and local citizens. We have focused on providing "Study Circles" based on "The Natural Step Framework" and Sarah James and Torbjörn Lahti's book entitled "The Natural Step for Communities: How Cities and Towns can Change to Sustainable Practices" ". [web link to "The Natural Step"] Recently, the Town of Menasha has also adopted the ideas of sustainability and also wants to work with the Menasha Joint School District on these issues as well.

As the Sustainability Board wraps up our second year, we are beginning to conduct baseline studies in several areas, and widen our scope to educating and integrating one of our largest employers....the Menasha Joint School District. Our goal is to include the School Board, teachers and administrators, and students on a variety of levels. This might include helping the District save money by creating a energy saving program for the physical plant, providing resources to teachers to incorporate sustainability education into the curriculum, and involving students in gathering data as part of the baseline studies or having students create sample projects that can be used as demonstrations for the community as a whole (ie using rainbarrels/rain gardens to mitigate storm water discharge from residential properties).

In order to complete the assignment for this class, I worked with the other teachers in creating a video to present to the Menasha High School staff. This video is one of the components in the broader action plan of providing an overall link to sustainability within the district and community. This action plan, is what I will help coordinate and carry out as I continue to act as a liaison between the school district and the city.

[web link to City of Menasha Sustainability Board]

1. Action Plan Summary

Project Purpose:

This action plan will serve as the formal, organized plan to provide the Menasha Joint School District a connection to sustainability efforts being implemented within the City and Town of Menasha. This plan will utilize the interest and momentum started by teachers taking the 734 KEEP class to address not only issues of energy efficiency and conservation, but other local issues that will help advance the City of Menasha's steps toward city-wide sustainability.

Implementation:

Implementation will begin in June 2009 with the showing of the video created by Menasha High School teachers and will continue into next fall. After the creation of a district-wide/school-based "Green Team," this project will be ongoing as staff/administrators focus on concerns identified by "Green Team" members.

Results:

The overall result is intended to be a coordinated, focused approach to energy conservation within the Menasha Joint School District (as a result of the KEEP 734 class) AND provide an systematic and organized approach to creating an awareness of sustainability efforts within the community, while involving staff and students in a variety of educational opportunities that also support community sustainability.

Total Budget Amount:

Budget needs will be addressed as necessary by the Menasha Joint School District, depending on projects selected. The money necessary could come from cost-savings as a result of changes, existing district budgets, and/or grant programs as necessary. Initially, the greatest investment will be in allocating staff time to meet and create a "Green Team." The district has a district-wide collaboration time set aside that individual teachers could choose to use to meet with each other, work on curriculum, etc. as long as outcomes are focused on improving student learning. The district also provides release time for some meetings, curriculum development and work with community partners. Menasha High School teachers completing the KEEP 734 class have agreed to pool their mini-grant monies to implement cost saving measures/needs identified by the district maintenance supervisor (Tom K.) at Menasha High School.

2. Audience

History and past accomplishments, especially as they relate to this project:

As identified in the Background Section, this project will continue to support the sustainability efforts of the City and Town of Menasha and provide a more organized approach to connecting efforts of the both the City, the Town and the School District. It will also help to identify those efforts already made by the School District to control costs and increase efficiency in regards to energy and sustainability practices within the school community.

Service area/population served:

The primary/direct audience will be the Menasha Joint School District School Board members, MJSD administrators/staff, and MJSD students. In addition, the City of Menasha Sustainability Board, Town of Menasha Sustainability Board and the citizens of Menasha, will be a secondary/indirect audience.

3. Statement of Problem or Need

Outline current resources that address this problem and identify gaps:

Currently, all requests from community members for student help with environmental projects are directed to me, "the environmental science" teacher. There is no guarantee that I will be able to include the requests in my curriculum nor find students to help. Teachers often ask me to provide help and resources to students researching environmental issues for reports. I have a limited amount of time to assist other classes find appropriate resources. The City of Menasha Sustainability Board wants to continue educating the community on principles of sustainability, yet does not necessarily have the "forum" to provide community education.

Describe how my project will fulfill these goals:

This project action plan will provide the organized, systematic framework to handle community requests for environmental projects staff/student assistance through the creation of a "Green Team." Additionally, subcommittees can work on creating curriculum/resources for students and teachers, focus on energy efficiency at a building level, and implement a hands-on program of activities that support sustainability within the community.

