SUSTAINABILITY GUIDE PLAN 2010

ACKNOWLEDGEMENTS

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GRAFTON
QUALITY LIFE, NATURALLY.

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INTRODUCTION

The Village of Grafton established the Sustainable Grafton Ad Hoc Committee in 2008 in order to advise the Village Board on implementation of sustainable practices, including the following recommendations:

A. Commit to sustainability by interdepartmental representation and cooperation. Reorganize across existing departments to integrate sustainable development into all Village functions and decisions.

B. Investigate and recommend financial resources for full-scale implementation of sustainable development. Pursue additional funding options for support of Village sustainability programs.

C. Recommend a green framework for all Grafton operations:
   - Build Green – green building, environmental development, brownfield redevelopment;
   - Save Green – energy efficiency;
   - Power Green – renewable energy;
   - Buy Green – Village purchasing;
   - Drive Green – alternative fuel for fleet, etc.; and
   - Promote Green – recycling, environmental performance, eco-tourism.

D. Investigate and recommend policies and programs that promote sustainable development planning: e.g., transportation planning; urban heat island effects; low impact development; smart growth.

E. Develop a comprehensive educational effort to inform residents and businesses of Sustainable Grafton initiatives: e.g. green meetings and events, green hotline, and webpage.

F. Develop annual reporting requirements for the Village and for each department to measure progress in implementing the Sustainable Grafton Program.

During 2008-09, the committee and Village Staff worked to create a more detailed sustainability plan based on 13 Best Practice Areas (BPA's). The guide plan relies heavily on the work of Burnsville, MN using the structure and some specific language and ideas found in this plan. The Village of Grafton sustainability guide plan provides practical ideas, activities and strategies for the Village organization and the community that would make Grafton more sustainable in future years. The plan aligns with the Village's charge to the committee.

The thirteen BPA's include:

- Development and Redevelopment
- Operations and Maintenance
- Energy
- Greenhouse Gas Emissions
- Water Use and Conservation
- Stormwater Management
- Waste Minimization and Recycling
- Reduction of Use and Safe Disposal of Hazardous Materials
- Integrated Pest Management
- Invasive Species Management
- Outdoor Lighting/Light Pollution
- Transportation
- Education

Each BPA includes a brief narrative on the subject area and is followed by a number of strategies. Several activities are suggested to support the strategy and include a brief description, responsible department, timeframe, possible costs and potential benefits. Activities listed as "initial plan" are already underway because of Village Board authorization. The definition of short term is those activities that may take place in five years or less; long term are those that will take more than five years.

Implementation Strategy:
The width and depth of any comprehensive sustainability plan requires careful implementation planning and execution. Success depends on funding, certainly, but even more important is the commitment of staff, elected officials, and the community to make it a priority. While the Village of Grafton is at the forefront on this growing national commitment, it is critically important not to oversell the benefits of sustainable practices, or to undersell their costs, as this will undermine the commitment by all invested to-date.

The following approaches to implementing the Sustainability Guide Plan are recommended to enhance success:

1. Establish an internal organizational guide plan team
Since sustainability practices cross through every Village department, it's vital that a motivated member of each affected department be part of an ongoing team. The team's goal will be to follow through on sustainability commitments, coordinate with other departments and outside partners, and make recommendations on implementing sustainable practices in their areas.

2. Establish a sensible timeline for implementation
The Village has already approved initial implementation of the 'low hanging fruit' of sustainable practices. These low/no cost activities are either underway now or will be in 2010. Otherwise a flexible implementation schedule is recommended for the

balance of the plan. Each action is divided into either a long or short term strategy. A short term strategy is defined as being implemented in less than five years; a long term strategy in more than five years.

3. A mix of funding sources must be obtained to implement the guide plan

Funding is a key challenge for most sustainability initiatives. Occasionally, funding can be an easy choice. For example, making an upfront investment in an energy saving lighting retrofit with a guaranteed payback in two years is a simple decision. However, most decisions are more complicated and many are more expensive. The committee recommends the following funding priorities be applied to guide plan implementation:

A. Grants must be vigorously pursued and considered the first funding priority, but they should not lead to short-term support without long-term financial viability. A grant that disappears after a short time and then threatens an initiative's on-going support due to lost funding is not desirable. Existing funding sources committed to sustainable practices and congruent with Village priorities should be the second priority. Activities with a reliable and persuasive payback period for the initial investment.
B. Activities where significant cost sharing with private or public sector partners would exist and council approval was obtained.
C. Funding obtained solely through the Village annual budget process.

4. A staff person should be identified as the Sustainability Coordinator

A staff person needs to be the focus for Village sustainability practices. The person would coordinate the guide plan team, apply for related grants, seek out private and public sector partners, and prepare sustainability proposals for consideration.

A small amount of funding should be included in the2011 budget for part time sustainability coordination work to manage the Village's sustainability effort. It will be important, through a combination of grants and/or city support, to fund an expanded sustainability coordinator position in the future if the initiatives outlined in this plan continue to be Village priorities as determined by Village Board.

DEVELOPMENT AND REDEVELOPMENT

The Village of Grafton supports using the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED®)[1] guidelines for the development of new Village facilities and at the time of renovation.

[1] LEED® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. The guidelines strive to improve the environmental and economic performance of commercial buildings using established and/or advanced industry principles, practices, materials and standards.

Strategy 1—Build Green

New Village facilities should be designed and constructed to a level of LEED® Silver, or its equivalent, striving for Gold level, or its equivalent. The Village strongly recommends and encourages all commercial, retail, and industrial development within the Village to follow the LEED® guidelines.

LEED® guidelines encompass the construction of new buildings, commercial interiors, building core and shell, schools and new homes, and neighborhood development.

LEED® guidelines in pilot (3/10) include retail, and healthcare construction. At such time as these guidelines are approved by the USGBC, the Village of Grafton will support and strongly encourage their use.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Build Green					
A	Build new DPW facility to LEED Silver, or equivalent	DPW	2009	I =	Reduced operating cost; reduced environmental impact.
B	Establish a timeline for training appropriate Village staff in LEED.	Admin.	2010	I = $500/employee A = $500/employee	Trained employees who are up-to-date on best practices.
C	Create non-monetary incentives to encourage green building	Planning	2010	Minimal	Reward best practices and reduce building impacts.
D	Staff to review development and redevelopment landscape plans for consistency with sustainability guide plan in all relevant areas of plan.	Planning	Ongoing	I=$0 A=$0	"Greener" developments in Village.

Possible Partners & Funding Sources

- USGBC (www.usgbc.org) for staff training, membership resources, LEED reference guides for training.
- Wisconsin Green Building Alliance for staff training resources (www.wgba.org)

Performance Indicators

- New DPW facility (2010) achieves LEED Silver, or equivalent.
- Relevant staff trained on LEED by end of 2010.
- Green building incentives identified and promoted to developers and homeowners.
- Increase in green buildings beyond Village-owned facilities.

OPERATIONS AND MAINTENANCE

The Village of Grafton supports using the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED®)[2] guidelines for the renovation and operation of existing Village facilities.

[2] LEED® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. The guidelines strive to improve the environmental and economic performance of commercial buildings using established and/or advanced industry principles, practices, materials and standards.

Strategy 1—Save Green

Existing Village facilities should be renovated and operated to a level of LEED® Silver, or its equivalent, striving for Gold level, or its equivalent. The Village strongly recommends and encourages all commercial, retail, and industrial development within the Village to follow the LEED® guidelines for existing buildings.

Strategy 2—Partner with Residents and Businesses

With greater media attention to things "green," more and more people are becoming interested in how they can do their part, and the Village can utilize this energy to partner with businesses and community groups to inform and generate greater participation. Through brochures, website media and organized activities, the Village and local businesses can promote greater awareness and participation of the importance of sustainable practices in the built environment—commercial and residential.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
	Strategy 1 – Save Green				
A	Renovate new Administration building to LEED Silver, or equivalent.	Admin.	2009		Reduced operating cost; reduced environmental impact.
B	Establish Village policy to purchase energy efficient fixtures.	Admin./ Finance	2010-15	Per building, minimal. Energy efficient fixtures do not need to cost more.	Reduce energy expenditures.
C	Establish Village policy and procedure to review all Village renovation procedures for sustainability opportunities.	Admin./ Finance	2010-15	I = part of renovation capital budgets with no additional up-front costs.	Reduce buildings impact and maintenance costs

D	Establish roof replacement and energy efficient improvement timeline for Village facilities. Consider installing photovoltaic roofing or "green roof" when appropriate.	Admin.	2010-15	I = needs more research at time of implementation.	Reduce energy expenditures.
E	Raise awareness by diligently communicating and promoting Village actions in print media, website, brochures, newsletters, speaking engagements.	Admin.	ongoing	Minimal	Encourages others to follow suit.
F	Document specific actions taken and their costs and outcomes (savings and benefits). Promote these to residents and businesses.	Admin.	ongoing		Makes tracking success easier; reduces confusion and overlap.
Strategy 2 – Partner Residents and Businesses					
A	Develop "Top-10 Things Residents Can Do to Move Toward a More Sustainable Home" and post on website, newsletter, flier/stuffers.	Admin.	2010	Minimal	Reduce environmental impact of residents' buildings.
B	Promote State and Utility Company incentives for efficiency to local businesses and residents.	Admin.	ongoing	Minimal	Reduce environmental impact of buildings.

Possible Partners & Funding Sources

- WE Energies for energy efficient improvement programs and incentives.
- Focus on Energy (state program) for energy efficient program opportunities and incentives.
- Wisconsin Green Building Alliance (www.wgba.org)
- US Green Building Council (www.usgbc.org)
- Local retailers.
- Local restaurants.

Performance Indicators

- New Administration renovation (2009) achieves LEED Silver, or equivalent.
- New Village policy and practice established for all renovation procedures for sustainability opportunities.
- Roof replacement and energy efficient improvement timelines established for relevant facilities.
- Website lists Top 10 things residents can do to move toward a more sustainable home.

ENERGY

The Village of Grafton will implement cost-effective policies and programs that enhance opportunities for individuals, businesses and public organizations to conserve energy and convert to renewable resources.

Strategy 1—Save Green

The Village will set goals for the use of non-renewable energy that are consistent with State and Federal regulations. Voluntary standards such as those listed in: 1) LEED Reference Guide for Green Building Operation and Maintenance, 2009 Edition, 2) Green Building Design and Construction Reference Guide, 2009 Edition and 3) Green Neighborhood Development Reference Guide, 2009 are encouraged to be followed, but not mandated.

