

City of Marshall

Background Information

County: Lyon

GreenStep Coordinator

Population: 13,700

GreenStep City category: A

Tom Hoff
Contractor
Tom.Hoff@swsc.org
507-537-2271

Full-time equivalent city staff (approx.): 100

City web page relating to sustainability/GreenStep activities:

Participating township(s) / school district(s):
Lake Marshall Township Marshall Public Schools

<http://www.marshallgreenstep.org>

GreenStep City resolution: [Click here](#) to view the file.

GreenStep City status and date: STEP 3 (06/15/2016)

Best Practice Actions Underway and Completed

Completed actions are denoted by stars. Mouse over a star for its definition.

Buildings and Lighting

Efficient Existing Public Buildings { BP no. 1 }

2 Star(s) Action 1: Enter building information into the Minnesota B3 Benchmarking database and routinely enter monthly energy, water use data for all city-owned buildings.

Date action report first entered: 08/22/2012

Implementation details:

Utility information for the City of Marshall and Marshall School District buildings has been entered into the B3 database dating back to 2007 and continues to be entered in on a regular basis.

Outcome measures/metrics:

Energy usage and utility costs are tracked and compared to benchmark data to validate energy efficiency improvement savings. Under performing buildings are targeted for additional savings opportunities.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, City of Marshall

1 Star(s) Action 2: Make no/low cost indoor lighting and operational changes in city-owned/school buildings to reduce energy costs.

Date action report first entered: 08/22/2012

Implementation details:

In 2010/2011, an energy audit was completed and savings opportunities identified. Areas with the most potential for energy savings at the lowest cost were targeted for

efficiency improvements. This meant a lighting retrofit for the following buildings: City Hall, North Ambulance, the Parks Maintenance Shed, Airport Shop, MERIT Center, Wastewater treatment facility, and the Street Department. Due in part to the success of the first retrofits, additional retrofits were begun in 2014 to the Legion Field Swimming pool.

Outcome measures/metrics:

The Street Dept replaced 500 watt incandescent lighting in its storage building with T-8 Highbay fluorescent fixtures resulting in improved lighting and a 75% reduction in energy usage. Overall the 2011 lighting retrofit resulted in an overall electric savings of 20%. An order has been put in for LED lighting for the Legion Field swimming pool, switching from the original incandescent lighting. Overall the project is expected to reduce the swimming pool's electric demand by 16,205 W, saving 28,453 kWh each summer.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, City of Marshall

2 Star(s) Action 3: Invest in larger energy efficiency projects through performance contracting or other funding or through smaller retro-commissioning/retrofit projects in city-owned/school buildings.

Date action report first entered: 08/22/2012

Implementation details:

Energy audits were completed on all City buildings and savings opportunities identified. Buildings with the most potential for energy savings with the lowest cost were targeted for efficiency improvements.

Outcome measures/metrics:

Lighting retrofits were completed at City Hall, Wastewater Facility, Parks Department, Airport, Ambulance building, and Merit Center, replacing all T-12 lighting with high performance T-8 lighting.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, City of Marshall

2 Star(s) Action 4: Implement information technology efforts and city employee engagement to reduce plug loads and building energy use.

Date action report first entered: 08/22/2012

Implementation details:

The New Marshall High School, Marshall Area YMCA, and Community Library all implemented a number of efficiency improvements during their construction within the last 10 years. Additional engineering and efficiency improvement rebates were provided through Marshall Municipal Utilities Energy Efficiency Rewards Program. Energy Management Systems are utilized at the Marshall High School, Junior High School, New Library, YMCA, and Municipal Utility office to control energy usage and costs. The energy management system at the new library controls light levels through daylight harvesting in addition to controlling HVAC settings based on time of day and occupancy. Common practice for all new City and School computer, office equipment, electronics, and appliance purchases is to specify ENERGY STAR models when available. The City waste water plant, lift stations, utility office, and water plant all participate in Utility Interruptible rates to control demand and energy costs.

