

SUSTAINABLE MARSHFIELD COMMITTEE REPORT

FEBRUARY 27, 2007

Executive Summary:

On March 14, 2006 the Common Council authorized the establishment of a committee to evaluate the Eco-municipality concept, to see how it can be applied to the city, businesses within our community and to city residents as well and report back to the Common Council the committee's findings and recommendations.

The Sustainable Marshfield Committee (SMC) began meeting in June 2006. The SMC consisted of the Mayor, two Aldermen, seven city employees and thirteen business and citizen representatives from throughout the community. The meetings were facilitated by agents of two different County University of Wisconsin Extension Offices with technical assistance from a statewide specialist of UW-Extension.

Later in the process the SMC organized three subcommittees to focus on specific topics. These topics included transportation, water quality/quantity and green buildings. The charge of these three subcommittees was to further evaluate in detail these topics and make recommendations on the same.

The following is a summary of the three subcommittees' findings and recommendations:

Sustainable Marshfield Transportation Subcommittee

Mission Statement:

It is the mission of the Sustainable Marshfield Transportation Subcommittee to develop recommendations that move residents and non-residents from point A to point B in a more sustainable manner.

Introduction:

Three areas of emphasis were chosen by the SMC for further exploration and recommendation development. One of the areas of emphasis was transportation. The Transportation Subcommittee met on multiple occasions to research potential actions the City of Marshfield could implement to make transportation within the city more sustainable. The following report details these recommendations and briefly outlines an action plan for implementation.

Plan of Action:

The Transportation Subcommittee recommends that the City of Marshfield pursue the following activities:

Alternate Fuels for Fleet Vehicles. Currently the City of Marshfield has a fleet of 49 vehicles (this does not include construction equipment) and to be a leader in the promotion of a cleaner fleet the city needs to consider the use of alternate fuels.

The current dump trucks could be utilizing bio-diesel. Bio-diesel is less toxic and more biodegradable than No. 2 diesel, but should not be used in older fleet vehicles.

Consideration should also be given for the gasoline powered vehicles by requiring future purchases to have the option of an alternative fuel but still maintain the option of using conventional gasoline. This would allow the user to utilize cleaner fuels when available and also use gasoline when the alternate fuel is not available, such as traveling outside the city limits.

There are many different types of alternate fuel options such as compressed natural gas (CNG), ethanol (E85), electricity, hydrogen, liquid natural gas (LNG), liquefied petroleum gas (LPG) and methanol (M85). Each of these options has specific advantages and disadvantages ranging from lower emissions and a reduced dependency on foreign oil to availability of alternate fuels from a local source. Additional research will be required before a specific direction can be chosen.

Fleet Vehicle Idling Policy. Implement a Vehicle Idle Policy that limits the length of time that stationary vehicles are allowed to idle. The unnecessary idling of vehicles and equipment wastes fuel, contributes to air pollution and may cause premature engine wear.

Park and Ride. Marshfield currently has a population of 19,258 residents. The daytime, weekday population increases to almost 35,000, with persons traveling into Marshfield to work at any of a number of businesses and more than 4,000 visitors each weekday to the Marshfield Clinic/St. Joseph's Hospital medical complex.

The negative affects of wear and tear on vehicles and fuel consumption, and the continuing need to expand parking areas to accommodate both workers and visitors alike is a basis to consider a Park & Ride concept.

To implement a program such as this, designated parking areas need to be strategically established at key locations perhaps 20-30 miles from Marshfield in all directions, preferably along main traveled routes from the outlying region into the city. Employees can be encouraged to share the ride for those 20- 30 miles, to and from work each day, with as many as three others in a car, or as many as 10-12 in a van. As a reward, those using the Park & Ride program might be provided with a convenient parking area.

Employer incentives would be an added boost to the development of the Park & Ride concept. Employers may accommodate the program by adjusting working hours to allow those traveling together to come and go at the same time. A very enterprising employer might consider providing the mode of transportation (van) from the outlying areas, or a financial incentive for those employees willing to share rides each day.

Shuttle Bus. Marshfield presently participates in the state/federal transportation program known as Share Ride, which subsidizes the private operation of a local taxi service. The basis for Share Ride is to pick any number of patrons at any one time, and share the ride with others to their individual destinations. This concept saves energy and wear and tear on equipment, and allows for more affordable rates.

There has been an interest expressed in the community to operate a shuttle bus service between the medical complex, the historic downtown and the north retail area. In the interest of the sustainable philosophy, consideration should be given to the operation of a community shuttle, operating on a continual basis, between established destinations.

With possible city participation in a state/federal funding program similar to the taxi service, as well as a partnership with local business as sponsors, such an operation might be a reality with limited or no tax implications.

Integrated Bike Trail System. This Committee recommends the City of Marshfield continue the construction of an integrated bike trail system that connects industrial, commercial and residential sections of Marshfield. The system should advance safe and efficient transportation for cyclists, pedestrians and other non-motorized transportation.

Sustainable Marshfield Water Quality/Quantity Subcommittee

Mission Statement:

The City of Marshfield will provide clean water to its residents and businesses and assure sufficient quantities of water will be available for future generations. The City of Marshfield will assure that surrounding groundwater and surface waters are not impaired because of actions within the City of Marshfield.