Strategy 2—Power Green

The Village is encouraged to support private sector decisions to use renewable energy, encourage use of local renewable energy resources where economical, and consider use of future options for renewable energy so that they may be developed when they become cost effective. The Village of Grafton may pursue options such as We-Energies 'Energy for Tomorrow' program.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Save Green					
A	Establish a Village policy for Village owned and operated facilities and equipment for reduction of energy usage in conjunction with a corresponding reduction in cost based on implementing projects with a payback of 4 years or less with financial incentives included.	Admin	June 2010	I = Sunk cost; expected duty of Village officials. Printing costs. A = Update/revise annually	Reduced operating costs for Village. Carbon footprint reduction.
B	Review financial incentive opportunities available Focus on Energy http://www.focusonenergy.com/ and the American Recovery and Reinvestment Act of 2009 http://www.recovery.gov/Pages/home.aspx	Admin	2010	I = Sunk cost: expected duty of Village officials A = Sunk cost as expected duty of Village officials	Potential financial offset for energy related projects

C	Before the end of 2010 the Village should have a plan to develop and implement, as per Village administration and operations departments, the five critical areas for energy management improvement the identified in the One-2-Five Energy assessment: (See Appendix A) 1) Understanding of Performance and Opportunities 2) Targets and Key Performance Indicators 3) Accountabilities 4) Awareness and Training 5) Innovation and New Technology	Admin	2010	I = Costs to be determined by Village administration with consultation with Focus on Energy A = Costs should be the result of estimates determined by activities in 'I" above.	Potential incentives available from Focus on Energy Schools and Government section.
Strategy 2 – Power Green					
A	Phase 1 boiler replacement in 2010 for existing heating plant boiler.	Wastewater Utility	2010	I: $228,455	Reduces natural gas use at wastewater utility.
B	Phase 2 boiler replacement of the sludge boiler with a combined boiler/heat exchanger that operates on natural gas and WWTP methane gas produced by a digester. This boiler project will mostly use digester methane gas for process sludge heating and also will partially meet building heat requirements with use of digester gas thereby saving an estimated $11,589 per year in natural gas costs. The project cost has been estimated at $391,036 and should significantly reduce the use and cost of natural cost but again, will not eliminate it.	Wastewater Utility	2013	I: $391,036	Significant reduction in natural gas usage wastewater utility.

Possible Partners & Funding Sources

- Focus on Energy (www.focusonenrgy.com)
- Federal government(www.doe.gov)
- We Energies(www.we-energies.com)
- State of Wisconsin Office of Energy Independence (www.energyindependence.wi.gov)

Performance Indicators

- Projects meet or exceed energy (kW, kWh, therm) reduction goals
- Projects meet or exceed minimum cost savings and payback

GREENHOUSE GAS EMISSIONS

The Village of Grafton will strive to inventory and set reduction targets for greenhouse gas emissions for Village facilities.

Strategy 1—Save Green

The initial goal is to conform to State and Federal regulations.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
	Strategy 1 – Save Green				
A	Calculate and tabulate GHG emissions with annual reporting to gather baseline data.	Admin.	2010	I = Existing Staff	Understanding of Village status and progress.
B	Institute a policy and practice of reporting fuel consumption from all Village operations sources as well as expenditures to accounts payable.	Admin.	2010	I = Existing Staff	Understanding of Village status and progress.
C	Develop GHG Emission reduction strategy based on collected baseline data and establish a reduction goal.	Admin.	2010	I = Existing Staff	Strategy based on local data and cost savings.

Possible Partners & Funding Sources

- WE Energies
- State of Wisconsin Office of Energy Independence (www.energyindependence.wi.gov)

Performance Indicators

- GHG calculation procedure established 2010
- Fuel consumption tracking established 2010.
- GHG reduction strategy developed 2010.

WATER USE AND CONSERVATION

The Village of Grafton will promote the conservation of water resources through water quality protection, public education, monitoring and policies that promote appropriate water usage.

Strategy 1—Build Green

Low-water use landscaping compatible with vegetation types native to the Milwaukee River ecosystem area and the use of natural rainwater for irrigation, consistent with state water law, will be encouraged. New development and redevelopment designed to conserve water will be encouraged.

Strategy 2—Promote Green

Raise awareness in the Village of ways to increase water quality by participating in public events, strategic signage, and specific high visibility activities that encourage water conservation.

Strategy 3—Save Green

The Village will pursue a water conservation program designed to minimize water waste and reduce water use during peak demand periods. Recycling techniques, water pricing, improved plumbing methods and fixtures, and efficient site design will also be encouraged.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Build Green					
A	Staff to review development and redevelopment landscape plans for consistency with sustainability guide plan on water conservation.	Planning & Development	Ongoing	I = $0 A = $0	Reduced sprinkling
B	Continue promotion & sale of rain barrels to residential customers; offer reduced cost/free delivery of rain barrels purchased in Spring and prior to June 15.	Water Utility	Annual	I = no additional cost A = $100	Reduced sprinkling
Strategy 2 – Promote Green					
A	Promote conservation watering of Village boulevards to occur only between 6:00 – 10:00 am.	Parks and Recreation	June 15 – Sept. 15	I = $0 A = “no additional cost”	Reduced sprinkling

B	Place water conservation placards at sinks and spigots on Village-owned properties.	DPW & Water Utility	By 6/15/10	I = A = $0	Reduce water consumption
C	Promote “Grafton Water On Tap” at Summer ‘Celebrate Grafton Events’ (Giro & Holidaze) to reduce use of plastic bottles and waste loading to Wisconsin landfills.	Water Utility	June & July	I = $500 A = $0	Public Education
D	In conjunction with the new Wisconsin law, the Village will promote the use of phosphorous-free fertilizers on lawns and maintained outlots (except for first year lawns).	Water Utility	Annual	I = $0 A = $0	Public Education
Strategy 3 – Save Green					
A	As part of the Village’s 2010 water rate increase application, rate blocks were designed to transition closer to a conservation-tiered pricing schedule in order to promote water use reduction.	Water Utility	2009	I = $0 (no additional cost to scheduled rate study) M = $0	Decrease in operating costs and possible delay in construction of a new well.
B	The Village will consider a future change in policy to cap the sewer credit provided to all residential customers relative to summer sprinkling.	Water Utility	2012	I = $0 A = $0	Reduced sprinkling
C	The Utility will continue to budget annually for leak detection activity and repairs as required to reduce ‘unaccounted for’ water below 15%.	Water Utility	Annual	I = $0 A = $25,000	Decreased operating expense and delay in need for future water supply

D	The Utility will continue to impose voluntary sprinkling restrictions on all water customers effective from June 15 to September 15 each year.	Water Utility	Annual	I = $0 A = $0	Reduced sprinkling & reduced water demand

Possible Partners & Funding Sources

- Grafton Chamber of Commerce
- Grafton Public Works Department
- PSC
- Keep Greater Milwaukee Beautiful (rainbarrels): www.kgmb.org ; Every Drop Counts: www.everydrop.org
- MMSD (rainbarrels): http://v3.mmsd.com/RainBarrels.aspx
- Wisconsin Association of Lakes (phosphorous education): http://www.wisconsinlakes.org
- UW Soil Testing Labs (phosphorous): www.ulab.soils.wisc.edu

Performance Indicators

- Strategy 1 – Sell 30 rain barrels per year over next 5 year period, 2010 – 2014.
- Strategy 2 – Reduce monthly 'max day' pumpage per annual average by 1.0% per year over the next 5 years.
- Strategy 3 – If sewer credit cap policy is changed, an increase in potential sewer revenues by nearly $100,000 per year in 2013 could be realized with transitioned reduction and elimination of the sewer credit over a 3 year period.
- Strategy 3 – Reduce 'unaccounted for' water from approximate 25% to 15% by January 1, 2015.

STORMWATER MANAGEMENT

The Village of Grafton will actively support efforts that protect our waters and sensitive environmental receptors from sediment and pollutants in stormwater runoff. While stormwater discharges from industrial and construction sites are regulated, the Village will promote and recognize efforts that reach beyond simply meeting local, State, and Federal requirements.

Strategy 1—Build Green

The development or redevelopment of industrial and commercial sites in the Village should implement Best Management Practices that “slow and control the flow” of stormwater. The Village will encourage architecture and landscape design that include innovative ways to handle stormwater, such as green roofs, rain barrels, rain gardens, cisterns, pervious pavements, buffers, on-site infiltration areas, naturalized ponds, and other sustainable concepts.

Strategy 2—Promote Green

The Village will pursue the promotion of public awareness that water is a vital natural resource. The Village will set the example to “disconnect” pipe flow and “reconnect” with systems that mimic the natural water cycle, protect the resource, and recharge the local aquifer by using, for example, innovative methods of stormwater management listed above.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Build Green					
A	As part of Highland Ridge redevelopment site, developer will be required to construct on-site stormwater ponds to handle 40% of total suspended solids removal (TSS) in storm water.	DPW	2009	I = $0 A = $0	This project will assist the Village in meeting DNR stormwater permit goals.
B	Provide outreach opportunities for Village residents and business owners BMPs that slow and control the flow of storm water, demonstrate example practices that encourage architecture /landscape ways to handle storm water, such as green roofs, rain barrels, rain gardens, cisterns, pervious pavements, buffers, on-site infiltration areas, naturalized ponds, etc.	DPW	2010-2014	I=$5,000 A=$5,000	Information outreach; Cleaner surface water

Strategy 2 – Promote Green					
A	Identify and/or Develop BMP demonstration site(s) to show storm water treatment train, bioretention, infiltration concepts using natural buffers, swales, native vegetation	DPW	2010-2014	I=$25,000 to $500,000 A=$1,000 to $10,000	Reduce environmental impact, Improve Infiltration of Storm water
B	Develop "Top-10 Things Business and Home Owners Can Do to have a More Sustainable Lawn and Garden" and post on website, newsletter, flier/stuffers.	DPW	2010-2014	I=$100 A=$3,000	Reduce environmental impact, Improve Infiltration of Storm water
C	Document specific actions taken and their costs and outcomes (savings and benefits). Promote these to residents and businesses.	DPW	2010-2014	I=$5,000 A=$3,000	Makes tracking success easier; reduces confusion and overlap.
D	Reduce Chloride Runoff to Waterways (utilize pre-wetted salt, salt brim, beet juice, etc.)	DPW	1010-2014	I=$50,000 A=$10,000	Reduces salt on roads which pollute our surface waters
E	Identify ways that the Village will be in compliance with the statewide Phosphorus ban, and post on website, newsletter,	DPW	2010-2014	I=$500 A=500	Reduces phosphorus runoff, which reduces algal blooms.
F	Reduce Pet Waste runoff into waterways and storm drains; publicize its importance and post on website, newsletter,	DPW	2010-2014	I=$500 A=500	Reduces fecal coliform