Outcome measures/metrics:

Energy usage is continuously monitored through Minnesota B3 benchmarking. The School is in the process of re-commissioning to further improve its efficiency and is seeking ENERGY STAR Certification.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, Marshall High School

1 Star(s) Action 7: Install for one or more city-owned/school buildings one of the following efficiency measures:

b. A district energy/microgrid system.

a. A ground-source, closed loop geothermal system.

c. A rainwater harvesting system for building water use.

Date action report first entered: 08/22/2012

Implementation details:

The new Marshall-Lyon County Library was constructed in 2011 and features a closed loop geothermal heating and cooling system using 54 wells. The Geothermal HVAC system provides efficient heating, cooling, and snow melting.

Outcome measures/metrics:

Engineers estimate 2,605,000 kBtu and \$36,000 saved per year, and a simple payback of less than 3 years after utility rebates.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, City of Marshall, Lyon County

Efficient Existing Private Buildings { BP no. 2 }

1 Star(s) Action 1: Create or participate in a marketing/outreach program to promote/achieve residential energy/water use reduction and energy efficiency.

Date action report first entered: 08/22/2012

Implementation details:

Marshall Municipal Utilities markets its energy efficiency programs and conservation through a number of different resources, including radio advertisement, newspaper, bill stuffers, open houses, and mailings. Conservation efforts are monitored and savings tracked. Marketing efforts are tailored to the appropriate season and adjusted as needed to capture new technologies and opportunities. Trade allies also help promote conservation efforts.

Outcome measures/metrics:

Conservation efforts are monitored and savings tracked. Marketing efforts are tailored to the appropriate season and adjusted as needed to capture new technologies and opportunities. Trade allies also help promote conservation efforts. Marshall Municipal Utilities (MMU), in conjunction with Missouri River Energy Services, offered a \$35 rebate to customers willing to part with their old inefficient, underutilized, refrigerator or freezer that may have been driving up their energy bills. The primary objective of the program is to help our customers remove their under-utilized, inefficient appliances off the grid and ensure they are properly recycled. MMU was able to eliminate approximately 36 inefficient appliances off of their system for an estimated annual savings of 27,100 kilowatt hours (kWh s). Since the inception of this program in 2010, 251 appliances have been recycled for a savings of 183,535 kWh s. The program will be offered again in the Spring of 2013

Descriptive links:

<http://www.marshallutilities.com/connector/20120706-Summer.pdf>

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, Marshall Independent, Marshall Radio

2 Star(s) Action 2: Integrate green building best practices information and assistance into the building permit process.

Date action report first entered: 08/22/2012

Implementation details:

IN PROGRESS: Marshall Municipal Utilities offers an ENERGY STAR New Homes program which provides rebates for ENERGY STAR qualification. Conservation, rebate and energy efficiency information is sent out to new building permit holders.

Outcome measures/metrics:

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, City of Marshall

2 Star(s) Action 5: Conserve/protect drinking/groundwater resources by creating a watering ordinance, water-wise landscaping ordinance/guidance, WaterSense purchasing program, or guidance on rainwater harvesting and home water softener use.

Date action report first entered: 08/22/2012

Implementation details:

Marshall Municipal Utilities has an Odd/Even sprinkling ordinance in place to help conserve and balance the demand for water. A Water Conservation Rate is also in place for residential and sprinkling meters. Rebates are provided for WaterSense toilets along with free low flow shower heads and faucet aerators to Marshall residents.

Outcome measures/metrics:

Conservation efforts have increased considerably since implementing a water conservation rate in 2009. More than 70 WaterSense toilet rebates were given out since 2010 when the program began and over 2,600 low flow shower heads have been provided to date.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities

Efficient Outdoor Lighting and Signals { BP no. 4 }

2 Star(s) Action 2: Purchase LEDs for all future street lighting and traffic signals .

Date action report first entered: 08/22/2012

Implementation details:

All new street light fixtures installed must meet Marshall Municipal Utilities requirements for Dark-sky compliance, efficiency, and light levels.

Outcome measures/metrics:

Nearly all of Marshall's Street lights have been replaced with new Dark-sky compliant energy efficient light fixtures as part of Marshall Municipal Utilities electric conversion project.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, City of Marshall

2 Star(s) Action 3: Replace the city's existing street lighting with Dark Sky-compliant LEDs, modifying any city franchise/utility agreement and adding smart grid attributes.