Introduction:

Water quality and quantity was chosen as one of the three high priority topics by the SMC. There are several reasons water quality and quantity are high priorities. Water quality is important to residents' health and the long-term health of the environment. The city has major investments in providing high quality and adequate quantities of water to its residents and businesses. The city also has a major investment in treating waste water. Maintaining adequate quantities of water for future growth is viewed as a high priority and challenge by city officials.

Plan of Action:

There are a variety of steps the city can consider to maintain high quality of water and assure adequate quantities of water for the future.

Water conservation. Marshfield Utilities should continue to promote the use of water saving devices, such as low-flow shower heads and low flow toilets, and offer incentives for their use. Industry should look for methods to reduce the use of water. Use of water

for lawns and gardens can be reduced through the use of rain gardens and rain barrels and projects to encourage their use.

Phosphorous-free fertilizer. Excess phosphorous leads to excessive plant and algae growth in area surface waters. Most area soils do not need phosphorous added for good plant growth. The city can educate and encourage citizens to use phosphorous-free fertilizer. The city can also ban the sale of phosphorous fertilizer as many other Wisconsin communities and Minnesota have done.

Pharmaceuticals in waste water. An increasing amount of pharmaceuticals (medicines) are found in waste water due to normal bodily excretion or flushing unused pharmaceuticals down the toilet. The city can educate and encourage residents and medical businesses to properly dispose of pharmaceuticals. Examples of business disposal include dentists disposing of mercury and care facilities returning unused medicine when possible. The city has been a leader in providing for proper disposal of pharmaceuticals through the *Take-Back Program* and should continue to do so.

Wellhead and groundwater protection. The city should continue to plan for and purchase areas for municipal wells and also provide for protection of water quality surrounding the wells. The city should provide for the proper abandonment of wells to prevent further contamination of groundwater.

Stormwater control. The city shall meet or exceed federal guidelines regarding storm water control in order to protect the quality of area surface waters and enhance groundwater recharge.

Mill Creek. The city is the headwaters for Mill Creek. The city should assure that surface waters flowing into Mill Creek from within its borders meet state and federal guidelines and participate with surrounding communities in improving the water quality in Mill Creek.

Utilities improvements. Lead lines: All lead water lines should be replaced on a cost effective basis whenever possible. Lead lines can cause unhealthy water. Continue replacing lead water lines whenever practical.

Wastewater lines: Leaking wastewater lines allow groundwater to enter the lines, causing increased sewage treatment costs. Wastewater lines should be replaced on a regular basis to assure effective and efficient treatment of wastewater.

Sustainable Marshfield Green Building Subcommittee

Mission Statement:

The City of Marshfield will encourage “Green Building” practices by example and through education and incentives.

Introduction:

Green Building by definition is a whole building integrated design and construction approach that optimizes the building site’s energy, water, and materials, and improves indoor environmental quality and occupant health.

Plan of Action:

The Green Building Subcommittee recommends that the city pursue the following activities:

Construction. The City of Marshfield will encourage the public and private sectors to build “Green”. The city should lead by example and construct the next city building project using “Green Building” practices. Consideration should be given to applying the national Green Building Rating System, “LEED”, Leadership in Energy and Environmental Design, a third-party certification program. “Green Globes” or other green building initiatives can also be considered.

Reuse. The City of Marshfield will recommend to the public and private sectors to reuse existing facilities before building a new building.

Education. The City of Marshfield will encourage and coordinate public “Green Building” education.

Incentives. The City of Marshfield will provide incentive programs to encourage both businesses and homeowners to build green. The following suggestions are just a tip of the iceberg:

- Recognition of “Green Buildings” or “Green Remodelings”. Owners, designers and contractors to receive recognition by the city.
- Coordination and filing of forms for Federal, State and utility incentive programs on behalf of business owners, developers or home owners.
- Development of site and/or building plan review process that provides credits for “Green Buildings” design.

RECOMMENDATIONS

The SMC recommends the establishment of a Sustainable Marshfield Program with the following details summarized as follows:

- I.** Establish the Sustainable Marshfield Committee as a standing committee, in order to advise the Mayor and Common Council on implementation of sustainable practices, including the following recommendations:
 - A.** Adopt the Sustainability Guidelines of the American Planning Association, in keeping with The Natural Step.
 - B.** Commit to sustainability by interdepartmental representation and cooperation. Reorganize across existing departments to integrate sustainable development into all city functions and decisions.
 - C.** Develop financial resources for full-scale implementation of sustainable development.
 - Pursue additional funding options for support of city sustainability programs
 - D.** Adopt a green framework for all Marshfield operations:
 - Build Green – green building;
 - Save Green – energy efficiency;
 - Power Green – renewable energy;
 - Buy Green – city purchasing;
 - Drive Green – alternative fuel for fleet, shuttle bus, etc.; and
 - Manage Green – recycling, environmental performance, environmental development, brownfields redevelopment, green meetings and events, green hotline and webpage.
 - E.** Develop policies and programs that promote sustainable development planning: e.g., efficient use of water across the city and throughout the cycle of use (freshwater demand, sewer and greywater, and stormwater); transportation planning; urban heat island effects; low impact development; smart growth.
 - F.** Develop annual reporting requirements for the city and for each department to measure progress in implementing the Sustainable Marshfield Program.
 - Develop annual state of the environment report.