G	Expand water quality monitoring efforts on the Milwaukee River and other waterways in the Village, by volunteer organization.	DNR / Riverkeeper	2010 2014	I=by others A= by others	Allows the ability to track water quality conditions.
H	Maintain Illicit, Discharge, Detection & Elimination (IDDE) monitoring program	DPW	2010-2014	I=$7,500 A=$7,500	Checks outfalls for IDDE
I	Reduce Infiltration and Inflow (I/I) in the sanitary sewer, which will reduce by pass pumping	WWTP	2010-2014	Expensive $300,000 annually	Increase the life of the WWTP
J	Draft and do annual repeat of article in Spring issue of Village newsletter on merits of using phosphorus-free fertilizer; place information re: phosphorus-free fertilizer on Village website under FAQ's	DPW	March 2010	I = $0 A = $0	Public Education
K	Provide limited number of coupons or raffle off a limited number bags of phosphorus-free fertilizer at a Village or Chamber event held in early Spring	DPW	May 2010	I = $100 A = $0	Public Education

Possible Partners & Funding Sources

- WDNR – Up to $100,000 (or 25 percent) of the cost for the engineering and construction of (estimated $400,000) Green Bay Road/Falls Road Stormwater Pond
- WDNR stormwater grants: http://dnr.wi.gov/runoff/grants
- Wisconsin Coastal Management Program
- WDNR River Protection Grant
- Key Village Industries, Retailers, etc.
- Sweetwater Trust, Watershed Action Teams, Riverkeeper
- WDNR Runoff Management (raingardens): http://dnr.wi.gov/runoff/rg/links.htm
- UW Extension: http://clean-water.uwex.edu/pubs/storm.htm ; http://clean-water.uwex.edu/pubs/pdf/storm.carcare.pdf
- USEPA: http://www.epa.gov/owow/funding/governments.html

Performance Indicators

- Increasing the Total Suspended Solids removed from the storm water as determined by the computer model SLAMM
- Increase the amount of material taken to the landfill from street sweeping and catch basin cleaning
- Number of rain barrels sold in the Village.

WASTE MINIMIZATION AND RECYCLING

The Village of Grafton will strive to increase recycling rates, reduce waste, and promote reuse in Village operations and in the community.

Strategy 1—Save Green

It is the goal of the Village to reduce solid waste produced in the Village by achieving a 50% waste diversion level. Higher goals may be set by Village Board from time to time as it is deemed feasible and desirable. Only as a last resort should a waste be buried or burned.

Strategy 2—Promote Green

The Village will develop recycling programs, policies and infrastructure that encourage and support the recycling and reuse of recyclable materials.

Strategy 3—Buy Green

The Village will create and maintain a relevant Environmental Purchasing Policy.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Save Green					
A	Standardize Recycling Containers and signage.	DPW	2010	I = Existing Staff; Incorporate into replacement schedule	Increased recycling, reduced waste
B	Conduct Employee orientation/ongoing recycling training.	DPW	2010	I = Existing Staff A = Existing Staff	Increased recycling, reduced waste
Strategy 2 – Promote Green					
A	Continue with clear stream recycling in the parks.	DPW	2010	I = Existing Staff	Increased recycling, reduced waste, increase public awareness.

Strategy 3 – Buy Green					
A	Create and maintain an Environmental Purchasing Policy that promotes markets for recycled commodities, promotes the preferential purchase of recycled products for government use, and encourages the use of products and services that are durable, repairable, reusable, recyclable and economically viable.	Admin.	2010	I = Existing Staff	Reduce impacts.
B	In accordance with the Environmental Purchasing Policy, develop a list of preferred local vendors for Village departments to choose from.	Admin.	2010	I = Existing Staff	Support local business, reduce impacts.
C	Annually train Grafton Village staff responsible for purchasing in current best practices in environmentally preferred purchasing.	Admin.	2010	I = Existing Staff	Reduced Impact.

Possible Partners & Funding Sources

- BestBuy e-cycling
- Volunteer Center of Ozaukee County electronics recycling
- WasteCap Wisconsin: http://www.wastecapwi.org/resources/electronics-recycling/fluorescent-lamp-and-bulb-recycling/
- Building Materials Recycling Association: www.bmra.org

Performance Indicators

- Environmental Purchasing Policy created 2010.
- Annual staff training conducted on environmental purchasing policy, including best practices.
- Annual staff training conducted on recycling practices.
- Purchasing internal audit indicates significant shift toward list of environmentally preferred vendors.

REDUCTION OF USE AND SAFE DISPOSAL OF HAZARDOUS MATERIALS

The Village will work to reduce use and ensure safe disposal of hazardous materials in Village operations, residences and businesses.

Strategy 1—Promote Green

Information will be provided for businesses and households about non-toxic alternatives, pollution prevention and responsible use and disposal of hazardous materials.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Promote Green					
A	Create a list of common household toxic products and their alternatives; post on website	DPW	2010-11	I = Existing Staff	Information awareness; reduced use of toxic products.

B	Promote use of a household hazardous waste collection facility to all residents.	DPW	2010	I = Existing Staff	Information awareness; safe disposal of hazardous and toxic materials.
C	Investigate feasibility of providing Grafton hazardous waste “clean sweep” day.	DPW	2010	I = Existing Staff	Safe disposal of hazardous and toxic materials.

Possible Partners & Funding Sources

- Ozaukee County
- WDNR
- State of Wisconsin and Ozaukee County: http://www.datcp.state.wi.us/arm/agriculture/pest-fert/pesticides/clean-sweep/index.jsp

Performance Indicators

- Hazardous Waste clean sweep held in 2010 or 2011.
- Information posted on website concerning alternatives to household toxic and hazardous materials.

INTEGRATED PEST MANAGEMENT

The Village will encourage efforts, both public and private, to reduce the use of pesticides, herbicides, insecticides, fungicides, avicides and rodenticides.

Strategy 1—Buy and Promote Green

In its own practices, the Village commits to the use of integrated pest management practices, which emphasizes the selection of the most environmentally-sound approach to pest management with the overall goal of reducing and, where possible, eliminating the dependence on chemical pest-control strategies. When public health risks are identified, the Village will balance the impacts and risks to the residents and the environment when choosing control measures.

Implementation Activities

Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Buy and Promote Green				

A	Inventory and evaluate Village pesticides to ensure that they are being stored and handled properly	DPW	2010	I = Existing Staff	
B	Where feasible, reduce herbicide applications on Village properties. In spite of GHG emissions, mowing or selective trimming should be preferred.	DPW	2010	I = Existing Staff	Reduced exposure to toxics.
C	Purchase alternatives to conventional herbicides where economically feasible.	DPW			
D	Report new pesticide/herbicide practices on Village properties to residents via. newsletter and website	DPW	2010	I = Existing Staff	Awareness increases.

Possible Partners & Funding Sources

- WDNR

Performance Indicators

- Significant reduction in application of herbicides and pesticides on Village properties.
- Few resident complaints about “weeds” on Village properties.

INVASIVE SPECIES MANAGEMENT

The Village will encourage efforts, both public and private, to reduce the presence of invasive species.

Strategy 1—Promote Green

The Village will implement landscaping practices using native plant species and turf minimization, and will encourage residences and businesses to do the same. Educational materials will be available at appropriate municipal locations. These materials will provide guidelines to landowners and business owners on invasive species identification and management options.

Implementation Activities

Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Promote Green				

A	Promote awareness of invasive species and an understanding of how invasions happen.	Parks	2010-2015	I = Existing Staff	Education/ Outreach
B	Train staff, contractors, and citizen-volunteers about invasive species identification and eradication. Also train to identify new populations early; respond as fast as possible to keep future costs down by preventing the seed source from establishing and spreading.	Parks	2010-2015	Invite local consultants community service	Improved management
C	Maintain a resource file of applicable control measures that will provide an overview about how to stop or slow the spread of an invasive species.	Parks	2010-2015	I = Existing Staff	Fewer infestations; Improved management
D	Annually review target areas, such as along park walkways or trails, right of ways, waterways, high quality areas to be protected from invasive infestation, etc.	Parks DPW	2010-2015		Fewer infestations; Improved management
E	Plan activities to limit the potential for the introduction and spread of invasive species. Invasive species will colonize sites that have been disturbed.	Parks Planning	2010-2015	I = Existing Staff	Fewer infestations: Improved management
F	Help establish a Friends Groups and/or a group of volunteers to monitor and provide outreach materials to teach homeowners and business owners how to manage invasive plants.	Parks	2010-2015		Education/ Outreach; Improved management
G	Avoid traveling through or working in small isolated populations of invasive plants.	Parks DPW	2010-2015	I = Existing Staff	Fewer infestations

H	Where appropriate require contractors and/or staff to clean equipment, shoes, and clothing upon leaving infested areas.	Parks DPW	2010-2015	I = Existing Staff	Fewer infestations
I	Disallow or discourage the planting of known invasive species (such as vetch) on public projects.	Planning	2010-2015	I = Existing Staff	Fewer infestations
J	Provide residents a list of local landscape suppliers that sell native plants (website, newsletters, flyers).	DPW Parks	2010-2015	I = Existing Staff	Promote local business; Education/ Outreach
Strategy 2 – Buy Green					
A	Buy native plant species for Village projects as much as possible - These plants are less susceptible to pest infestation and will naturally assist with infiltration of stormwater.	DPW	2010-2015	I = Existing Staff	Promote local business; Fewer infestations
Strategy 3 – Build Green					
A	For new or redeveloped projects, require landscape and open space management measures that target invasive species control.	Planning DPW Parks	2010-2015	I = Existing Staff	Improved management; Fewer infestations
B	Require at least 75% native perennial landscaping and tree use around buildings to help prevent the spread of exotic species.	Planning DPW Parks	2010-2015	I = Existing Staff	Improved Management; Fewer infestations