Date action report first entered: 08/22/2012

Implementation details:

Marshall Municipal Utilities policy is to replace all street light fixtures with new energy efficient fixtures as part of it's planned electric system improvement project.

Outcome measures/metrics:

Nearly all of Marshall's Street lights have been replaced with new Dark-sky compliant energy efficient light fixtures as part of Marshall Municipal Utilities electric conversion project.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities

2 Star(s) Action 5: Use LED/solar-powered lighting for a flashing sign or in a street, parking lot or park

project.

Date action report first entered: 08/22/2012

Implementation details:

Marshall Municipal Utilities (MMU) implemented a pilot LED Street light project in 2010, installing 33 LED street light fixtures along State Street near Southwest Minnesota State University.

Outcome measures/metrics:

Following the intallation of MMU's LED fixtures , Southwest Minnesota State University also replaced 50 parking lot light fixtures with similar LED fixtures.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities, Southwest Minnesota State University

Building Redevelopment { BP no. 5 }

2 Star(s) Action 3: Plan for reuse of large-format retail buildings, or work with a local school to either add-on space or repurpose space into non-school uses.

Date action report first entered: 07/21/2015

Implementation details:

A 36,000 square foot retail building was home to Alco (one of the first big box stores) and Running Fleet and Farm since 1979. It was empty for over four years as it was too small for modern big box retail and too big for the locally owned retail business. Brau Brothers, a regional brewery, started looking to relocate their brewery and considered Marshall as one of the candidate cities. The City of Marshall provided a \$125,000 forgivable loan and another \$125,000 low interest loan as a way to attract the business and make the most efficient use of the vacant property.

Outcome measures/metrics:

in 2013 Marshall secured the first ever brewery in Lyon County. The move for Brau Brothers allowed them to increase production from 5,000 barrels per year to over 25,000. The business contributes to the tax base of the community. Due to the rising popularity of craft breweries, Marshall has become a destination point for people that want tours or want to attend one of the many events that the brewery brings to town (e.g., concerts, etc.).

Descriptive links:

For more information contact:

Cal Brink (City staff) | calb@marshall-mn.org | 507-337-0802

Partners:

Marshall Chamber of Commerce; City of Marshall; Lyon County Economic Development

Land Use

Comprehensive, Climate and Energy Plans { BP no. 6 }

1 Star(s) Action 1: Adopt a comprehensive plan or (for Category B & C cities) adopt a land use plan that was adopted by the county or a regional entity.

Date action report first entered: 08/22/2012

Implementation details:

A Comprehensive Plan was completed in 1996 with updates and amendments in 2004. Discussion is taking place about a plan update.

Outcome measures/metrics:

Goals will change in subsequent updates, but current goals address: 1)development of bike and walking trails, 2)conservation of natural resources, 3) curbside recycling 3) alternative energy sources 4) wetland protection 5) water quality and conservation 6) building preservation Sustainability-related goals are scattered throughout the document rather than being listed in a specific section, although there is a section outlining the state of Marshall's environment when the plan was written.

Descriptive links:

<http://marshallmn.com/main/index.php/public-works/planning-zoning/comprehensive-plan>

For more information contact:

Ben Martig (City staff) | Ben.Martig@ci.marshall.mn.us | 507-537-6760

Partners:

City of Marshall

1 Star(s) Action 2: Demonstrate that regulatory ordinances comply with the comprehensive plan including but not limited to having the zoning ordinance explicitly reference the comprehensive plan as the foundational document for decision making.

Date action report first entered: 08/22/2012

Implementation details:

Regulatory ordinances comply with the city comprehensive plan and the plan is referenced in the CODE OF ORDINANCES CITY OF MARSHALL. The comprehensive plan is listed as a basis for several ordinances.