4. Project Goals and Objectives

Provide the specific goals you intend to achieve:

This action plan is primarily focused on creating a district-wide "Green Team" with a possibility of sub-committees that would represent different aspects of environmental interest/issue involvment. In order to do this however, there needs to be some education/awareness of sustainability developed by the Menasha Joint School District School Board, administrators/staff, and students. Additionally, my action plan will more

specifically outline connections to the community's sustainability efforts which the City of Menasha Sustainability Board has asked for MJSD staff/student help to implement.

Note the milestones I will reach while meeting those goals:

**see chart attached [web link to ENERGY/SUSTAINABILITY ACTION PLAN]

5. Methods and timeline

List what actions will be taken to achieve project goals:

Establish a timeline for project activities:

Identify who will be responsible for each action item:

**see chart attached [web link to ENERGY/SUSTAINABILITY ACTION PLAN]

6. Evaluation Criteria and Process

How will I measure the success of my project:

The main focus of this action plan is to begin to educate the Menasha Joint School District School Board, staff and students about the basics of sustainability for the purpose of extending education into the community. The establishment of a "Green Team" will help build on the current enthusiasm for involvement and will help set the stage for successful completions of environmental projects in the future. Beginning with the small group of teachers that took the 734 KEEP class, I feel the district can become a leader in energy efficiency/sustainability as a business entity and as a leader through the integration of community projects into the curriculum. Success will be evaluated by the City of Menasha Sustainability Board, as they reach out to business and industry within the City of Menasha. Internally, the Menasha Joint School District (Becky Bauer) will be able to measure success by having a coordinated, district-wide effort to increase energy efficiency within buildings and to provide resources to students and staff. I feel these two efforts need to go together and as a district we are close to "critical mass" in getting started. Perhaps the current economy has created a greater need and therefore interest....perhaps a new president is also a motivator....there are several key staff that have been working to involve the district, but finally, administration, staff, and students are ready to jump in. I will consider this action plan successful if we have a "Green Team" of 5-8 members that have identified at least 2 key projects to work on in the 2009-2010 school year.

List what records and information I will gather to assess project success:

- 1. Survey of MJSD staff as to their basic knowledge of the Natural Step Sustainability Framework
- 2. Survey selected students/classes before and after presentations to determine their personal knowledge of sustainability issues and their likelihood of personal involvement in community projects.
- 3. Produce a completed "Safe Routes to School" baseline study that results in recommendations to City of Menasha Public Works for transportation corridor improvements. Based on study recommendations, more students would/could walk safely to school.
- 4. Greater staff involvement in environmental/sustainability inclusion into curriculum.
- 5. Increased requests from staff for resources and connection to more hands on learning through projects with and for the community.

7. Budget

Funding that might be needed to implement my plan (include as much detail as possible):

Most of the focus of this plan is organizational, and therefore, specific funding is not necessary. The Menasha Joint School District has an integrated method for providing collaboration time and resources to staff. Once the "Green Team" begins to identify projects and changes within the district, then an implementation budget will be required. Probably this funding will come from the district budget as a result of a cost/benefit/pay back on investment analysis.

ENERGY/SUSTAINABILITY ACTION PLAN

Becky Bauer

GOAL	ACTIONS	TIMELINE		PERSON	COST
				RESPONISBLE	
A. Inform MJSD School	1. Create a powerpoint presentation	Summer 2009create		BB/City of	none
Board/administrators/staff/stud	for the MJSD School Board, with	powerpoint;		Menasha	(copies of info
ents about City of	assistance from Catherine	September, 2009,		Sustainability	provided by MJSD)
Menasha/Town of Menasha	Neiswender, UW-Extension, that	present to School		Board	
Sustainability Boards and "The	explains the history, background,	Board			
Natural Step" philosophy.	general principles, and				
	implementation process for "The				
	Natural Step Framework."				
	2. Present powerpoint to staff at each	Sept-Nov 2009		BB	none
	building during monthly faculty				(copies of info
	meeting (8 buildings) and offer a				provided by MJSD)
	Sustainability "Study Circle" for staff				
	3. Collaborate with Char Foth, Adv.	Summer 2009		BB	none
	Composition teacher and Matt Becker,				
	EEN inclusion teacher to create a				
	presentation on sustainability for				
	students				
	4. Present powerpoint to Env. Sci.	Nov 2009 & Feb 2010		BB	Covered by science
	students during unit on Hazardous				department
	Waste & Advanced Composition				curriculum
	students during unit on research paper				development
	focused on the environment				
GOAL	ACTIONS	TIMELINE		PERSON	COST
				RESPONISBLE	
B. Develop a "Green Team"	1. Obtain district/building permission	May 2009	1	BB/Tom	none
for MJSD	for a "Green Team" from district			Kulczewski	
	administration				
	2. Create a job description for "Green	May 2009		BB	none
	Team" members and survey to				
	indicate staff interest/participation,				
	with approval of Maintenance/				
	Superintendent/ Principals.				
	3. Promote/survey "Green Team" at	June 2009 at Menasha		BB/ Tom	Cost of copies
	monthly faculty meetings using "MHS	High School, Sept-Nov		Kulczewski	(district)