Possible Partners & Funding Sources

- Local Nurseries, Native Landscapers, Suppliers and Consultants
- Invasive Plant Association of Wisconsin (www.ipaw.org.)
- Besadny Conservation Grant Program
- Citizen Based Monitoring Partnership Program
- Urban Forestry Assistance Grants
- Wisconsin Council on Forestry
- Master Gardeners

Resources:

- Wisconsin Native Plant Sources: http://clean-water.uwex.edu/pubs/pdf/home.lonative.pdf
- Webinar Series for Invasive Plant Management **http://www.weedcenter.org/outreach/project-webseminar.html**
- USDA/NRCS Plants Database **http://plants.usda.gov/wetinfo.html**
- Flora and National Wetland Plant List **https://rsgis.crrel.usace.army.mil/apex/f?p=703:1:841782142443384**
- Wisconsin State Herbarium **http://www.botany.wisc.edu/wisflora/**
- Robert R. Freckmann Herbarium – UW Stevens Point **http://wisplants.uwsp.edu/VascularPlants.html**
- Herbarium - Cofrin Center for Diversity , UW Green Bay **http://www.uwgb.edu/biodiversity/herbarium/**

See Appendix B for additional resources and funding opportunities

Performance Indicators

- Reduction in amount of herbicide used to control exotic plants.
- Increased awareness and knowledge of invasive plant identification and threat (Village, public).
- Increased use of native species rather than exotic varieties (developers, homeowners, Village).
- Training sessions for Staff.
- Outreach / education events for Public.
- Track the number of areas inspected and/or managed.

OUTDOOR LIGHTING/LIGHT POLLUTION

The Village will encourage the efficient use of outdoor lighting to reduce light pollution and conserve energy while providing for public safety. The Village will seek to provide a nighttime environment that includes the ability to view the stars against a dark, clear, moonless sky so that people can see the Milky Way Galaxy from residential and other designated viewing areas.

Strategy 1—Save Green

Measures such as using more energy efficient lights, ensuring that the level of outdoor lighting is appropriate to the application, minimizing glare, and using shielding techniques to direct light downward will be encouraged to improve nighttime visibility, security and safety in the Village and eliminate harsh glare and “light trespass” between properties.

Implementation Activities

Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Save Green				

A	Partially or fully shield all existing exterior lighting fixtures 50 watts or over so that they do not directly emit light to the night sky. Non-permanent lighting fixtures, ceremonial lighting and lighting of U.S., State of Wisconsin and Village of Grafton flags exempted. Note: 'Night Sky' is defined as that period from end of evening twilight to beginning of morning twilight for Grafton WI. Twilight times are determined by the U.S. Naval Observatory and posted at: http://aa.usno.navy.mil/data/docs/RS_OneDay.php	DPW	2012	I = Fixture shields. Price varies based on fixture type and size. $35-$50 per fixture. Cost based on purchase of one shield. A = Maintain shields to continue to meet strategy. Variable cost.	Carefully designed exterior lighting solutions can reduce infrastructure costs and energy use when compared with common-practice solutions. Energy and maintenance savings over the lifetime of the project can be achieved.

B	When installing exterior lighting fixtures of 50 watts or greater, where none had been previously been installed, they are to be partially or fully shielded so that they do not directly emit light to the night sky. Non-permanent lighting fixtures, ceremonial lighting and lighting of U.S., State of Wisconsin and Village of Grafton flags exempted. Note: 'Night Sky' is defined as that period from end of evening twilight to beginning of morning twilight for Grafton WI. Twilight times are determined by the U.S. Naval Observatory and posted at: http://aa.usno.navy.mil/data/docs/RS_OneDay.php	DPW	2010	I = First cost to purchase and install shielded permanent fixtures. A= Lighting fixture maintenance.	Carefully designed exterior lighting solutions can reduce infrastructure costs and energy use when compared with common-practice solutions. Energy and maintenance savings over the lifetime of the project can be achieved.

Possible Partners & Funding Sources

- Illuminating Engineering Society (www.ies.org)
- Wisconsin Green Building Alliance (www.wgba.com)
- Focus on Energy (www.focusonenergy.com)
- Federal Government(www.doe.gov)
- U.S. Green Building Council (www.usgbc.org)
- We Energies (www.we-energies.com)
- The Dark Sky Society (www.darkskysociety.org)

Performance Indicators

- New exterior lighting fixtures of 50 watts or greater are purchased with shields which do not directly emit light to the night sky.
- Exterior lighting fixture shields for 50 watt or greater lights are in place and do not directly emit light to the night sky.
- Shields remain in place and continue to function to meet performance standard.

TRANSPORTATION

The sustainable and energy efficient transportation practices being promoted by the Village of Grafton have been developed recognizing the importance of efficient access to jobs, services, retail centers, industrial areas, and large regional metropolitan areas. Sustainable and energy efficient transportation practices are applicable to Village departments and services as well as to the citizens of Grafton. By reducing average trip length and vehicle travel time, and by encouraging multimodal transportation usage, the economy of the region becomes more time and resource efficient. To achieve the objective of green transportation, the Village of Grafton will pursue the following strategies.

Strategy 1—Plan Green

Encourage development of the infrastructure for alternative fuels.

Strategy 2—Buy Green

Establish policies that prioritize fuel economy when purchasing new equipment. Encourage and evaluate the purchase of new vehicles that use alternative fuels such as hybrid, electric, and flex-fuel vehicles, and work to convert existing vehicles to use such fuels.

Strategy 3—Build Green

Require new development to facilitate safe and efficient avenues for pedestrian and bicycle traffic throughout the Village and to facilitate pedestrian and bicycle traffic to centers of mass transit.

Strategy 4—Promote Green

Promote the use of the regional mass transit system and develop a ride-share system on the Village web page.

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Plan Green					
A	Existing Roads with low traffic counts, pavement reduced to 30 feet when road is reconstructed.	DPW	Long term	This would likely result in reduced costs. Immediately – increase in road repair costs annually - reduced maintenance costs. I	Reduction in material costs, reduces runoff, reduced solar island effect.

B	New development with roads that will have a low traffic count would be reduced to 60 feet of ROW and a 30 foot pavement from face of curb to face of curb.	DPW	Long term	This would likely result in reduced costs. Immediately in reduced road construction costs and annually in reduced maintenance costs. I	Reduction in material costs, reduces runoff, reduced solar island effect.
C	Encourage development of the infrastructure for alternative fuels.	Village Board, Planning commission and CDA	Long term	I – there could be a cost to a TID if the Alternative Fuel Facility required developer incentives from the TID	An available source for alternative fuels for Village and residents' vehicles
Strategy 2 – Buy Green					
A	Establish policies that prioritize fuel economy when purchasing new equipment. Encourage and evaluate the purchase of new vehicles that use alternative fuels such as hybrid, electric, and flex-fuel vehicles. DPW requires vehicles that need certain horse power and may not be able to select these vehicles at this time.	All Departments	2010	I – requires policy. A – evaluation of ROI.	
Strategy 3 – Build Green					
A	Use LED technology where practical. Examples include traffic lights, street lighting, and parking lot lighting.	DPW	2010	I – requires policy. A – evaluation of ROI.	

B	Require new development to facilitate safe and efficient avenues for pedestrian and bicycle traffic throughout the Village and to facilitate pedestrian and bicycle traffic to centers of mass transit.	Planning Commission	2010	I – install bike racks at mass transit stops A – maintain bike racks	
Strategy 3 – Promote Green					
A	Promote the use of the regional mass transit system and develop a ride-share system on the Village web page.	Admin.	2011	I - update web page A – update web page	A community that is more informed
B	Inform the residents of the cost savings in energy, maintenance costs, and progress toward improvements. this could be a meter showing accumulated energy cost savings from using LEDs. There could be a post showing the location of new bicycle racks.	Staff	2010	I - Update web page A – Update web page	A community that is more informed

Possible Partners & Funding Sources

- Village Businesses –Adopt a bike rack.
- WE Energies
- Focus on Energy for installation and replacement of lighting
- Pedestrian Friendly Streets: www.completestreets.org

Performance Indicators

- Reduction of road surface area per mile of roadway
- Number of LED lighting fixtures
- Number of bike racks.
- Number of alternative fuel vehicles owned by the Village.
- Number of alternative fuel vehicles owned by residents
- Number of residents using bike racks at public transportation hubs

EDUCATION

The Village recognizes the need for and value of educational outreach efforts in promoting sustainable and energy efficient practices.

Strategy 1—Promote Green

Educational Resources are important in promoting sustainability in the Village of Grafton to meet the needs of residents, businesses and organizations within the Village, providing them with information on best practices, funding sources, and educational opportunities (conferences, workshops, and other resources).

Implementation Activities

	Activity/Description	Lead Department	Timeframe	Cost: I = Implementation A= Annual Cost	Potential Benefits
Strategy 1 – Promote Green					
A	Village website: a dedicated section to promote sustainability education and resources. Flyer/insert for the hard copies.	Admin. Volunt.	2010	Additional $16 for insert for 260 copies.	

B	Green Award: Categories—businesses, residences/citizens, organizations, events, schools (incl. faith based groups)	Admin.	2010	Not determined	
C	Green tour: highlight sustainability efforts in the Village	Admin. Volunt.	2010	Not determined	
D	Annual Sustainability Conference	Admin. Volunt. Comm. Group	2010	Not determined	

Strategy 2 – Buy Green

With an increasing number of "green products" in the marketplace, the Village of Grafton recognizes the opportunity to educate consumers in making product choices which promote sustainability.

A	Village website/newsletter: consumer column, question and answer section	Admin. Volunt.	2010	Additional $16 for insert for 260 copies	
B	Library: show product comparisons, involve GHS marketing students, guest speakers, discussion groups, film series, continued education	Volunt. GHS	2010	Not determined	
C	Vendor Fair: utilize manufacturers of products to give consumers comparisons	Admin. Manuf. Busin. Volunt.	2010	Not determined	

Strategy 3 – Save Green

Through the Village newsletter with a dedicated section to education, the Village of Grafton will encourage residents to implement resource conservation actions that lead to sustainability and to reduced dependence upon fossil fuels, extracted metals, minerals, and freshwater resources.