Outcome measures/metrics:

The following are links to specific ordinances referencing the comprehensive plan:

http://library.municode.com/HTML/13297/level3/PTIICOOR_CH66SU_ARTIINGE.html#PTIICOOR_CH66SU_ARTIINGE_S66-2PUCH
http://library.municode.com/HTML/13297/level3/PTIICOOR_CH66SU_ARTIINGE.html#PTIICOOR_CH66SU_ARTIINGE_S66-9COPLPLCHPRADRU
http://library.municode.com/HTML/13297/level3/PTIICOOR_CH86ZO_ARTIINGE.html#PTIICOOR_CH86ZO_ARTIINGE_S86-3PUINCH
http://library.municode.com/HTML/13297/level3/PTIICOOR_CH86ZO_ARTIINGE.html#PTIICOOR_CH86ZO_ARTIINGE_S86-5IN

Descriptive links:

<http://library.municode.com/index.aspx?clientId=13297>

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

Partners:

City of Marshall

1 Star(s) Action 3: Include requirements in comprehensive and/or other plans for intergovernmental coordination addressing regional land use and watershed / wellhead impacts, infrastructure, transportation, economic development and city/regional services.

Date action report first entered: 11/19/2013

Implementation details:

The 2004 plan references the 2002 Lyon County comprehensive plan which addresses models of township-city interaction. The Lyon County Plan also provides a framework for orderly annexation agreements. Further information can be found on pages 127-130 of the 2004 Marshall Comprehensive Plan.

Outcome measures/metrics:

Issues covered by the Lyon County plan include: land use, sewer and water, economic development, housing and for foreclosures.

Descriptive links:

<http://marshallmn.com/main/images/works/pdf/City-of-Marshall-1996-Comprehensive-Plan.pdf>

For more information contact:

Ben Martig (City staff) | Ben.Martig@ci.marshall.mn.us | 507-537-6760

Mixed Uses { BP no. 8 }

1 Star(s) Action 3: Modify a planned unit development ordinance to emphasize mixed use development or to limit residential PUDs to areas adjacent to commercial development.

Date action report first entered: 11/19/2013

Implementation details:

The City's PUD ordinance allows for mixed uses in addition to higher density uses.

Outcome measures/metrics:

Descriptive links:

http://library.municode.com/HTML/13297/level3/PTIICOOR_CH86ZO_ARTVPLUNDE.html#TOPTITLE

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

1 Star(s) Action 5: Have a downtown zoning district that allows residential and compatible commercial development.

Date action report first entered: 11/19/2013

Implementation details:

There is as downtown zoning district which allows for mixed uses of buildings (ie apartments on top of businesses). The district is outlined in the comprehensive plan.

Outcome measures/metrics:

Descriptive links:

<http://marshallmn.com/main/images/works/pdf/City-of-Marshall-1996-Comprehensive-Plan.pdf>

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

Transportation

Living Streets { BP no. 11 }

1 Star(s) Action 1: Adopt a complete streets policy or a living streets policy, which addresses landscaping and stormwater.

Date action report first entered: 04/29/2016

Implementation details:

Since becoming a Level 1 GreenStep City in 2012 the City of Marshall has demonstrated a commitment to the Complete/Living Streets standards by implementing a number of practices to improve and encourage safe, multimodal transportation in the community. The city partnered with Marshall GreenStep, Healthy56258, and the Southwest Regional Development Commission to conduct an extensive Health Impact Assessment in 2015 in an effort to look at the sidewalk and biking/walking path infrastructure, and to determine gaps. The study also looked at some problem intersections in the community. Input was sought from community members and several listening sessions were held to gather information. The final report and recommendations were presented to the City Council and received very favorably. In the past 5 years the number of miles of paved trails has more than doubled. Marshall now has 12.73 miles of on-street and 14.34 of off-street bike/walking paths, and in 2015 completed a 14 miles off-street path that connects the City of Marshall with the City of Lynd and Camden State Park. A Safe Routes to Schools application has also been written and submitted by a partnership that is concerned about making sure students can get to and from schools efficiently and safely. One of the most recent examples of commitment to Complete/Living Streets was the redesign of one of the most dangerous intersections in the Minnesota for motorists, cyclists and pedestrians. The Saratoga Street segment and Highway 23 intersection were redesigned to include "J-Turns" to reduce right angle car crashes. A large pedestrian bridge and bike/walking trail were constructed to provide convenient and safe biking and walking access to several neighborhoods that were separated by dangerous levels of traffic.