	energy video"/ powerpoint as a lead-in/interest indicator **overlap with MHS action plan (video) 4. Recruit at least one member from each district building and hold an organizational "Green Team" meeting	2009 district-wide Nov-Dec, 2009	BB/ Tom Kulczewski	none
	5. Create a a"Green Team" mission statement	Dec 2009	BB/ Tom Kulczewski	none
	6. Hold 2 additional quarterly meetings	Jan-June 2010	BB/ Tom Kulczewski	none
	7. Create a process for requesting staff/student involvement for community based environmental projects. Publicize to community sustainability groups	Dec 2009	BB	
	8. As needed create subcommittees of the Green Team to deal with curriculum development/staff inservice, physical plant energy efficiency/conservation, habitat/landscaping of buildings/properties, special projects, etc	June 2010	BB/ Tom Kulczewski	
GOAL	ACTIONS	TIMELINE	PERSON RESPONISBLE	COST
C. Develop a MJSD focused resource web page for staff and students **overlap with MHS action plan (video)	1. Link a sustainability page to BB's existing Env. Sci. web page **create a book mark of web page for teacher reference to be handed out during video viewing	May 2009 [web link to sustainability resources]	BB	none
	2. Work with Env. Sci., Adv. Comp, and LMC to create resource categories	May-Aug 2009	BB/Char Foth/Matt Becker/Nancy Biese	none
	3. Link existing material to web page and create a way for staff/students to continue to add resources	Aug 2009	BB	

GOAL	ACTIONS	TIMELINE	PERSON RESPONISBLE	COST
D. Assist the City of Menasha with baseline transportation study (Safe Routes to School)	1. Review/plan baseline study approach for "Safe Routes to School"	June 2009	BB	
•	2. Publicize to High School students and elementary Parent/Teacher Organizations (PTO) for assistance	Sept 2009	BB/Sustainability Board/PTO/MHS Earth Club/Env. Sci. classes	
	3. Conduct baseline study	Sept-Dec 2009	BB/Sustainability Board/ PTO/MHS Earth Club/Env. Sci. classes	
	4. Work with City of Menasha to input data into GIS to create a community report of findings	Jan-Mar 2010	BB/Sustainability Board/ PTO/MHS Earth Club/Env. Sci. classes	
	5. Present report and recommendations to City of Menasha Common Council/Town of Menasha Board regarding necessary safety/usability recommendations	June 2010	BB/Sustainability Board/ PTO/MHS Earth Club/Env. Sci. classes	
GOAL	ACTIONS	TIMELINE	PERSON RESPONISBLE	COST
E. Revitalize the MHS Earth Club to promote student involvement in school and community sustainability projects	1. Recruit student members during student orientation/club activity sign up	Aug 2009	BB	
	2. Engage students in creating displays on sustainability for MHS students, Town of Menasha/City of Menasha	Sept-Dec 2009	BB/Earth Club officers	
	3. Involve students with "Safe Routes to School" project	Sept 2009-June 2010	BB/Earth Club officers	Possible grant funding through municipality/state
	4. Plan a Sustainability/Energy Fair to coincide with Earth Day/Arbor Day	Sept 2009-June 2010	BB/Earth Club officers	Possible grant funding through sustainability board

5. Begin to investigate participation in Wisconsin's Green and Healthy School program	Jan-Dec 2010	BB/Earth Club officers/"Green Team"	Needs to be determined