A	Encourage use of products which minimize overpackaging	Admin. Volunt.	2010		
B	Encourage development of community garden(s)	Admin.	2010		
C	Continue to promote the Grafton Farmer's Market and to encourage local businesses to utilize local food products	Admin. Volunt.	2010		
D	Continue to promote recycling of materials	Admin. Volunt.	2010		
E	Encourage the use of products and practices which minimize water consumption	Admin. Volunt.	2010		

Possible Partners & Funding Sources

- Chamber of Commerce
- Grants
- Local business donations
- Grafton School district
- Manufacturers of products: ex. flooring manufacturers from current local businesses
- Wisconsin Environmental Education Board: http://www.uwsp.edu/cnr/weeb/grant-program

Performance Indicators

- By the fall of 2010 the Village web site will have a dedicated section on education and resources for Village residents.
- By the fall of 2011 the Village will investigate sponsoring a "Green Award" program.
- By the fall of 2011 the Village will host a sustainable conference to include all municipalities of Ozaukee County.
- By the fall of 2010 a "Green Tour" will take place to visit Village businesses and residents who exemplify sustainable efforts. This tour may be in partnership with the Chamber of Commerce. The frequency of the tour will be determined later.
- By the fall of 2010 the Village library will have a display highlighting sustainability concepts, including participation of the schools; the display to include brochures, displays, handouts and video loops/power point presentations. The end result could be a kiosk-type of display.

APPENDIX - A

One-2-Five Energy Diagnostic Report

December 3, 2009

Mr. Darrell Hofland
Village of Grafton
1971 Washington Street
Grafton, WI 53024

Dear Mr. Hofland:

Thank you for your time and that of your colleagues on July 1, 2009. I appreciate your patience and apologize for the delays in getting this report to you. I appreciated your input and feedback and trust that you found the One-2-Five® Energy diagnostic session an informative and worthwhile exercise. This process has been successfully used to help more than 2,373 facilities define their critical next steps that drive their energy management program and deliver long-term savings.

The attached output and benchmarking reports from the diagnostic show a snapshot of the current overall energy management performance for your site. EnVinta's One-2-Five® Energy database contains 98 sites in your industry sector of "Local Government Administration". The diagnostic process revealed that:

- You rated your operations at the 4 star level, which indicates that you currently have energy management systems integrated into your business system and implementing the strategies necessary for a strategic and comprehensive approach to managing energy- related issues. Of All Sites who have participated in One-2-Five Energy Benchmarking, 86% have scored at the 1 or 2 star level; 60% have scored at the 2 star level. Of the 98 total sites in the benchmarking database for this industry sector, 44% of them rank in your category as 2 star level. Additionally, 45% are at the 1 star level, 5% are at the 3 star level and 6% are at the 4 star level.
- The site has an International Benchmark Rating of 3.68, which is slightly below the maximum industry sector score of 3.72, and well above industry sector average score of 1.27.
- Based on an extrapolation of usage and Star score data for your industry, indicative annual savings in the range of 0% to 6% ($0 to $20,000) could be available if you continue to incorporate additional energy management best practice processes throughout your operations. Savings opportunities are typically greater when your organization's Star Rating is low.
- Village of Grafton scored 21 of the 22 elements evaluated at bronze level or above and has a star rating equivalent or better than 95% of participants in the industry. The One-2- Five® Energy benchmarking indicates that 91% of the elements for this site scored at or

above average relative to the "Local Government Administration" sector. Village of Grafton scored at the Platinum level for thirteen of the elements (1.1 Demonstrates Corporate Commitment, 3.2 Plans, 4.3 Resourcing, 5.1 Criteria / Budgets for Capital Expenditures (CAPEX), 5.2 Energy Operating Budgets, 6.1 Purchasing Procedures and Alternative Energy Options, 6.2 Quality and Reliability of Supply, 6.3 Optimizing Purchasing within Supply Agreement, 7.1 Operating Procedures, 7.2 Maintenance Procedures, 8.1 Efficiency of Existing Plant Design, 8.2 Procedures - Plant design / retrofit, purchasing / replacement, 9.1 Metering and Monitoring and 9.2 Reporting, Feedback and Control Systems).

During the diagnostic we identified a number of areas where further development could still occur and these are discussed in the following report with the critical next actions highlighted below. As we discussed, One-2-Five® Energy helps identify the most important next steps for further developing your energy management program - extracting greatest value from resources by ensuring each project undertaken is supported by other relevant activities. As you have experienced in other parts of your business, namely quality, safety, and environment, taking a systems approach and establishing sound business processes is a critical success factor in a management program and necessary to establish the right environment for achieving sustainable benefits - energy is no different.

One-2-Five® Energy has recommended that you initially focus on actions in the following areas:

1. ***Understanding of Performance and Opportunities*** - Clearly, Village of Grafton has made strides in understanding energy performance and responding to opportunities. Establishing the energy use per unit of output for each major area or process may give the organization insight into opportunities for cost control beyond just the already-captured "low-hanging fruit". This level of understanding the energy use will also help in focusing resources in those areas that will return the largest benefit given their degree of energy intensity and therefore production cost impact. Furthermore, implementing a process of comparing normalized performance data of related sites or site operations could make additional advancement in the organization as a whole. This activity can serve as the basis for establishing accurate targets for further improvement based on the performance of the top sites in each category.

   Financial assistance for engineering studies and engineering audits are available from Focus on Energy program.

2. ***Targets and Key Performance Indicators*** - Along with clearly communicated corporate commitment, Village of Grafton has the opportunity to set overall site targets for reducing energy expenditures and set key performance indicators (KPI) based on kWh/sq. ft. of operation. It is recommended that the organization expand current motivational incentives for appropriate personnel based on the KPI's for energy as a means of focusing resources on the issue of cost containment with regard to energy expenditures.

We Energies along with Focus on Energy can provide training opportunities for developing effective energy management plans through the use of Focus on Energy's Practical Energy Management (PEM) program.

3. ***Accountabilities*** - Making the actual energy end-users accountable for their overall energy usage is a watershed issue in a site's energy program and is one of the best ways to encourage operational staff to fully participate in the energy management initiatives. Transfer of accountability depends on good metering so that the energy usage can be successfully assigned, as well as a demonstration of how facilities management and engineering can support the responsible parties achieve significant reductions in usage. Being held accountable will lift the profile of energy management within operations and personnel will be more inclined to assist with the identification of opportunities for equipment retrofit, as well as potential improvements within operational procedures and areas requiring maintenance attention.

4. ***Awareness and Training*** - Another area that may produce immediate results is raising the general awareness of energy conservation across the organization. Raising awareness of energy across the site can be an effective tool to help identify and drive many of the lower cost saving opportunities associated with behavioral issues. It essentially develops a much broader network of personnel able to at least be aware of energy as an issue and many unexpected but useful suggestions can result as everyone begins to understand what they themselves can do to control energy waste. Effective programs typically utilize multiple communication channels - newsletters, screensavers, intranet, and poster displays are a few suggestions.

We Energies can provide training opportunities for developing effective awareness and training ideas through the Education and Awareness Program.

5. ***Innovation and New Technology*** - Examines how an organization keeps up with improvements in energy technology, and also how it harnesses innovation from within to improve operations. This is not a critical element for many organizations early in their programs. It can become more important as the program develops, especially in energy-intensive operations where energy efficiency innovation plays a key role in determining overall competitiveness.

We Energies and Franklin Energy Services would like to thank Village of Grafton for their participation in the One-2-Five® Energy diagnostic session. We trust this Management Systems Diagnostic Session provides the basis for identifying opportunities to reduce your energy costs. There are a number of programs and services available through We Energies and Focus on Energy that you may find useful in implementing the above recommendations and generally support your energy management activities.

Best Regards,

Paul Van de Sand
Franklin Energy Services

Energy Diagnostic

Village of Grafton

Grafton

Prepared for

Darrell Hofland

Prepared by

Paul Van de Sand

Diagnostic Review Completed on

July 01, 2009

Next Recommended Review

September 29, 2009

Executive Summary

Star Rating

The Star Rating is One-2-Five Energy's main ranking of your systems for energy management and follows the definitions listed below. The Star Rating also forms the basis for benchmarking at www.one-2-five.com, enabling you to compare your performance against other sites within your own operations and against other organizations.

Your Star Rating

1 Star - Limited focus on energy
2 Stars - Basic waste reduction activities
3 Stars - Formal systems for energy being established
4 Stars - Energy systems integrated into business systems
5 Stars - Achieving best practice & continuous improvement

Annual Energy Costs and Savings

The following savings estimates are based on your type of business and your current Star Rating. Savings opportunities are typically greater when your organization's Star Rating is low. As you implement systems, you achieve greater and sustainable savings.

Total Energy Costs	$327,218.
Indicative Energy Savings *	$0 to $20,000.
Total Greenhouse Gas Emissions ^	2,000 tons of carbon dioxide.
Indicative Greenhouse Gas Emissions Savings *	0 to 100 tons of carbon dioxide.
Energy Costs as % of Variable Operating Costs	Not Specified.

* Broad indicative savings only for similar types of organizations with your star rating. It should be noted that a specific site review is required to determine your savings opportunities. This range is only provided to give an idea of preliminary scope for savings. ENVINTA and the distributors of this product do not guarantee that your organisation can achieve these indicative savings.

^ Greenhouse Gas Emissions are based on available average emissions co-efficients. Actual emissions will vary from site to site based on the specific energy sources used by the site. Emissions do not include purchased steam.

Diagnostic Results

Overview

The Diagnostic Results section is a summary of your organization's performance in energy management as identified by your responses to the diagnostic session.

Levels of Development

The elements are each rated in one of five levels of development.

- Yet to qualify indicates that your organization has a limited focus on this element of energy management.
- Bronze level indicates a waste cutting approach is used for this element.
- Silver level indicates that you are starting to manage this element with formal systems.
- Gold level indicates that you manage this element with established systems, which are integrated into everyday business.
- Platinum level is achieved where you manage an element with best practice systems and have a continuous improvement program driving further improvement.

Areas for Focus

Elements that are identified as critical should take precedence at this stage of development in your systems for energy management. Selection of these Critical Elements is based on results from the diagnostic, and also your ranking of the importance of each element to your organization. The actions listed in the Recommended Actions section address these Critical Elements.

Diagnostic Results

Element	Level of Development (Yet to Qualify / Bronze / Silver / Gold / Platinum)	User Priority	Critical Action Items
1.1 Demonstrated corporate commitment		Low	-
2.1 Understanding of performance and opportunities		Low	Critical
3.1 Targets, performance indicators (KPI) and motivation		Medium	Critical
3.2 Plans		Low	-
4.1 Accountabilities		Low	Critical
4.2 Awareness and training		Medium	Critical
4.3 Resourcing		Low	-
5.1 Criteria/Budgets for capital expenditure (CAPEX)		Low	-
5.2 Energy operating budgets		Low	-
6.1 Purchasing procedures and alternative energy options		Low	-
6.2 Quality and reliability of supply		Low	-
6.3 Optimizing purchasing within supply agreement		Low	-
7.1 Operating procedures		Low	-
7.2 Maintenance procedures		Low	-
8.1 Efficiency of existing plant design		Low	-
8.2 Procedures - plant design/retrofit, purchasing/replacement		Low	-
8.3 Innovation and new technology		Low	Critical
9.1 Metering and monitoring		Low	-
9.2 Reporting, feedback and control systems		Low	-
9.3 Documentation and records		Low	-
10.1 Energy cost performance in the past 12 months		Low	-
10.2 Auditing progress		Low	-

Overall Ranking : 4 Stars **% Achievement : 80%** **% required to reach next Star level : +8%**

Critical Element Explanations

Understanding of performance and opportunities

Evaluates the level of understanding of current energy performance, and the risks and opportunities associated with "best practice". Effective organizations need a baseline measure of current energy performance. This is essential to understanding the importance of energy costs in operations, to prioritize actions, and as a basis for comparison to identify gains made. Initial estimates of the scale of savings opportunities will come from benchmarking against other similar operations and through detailed technical evaluation of process.

Targets, performance indicators (KPI) and motivation

Reviews progress in setting performance targets and key performance indicators (KPIs), and in establishing action plans to meet these targets. Targets provide a measurable focus. Initially, many organizations establish "stretch" energy performance targets which demonstrate that a major change in efficiency is expected. As the program develops, easy savings are taken up and more accurate information on savings potential becomes available. Effective organizations implement systems which reward delivery of targeted performance in each energy-intensive cost center.

Accountabilities

Assesses whether you have the right people accountable for managing energy costs and the extent to which these people have their role formalized. This is a key problem area in many energy management programs. The One-2-Five® Energy approach is to ensure major energy users become accountable for their own energy use and have the tools to do this effectively. An early step in many programs is to appoint a site engineer to the role of "energy manager". In such a role, the person typically has all the responsibility and little authority over usage. This is not only a thankless task but also relatively ineffective in achieving change, once the simple technical waste projects have been implemented. A process driven by end user operations is more effective.

Awareness and training

Examines the way people in the organization are trained and motivated to drive energy efficiency (and supply) improvements. While it seems self-evident that skilled, motivated people are the basis for efficiency improvement, only a few operations provide adequate training to develop skills to the level required to manage energy effectively. We find that this is an area of almost total neglect in most organizations.

Innovation and new technology

Examines how your organization keeps up with improvements in energy technology, and also how it harnesses innovation from within to improve operations. This is not a critical element for many organizations early in their programs. It can become more important as the program develops, especially in energy-intensive operations where energy efficiency innovation plays a key role in determining overall competitiveness.

Recommended Actions

How to use the Recommended Actions Report

The Recommended Actions are based on the Critical Elements identified in your Diagnostic Results. Progressing to the next level of development in any Critical Element may require several actions to be initiated. Actions should be targeted for completion as soon as possible (preferably within 90 days).

We suggest that these actions be used to develop an action plan, which includes clear activity statements and goals, plus resource assignment and a schedule for completion.

After completing some or all of your Recommended Actions you can reassess your progress by running another diagnostic session. One-2-Five Energy will then recalculate your Star Rating, Critical Elements and generate a new set of associated Recommended Actions. Note that addressing the Critical Elements via these actions is likely to contribute to progression in other elements.

Recommended Actions

Recommended Actions for Critical Elements from this Diagnostic

1. Targets, performance indicators (KPI) and motivation

a) Set overall energy savings targets for reducing energy costs or improving energy efficiency based on benchmarking or an assessment of opportunities.

2. Awareness and training

a) Create a "competency matrix" for each position or activity in energy intensive operations, showing the required knowledge, skills, and attributes. Use this matrix to assess current energy management training needs.

b) Integrate your energy training program for energy-intensive operations with other business training activities (e.g. induction, occupational health and safety, financial, environmental, quality).

3. Understanding of performance and opportunities

a) Benchmark the energy performance of your energy-intensive plant/facilities against industry "best practice".

b) Quantify any significant environmental consequences of your energy use.

4. Accountabilities

a) Clearly define energy management accountabilities for facility managers and service providers. Ensure energy management responsibilities are included in job descriptions and your formal reporting structure.

5. Innovation and new technology

a) Regularly (at least every six months) have formal sessions to generate ideas from your staff to improve energy efficiency.

One-2-Five
About One-2-Five
Benchmarking
About Energetics
FAQs
Registered Users

Benchmarking Menu

Welcome to One-2-Five Energy Benchmarking for WEE_0028.

There are currently:

98 sites in your industry sector of Local Government Administration
142 sites in your industry sector of Government Administration
153 sites in your industry sector of Government Administration and Defence
1504 sites in your country - USA
2373 sites in total

The reports available are:

- Benchmarking Summary
- Element Analysis - Industry Sector
- Element Analysis - Country
- Star Rating Analysis - Industry Sector
- Star Rating Analysis - All Sites

Select Industry Group for Benchmarking
Local Government Administration

Local Government Administration
Government Administration

Perform Benchmarking on data from this date
Wednesday, July 01, 2009

Wednesday, July 01, 2009

PRINT COVER SHEET | PRINT ALL REPORTS

Element Analysis - Country

USA

Element	Level of Development	Below	Critical Actions	Your % of Site sites
	YTQ Bronze Silver Gold Platinum **Average**			
1.1 Demonstrated corporate commitment				52.9
2.1 Understanding of performance and opportunities			**C**	63.8
3.1 Targets, performance indicators (KPI) and motivation		**X**	**C**	57.2
3.2 Plans			34.8	4.1
Accountabilities			**C**	36.9
4.2 Awareness and training			**C**	45.8
4.3 Resourcing			13.3	5.1
Criteria/Budgets for capital expenditure (CAPEX)			6.4	5.2
Energy operating budgets			3.0	
6.1 Purchasing procedures and alternative energy options				9.8
6.2 Quality and reliability of supply				3.7
6.3 Optimizing purchasing within supply agreement				9.8
7.1 Operating procedures				18.7
7.2 Maintenance procedures				7.5
8.1 Efficiency of existing plant design				4.4
8.2 Procedures - plant design/retrofit, purchasing/replacement				8.1
8.3 Innovation and new technology		**X**	**C**	3.4
9.1 Metering and monitoring		46.4	9.2	Reporting,
feedback and control systems		49.8	9.3	
Documentation and records		3.5	10.1	Energy
cost performance in the past 12 months		0.0	10.2	Auditing
progress		20.3		

Previous Next Back to Benchmarking Menu

PRINT

Element Analysis - Industry Sector

Local Government Administration

Element	Level of Development	Below Average	Critical Actions	Your % of Site sites
	YTQ Bronze Silver Gold Platinum			
1.1 Demonstrated corporate commitment				54.1
2.1 Understanding of performance and opportunities			C	57.1
3.1 Targets, performance indicators (KPI) and motivation		X	C	59.2
3.2 Plans			24.5	4.1
Accountabilities			C	40.8
4.2 Awareness and training			C	55.1
4.3 Resourcing			20.4	5.1
Criteria/Budgets for capital expenditure (CAPEX)			9.2	5.2
Energy operating budgets			3.1	
6.1 Purchasing procedures and alternative energy options				11.2
6.2 Quality and reliability of supply				2.0
6.3 Optimizing purchasing within supply agreement				11.2
7.1 Operating procedures				9.2
7.2 Maintenance procedures				5.1
8.1 Efficiency of existing plant design				7.1
8.2 Procedures - plant design/retrofit, purchasing/replacement				12.2
8.3 Innovation and new technology		X	C	9.2
9.1 Metering and monitoring		36.7	9.2	Reporting,
feedback and control systems		48.0	9.3	
Documentation and records		7.1	10.1	Energy
cost performance in the past 12 months		0.0	10.2	Auditing
progress		17.3		

Legend

Site Practices | Industry Best Practice | Average Industry Practice

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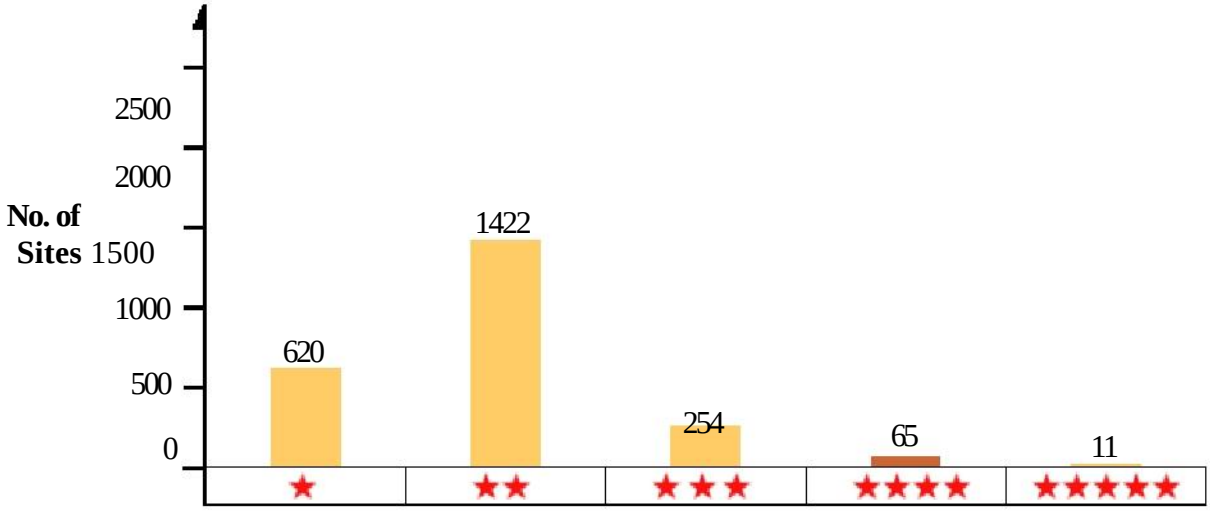
PRINT

Star Rating Analysis - All Sites

All Sites
The average International Benchmark Rating is 1.40



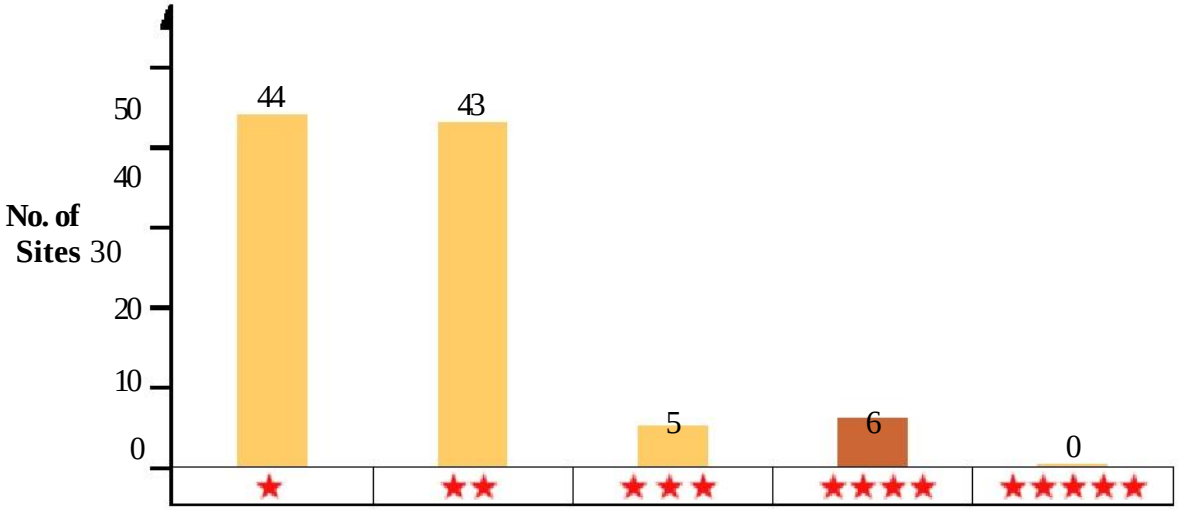
Star Rating (All Sites)

Previous Next Back to Benchmarking Menu

PRINT

Star Rating Analysis - Industry Sector

Local Government Administration
The average International Benchmark Rating is 1.30



Star Rating (Industry Sector)

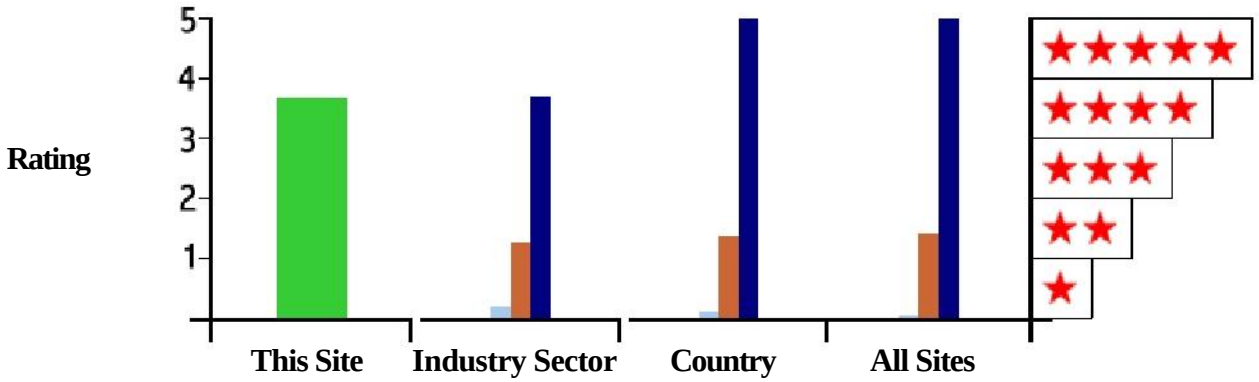
Legend
Your site
Other sites

Previous Next Back to Benchmarking Menu

PRINT

Benchmarking Summary

Village of Grafton
Industry Sector: Local Government Administration
This Site's International Benchmark Rating is 3.68
One-2-Five Star Rating is 4 stars



	Industry Sector	Country	All Sites
	Rating	Rating	Rating
Maximum Score	3.72	5.00	5.00
Average Score	1.27	1.39	1.42
Minimum Score	0.21	0.12	0.00

APPENDIX - B

Invasive Species Resources

Southeastern Wisconsin Invasive Species Consortium (SEWISC) In June 2007 a Cooperative Weed Management Area (CWMA) was formed to integrate invasive plant and animal management resources across jurisdictional boundaries to benefit the entire region. Functioning as a CWMA, the **Southeastern Wisconsin Invasive Species Consortium (SEWISC)** is a broad-based coalition that promotes efficient and effective management of invasive species throughout an 8-county region (Sheboygan, Washington, Ozaukee, Waukesha, Milwaukee, Walworth, Racine, and Kenosha). SEWISC provides the opportunity for partners to share and leverage limited resources, raise awareness about invasive species problems, and provide a mechanism for collaborative problem-solving on both public and private lands. **http://www.ipaw.org/**

National Invasive Species Information Resource Center http://www.invasivespeciesinfo.gov Invasive plant identification, Resources databases, Manager's Toolkit with control methods, planning, record keeping, Educational resources, Funding sources

Invasive Plants of the United States - http://www.invasive.org/weedcd/ Identification, biology, and ecology of invasive plants, Links to control methods on each species' page

Midwest Invasive Plant Network - http://mipn.org/ Grants listing, Education, prevention, and management resources

Invasive Plant Association of Wisconsin – http://www.ipaw.org Plant-specific information, Links to local organizations and resources, Reporting forms, Searchable database of web resources

Educational materials, management and identification guides

Photos of exotic and invasive plants, insects, animals, and more:

- http://www.invasive.org/images.cfm
- http://dnr.wi.gov/invasives/plants.asp

Why Should I Care About Invasive Plants? Download the PDF from MIPN (1.13MB)

MIPN Landscape Alternatives Download the PDF from MIPN (1 MB)

Photos of exotic and invasive plants, insects, animals, and more: http://www.invasive.org/images.cfm

Invasive Plants of the Upper Midwest: An Illustrated Guide to Their Identification and Control by Elizabeth J. Czarapata: http://ipaw.org/order.asp

Invasive Plants: A Guide to Identification, Impacts, and Control of Common North American Species by Sylvan Ramsey Kaufman: http://www.amazon.com/Invasive-Plants-Identification-Impacts-American/dp/0811733653/ref=pd_bxgy_b_img_b

DVD – Dangerous Travelers: Controlling Invasive Plants Along America's Roadways
University of Wisconsin-Extension pest management video resources: http://www.uwex.edu/ces/media/catalog/pest.cfm

Reference, Guidance, and Funding Sources

Checklist of Responsibility - Best Management Practices (Excel)
Construction Contract Language from The Center for Invasive Plant Management (Word)
Educational language for newsletters, town boards, city councils, other (Word)
Financial Assistance (Word)
Internet Resources for Invasive Plant Management (Word)
Mowing Guidance to Prevent Spreading of Right of Way Invasive Plants in S Wisconsin (PDF)
Species - specific herbicide recommendations (Word)
Suggested Timing of Control for Select Species in Southeastern Wisconsin (PDF)

Reporting Forms

Invasive Plant Report Form from the Invasive Plant Assoc of Wisconsin (Word)
Washington County Highway Invasive Species Reporting Form (Word)
Weed Inventory Form for the Field (Word)

Restoration Recommendations and Guidelines

Aggressive native plants to use as replacements for invasives (Word)
Prairie Establishment Guidelines (Word)
Recommended native trees for streets and parks (Word)

U.S. Department of Agriculture (USDA) Grant and Partnership Programs That Can Address Invasive Species Research, Technical Assistance, Prevention and Control Download the PDF from The Weed Center (134 KB)

Challenges to their management of invasive species and ways that their management of invasive species could be helped by SEWISC or other groups. Download the PDF (262 KB)

Invasive Species BMP Workshops
Ecology of Invasives Handout.pdf (3.5 MB)

Highways and Right of Ways
Best Management Practices and NR-40 for Highways and Right of Ways Handouts 2pp.pdf (1.38 MB)
Control methods for Highways and Right of Ways Handout.pdf (1.69 MB)
Planning for Highways and Right of Ways Handout.pdf (2.64 MB)

Parks
Best Management Practices and NR-40 for Parks Handout.pdf (954KB)
Control methods for Parks Handout.pdf (1.02 MB)
Planning Methods for Parks Handout.pdf (2.45 MB)

Funding and Cost Share Programs for Invasive Plant Control

Citizen Based Monitoring Partnership Program The purpose of this program is to provide funding and support to initiate or expand citizen-based monitoring programs involved in the monitoring of aquatic and terrestrial plants, animals and their habitats. Eligible activities include training and methods development, field monitoring, and data sharing or conversion. Awards range from $2,500-$7,500 and require a 25% non-DNR match. **Deadline**: December 1, **Website**: http://atriweb.info/cbm/Partnership/index.cfm **Contact**: Rori Paloski, Wisconsin DNR, Rori.Paloski@dnr.state.wi.us, (608) 264-6040

Besadny Conservation Grant Program The Wisconsin Natural Resources Foundation, with DNR support, provides grants ranging from $100-$1,000 (with a 1:1 match) for small scale projects which benefit the public, involve management and restoration of Wisconsin natural resources, and/or contribute to knowledge about WI natural resources through education.

Private or public organizations or government agencies are eligible. **Deadline**: Proposals due January 15 and funds awarded in March. **Website**: http://www.nrfwis.org/grantOpp/besadny/index.htm **Contact**: Camille Zanoni, NRF Program Director, (608) 266-1430, Camille.Zanoni@dnr.state.wi.us

Wisconsin Forest Stewardship Program The primary objective is to encourage private non-industrial forest landowners to consider all resources in the management of their forest lands. The program also encourages landowners to obtain a Forest Stewardship Plan to help meet their management objectives. **Contact**: Ask your local DNR forester for details. See this website for names and addresses.

Wisconsin Landowner Incentive Program (LIP) The Landowner Incentive Program provides grants to help private landowners (individual and group owners) manage and restore habitat for at-risk (rare) species on their land. More than 85% of Wisconsin's land is privately owned and approximately 90% of at-risk species have populations on private land. The program provides up to 75% of the project cost for eligible projects and provides technical assistance to landowners. LIP is funded by the U.S. Fish and Wildlife Service and administered by the Wisconsin DNR. Eligible projects include, but are not limited to, conducting prescribed burns, restoring native vegetation, and removing invasive and woody species to benefit at-risk species. Projects must occur in one of the priority ecosystems, which in 2006 were Prairie & Savanna Habitat, and the Northern Lake Michigan Ecological Landscape. See website for current priorities and for species considered rare (state or federal endangered, threatened or species of special concern) **Website**: http://dnr.wi.gov/org/land/er/WLIP

Federal LIP Information: http://www.fws.gov/midwest/FederalAid/programs/lip.htm **Contact**: Jennifer Bardeen, Wisconsin DNR - Bureau of Endangered Resources, 101 S. Webster St., Box 7921, Madison, WI 53707, (608) 266-8736, Jennifer.Bardeen@dnr.state.wi.us

Turkey Stamp-Funded Projects Proposals must address the goals and objectives of developing, managing, preserving, restoring and maintaining the wild turkey population in the state. First priority for the stamp revenue is placed upon projects for managing the turkey population and administering hunting seasons. Other priorities emphasize wild turkey management on a landscape scale. Habitat requirement priorities for turkeys include: natural habitat management (examples include: post-sale non-commercial cuts to encourage oak, grassland management, prescribed burning, seeding of logging access trails/decking areas/utility rights-of-way, and similar practices designed to encourage existing oak and other habitats important to turkeys), habitat development (including food plots to provide forage during the winter, and artificial regeneration to include planting of shrubs, grasses, oak, small plots of pine or spruce), and information and education (including sponsoring seminars and educational events related to turkey management and hunting). **Eligibility**: Wildlife biologists, technicians, non-profit conservation partners, state property managers, and foresters. **Deadline**: March 15 every two years (next deadline 2007),

Contact: Andrea Mezera, Assistant Upland Wildlife Ecologist, Wisconsin DNR, (608) 261-8458, Andrea.Mezera@dnr.state.wi.us

Pheasant Stamp-Funded Projects Revenues from pheasant stamp sales are used to develop, manage, preserve, restore and maintain the wild pheasant population in the state. Acceptable habitat practices include grassland development, grassland or wetland maintenance on private lands (e.g., brushing and burning), development & maintenance of grasslands cost-shared w/ cooperating non-profit groups, winter cover improvements, predator habitat management, and food plot development on public lands. **Eligibility**: Wildlife biologists, technicians, non-profit conservation partners, state property managers, and foresters. **Deadline**: March 15, every two years (next deadline 2007) **Contact**: Andrea Mezera, Assistant Upland Wildlife Ecologist, Wisconsin DNR, (608) 261-8458, Andrea.Mezera@dnr.state.wi.us

Forestry Urban Forestry Assistance Grants The purpose of the program is to fund projects that improve a community's capacity to manage its trees – and control of invasives can be part of that process. Forestry plans, educational activities, and plant removal are among the eligible project activities. The applicant may be a city, Village, town, county, tribal government, or 501(c)(3) nonprofit organization. Joint applications are encouraged. This is a 50-50 cost-share program. Upon project completion and approval, the sponsor requests reimbursement for 50 percent of eligible costs up to the approved amount of the grant award. Nonprofit organizations may ask for half of their total grant as an advance at the time of award, but otherwise grants are not provided up front. Awards range from $1,000 to $25,000. Deadline for applications is early October. **Website**: http://dnr.wi.gov/org/land/Forestry/UF/grants

Private Landowner Forestry Assistance Program Guide This site offers comparisons among the various state assistance programs. **Website**: http://dnr.wi.gov/org/land/forestry/Private/financial/costshare.htm

Managed Forest Law (MFL) Roughly 2,500,000 acres are enrolled in the forest tax programs statewide and around 25,000 landowners participate. Under the MFL, a landowner selects a 25 or 50 year contract period. A forestry plan is developed covering mandatory and recommended practices for the chosen time period. The reward for following the plan is that MFL property taxes average 80% less than regular property taxes. The landowners pay only $.74 or $1.74 per acre annually (depending upon the land's status as open or closed public access, which you select) and a 5% tax on harvested timber. Private landowners with at least 10 acres of land are eligible. **Website**: http://dnr.wi.gov/org/land/forestry/ftax/mfl.htm **Contact**: Your local DNR forester. See this website for names and addresses.

Forest Stewardship Grants Natural resource agencies, organizations, and others interested in promoting stewardship management of private non-industrial forest lands may be eligible to receive funds for approved projects. Grants cover 50

percent of actual eligible costs, and requests are limited to $15,000 per proposal. Projects directed toward one or more of the following are eligible: 1) Providing direct assistance to private forest landowners, 2) Providing information on multi-resource management of forest lands to the general public (especially Wisconsin private forest landowners), 3) Training of resource professionals and service providers who assist private forest landowners in the management of their forest lands, 4) Developing new information and/or training materials on sound forest management. Examples of eligible projects include landowner workshops, management plan writing, field days, training sessions, direct landowner assistance and research. Applications available in November and due January 1. **Website**: http://dnr.wi.gov/org/caer/cfa/Grants/fosteward.html

Wisconsin Forest Landowner Grant Program Provides $1,250,000 annually for stewardship practices on private land. A wide array of practices are eligible for cost sharing including: management plan development, wetland restoration, tree planting, forest improvement and prairie restoration. Up to 65% of the eligible costs can be refunded to you upon completion of the work. Applications are funded on the basis of priority. Plan development, afforestation, reforestation and timber stand improvement are top priorities while the remaining practices are secondary. **Deadline**: Applications are accepted continuously but processed three times a year - February 1, May 1, August 1. **Contact**: Ask your local DNR forester for details. See this website for names and addresses. **Application**: http://dnr.wi.gov/org/land/forestry/Private/financial/wflgpapp.pdf

Regulations and Best Management Practices

Invasive Species Best Management Practices for Recreation Areas (Word)
Plants Classified as Invasive under NR 40 -The Wisconsin Invasive Species Rule (Word)
Summary of Wisconsin Invasive Species Rule NR 40 (Word)
Transportation and Utility Corridor Best Management Practices (Word)
Urban Forestry Best Management Practices for Invasive Species Management (Word)
Wisconsin Pesticide Applicator Training -category-Turf&Landscape09 (PDF)
Wisconsin Pesticide Applicator Training -Field and Veg Crop Category (PDF)
Wisconsin Pesticide Applicator Training for Right of Ways (PDF)

Invasive Species Department and Council Responsibilities (23.22 WI Stats) - Gives the responsibility to the DNR to establish a statewide program to control invasive species. This includes developing a system of classifying invasive species under the program, conducting studies relating to issues of controlling invasive species, and establishing cost-sharing programs for invasive species control. The Wisconsin Council on Invasive Species has the responsibility of making recommendations to the department.

Noxious Weed Law (66.047 WI Stats) - Requires landowners statewide to control three common weeds, Canada thistle (*Cirsium arvensis)*, leafy spurge (*Euphorbia esula)* and field bindweed (*Convolvulus arvensis)* for which control is difficult and eradication is rarely feasible. At the local level counties and municipalities can add other species to their local noxious weed list. The law does not provide any authority, funding or staffing to any state agency to implement it. (1975)

Nuisance Weed Law (23.235 WI Stats) - Wisconsin nuisance weeds are purple loosestrife (*Lythrum salicaria*) and multiflora rose (*Rosa multiflora*). Nuisance weeds may not be sold, distributed, planted, or cultivated. (1987).

Agriculture and Vegetable Seeds (94.38 WI Stats) - As part of a more extensive law, "prohibited and restricted" noxious weed seeds are listed. "Prohibited noxious weed seeds" include the seeds of field bindweed (*Convolvulus arvensis*), leafy spurge (*Euphorbia esula*), Canada thistle (*Cirsium arvense*) and quack grass (*Agropyron repens*)."Restricted noxious weed seeds" include the seeds of dodder (*Cuscuta* spp.), wild mustard (*Sinapis arvensis*), Indian mustard (*Brassica juncea*), buckhorn (*Plantago lanceolata*), ox-eye daisy (*Leucanthemum vulgare*), perennial sow thistle (*Sonchus arvensis*), wild radish (*Raphanus raphanistrum*), yellow rocket (*Barbarea vulgaris*), wild oats (*Avena fatua*), giant foxtail (*Setaria faberi*), hoary alyssum (*Berteroa incana*), downy brome (*Bromus tectorum*) and white cockle (*Silene alba*). The amount of noxious weed seeds that can be found in any seed lot is limited. A surcharge on seeds currently pays for the inspection of seed lots by the Wisconsin Crop Improvement Association. (1975)

County (59.70) and Town (60.238) - Counties and towns may appropriate funds for the control of weeds and other pests.

Cutting Aquatic Nuisance Weeds (30.125) - Requires persons who cut aquatic weeds in navigable waters to remove them from the water. (1979)
Control of Aquatic Nuisance Weeds (30.1255) - "Aquatic nuisance species" is defined and DNR is required to periodically submit reports to the legislature on the impacts of aquatic nuisance species, potential control strategies and areas and activities needing technical or financial assistance. The first report was due in 1994 and was limited to zebra mussels. (1991)

Aquatic Plant Management and Protection - The 2001-03 Budget Bill grants rule-making authority to the DNR to designate aquatic "nuisance plants," protect native aquatic plants, and control aquatic plants that cause nuisances. It prohibits the launching of any watercraft, trailer or equipment with any aquatic plant attached to its exterior surface, requires posting of publicly owned boat landings and grants rule-making authority to DNR for managing aquatic plants in waters of the state. It also directs the DNR to implement a statewide program for education, research, control and containment of nuisance plants and for aquatic plant protection. **Financial Help website** This is a good starting point to find out about financial help in Private Forestry from the Wisconsin DNR. It lists state forest tax laws and cost-share programs. **Website**: http://dnr.wi.gov/org/land/forestry/Private/financial