Outcome measures/metrics:

Marshall has achieved Tree City USA status since 2014. The City of Marshall has a Surface Water Management Utility as identified by Chapter 78, Article III. of the City Code of Ordinances. Revenues derived from stormwater utilities are dedicated to the construction, maintenance, and operation of the storm sewer drainage system and for education of stormwater best practices. Marshall now has 12.73 miles of on-street and 14.34 of off-street bike/walking paths, and in 2015 completed a 14 miles off-street path that connects the City of Marshall with the City of Lynd and Camden State Park. A pedestrian bridge and reduced conflict intersection was completed in 2015 and safety data is collected on-going.

Descriptive links:

<http://ci.marshall.mn.us/main/index.php/public-works/engineering/construction-projects/highway-23-saratoga-project>

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

Partners:

GreenStep Committee; Healthy 56258; Southwest Regional Development Commission

3 Star(s) Action 4: Identify, prioritize and remedy complete streets gaps and lack of connectivity/safety within your road network by, for example, adding a bike route/lane, truck route, sidewalk or mid-block alley.

Date action report first entered: 01/26/2016

Implementation details:

In an effort to improve connectivity and safety for bicyclists and pedestrians, the City of Marshall has solicited public input and formed new partnerships to increase the number of bike lanes, miles off-street paved trails, and make connections between the other cities and regional parks. With assistance from the Southwest Regional Development Commission a Health Impact Assessment was conducted in 2015 which provided information about sidewalk and trail gas as well as problem intersections.

Outcome measures/metrics:

Main Street Reconstruction of twelve blocks of sidewalks 2016 – replacing deteriorated pedestrian sidewalks after MNDOT improvements of ADA ramps at all intersections in 2015. 12.73 miles of painted bike lanes with signs to improve drivers awareness of cyclists and provide designated cycling lanes. 14.34 miles of paved off-street bike trails to connect all major areas of the city. Reconstruction of Trails – Holy Redeemer & Avera. Unprecedented partnership between the City of Marshall, Lyon County, City of Lynd and Minnesota Department of Natural Resources to share financial resources and in-kind staff contributions to construct a paved off-highway trail to connect Marshall, Lynd and Camden State Park (14 miles completed in fall of 2015). Safe Routes to School Planning Grant 2016 application with the following partners: Marshall Middle School, West Side School, Marshall Area Christian School, Holy Redeemer, Park Side School.

Descriptive links:

[view file](#)

For more information contact:

Ben Martig (City staff) | Ben.Martig@ci.marshall.mn.us | 507-537-6760

Partners:

City of Marshall, City of Lynd, Minnesota Department of Natural Resources, Camden State Park Staff, Lyon County, Marshall Public Schools

3 Star(s) Action 5: Identify and remedy street-trail gaps between city streets and off-road trails/bike trails to better facilitate walking and biking.

Date action report first entered: 01/26/2016

Implementation details:

If you look at a Minnesota map of paved bike trails you will notice that southwest Minnesota clearly has fewer trails than most other areas of the state. For the past 25+ years there has been a vision for a paved bike trail that would connect Marshall with Camden State Park. The 14 mile trail was finally completed in 2015 due to an historical partnership between the City of Marshall, Lyon County, City of Lynd, Minnesota Department of Natural Resources, and Minnesota Department of Transportation.

Outcome measures/metrics:

\$2.6 million in Legacy Funds Secured. Financial and In-kind contributions from City of Marshall, City of Lynd and Lyon County. 14 mile section of trail completed that connects 2 cities and a Minnesota State Park.

Descriptive links:

<http://www.marshallindependent.com/page/content.detail/id/568921/City--county--state-hail-the-trail.html?nav=5015>

For more information contact:

Ben Martig (City staff) | Ben.Martig@ci.marshall.mn.us | 507-537-6760

Partners:

City of Marshall, City of Lynd, Minnesota Department of Natural Resources, Lyon County, Camden State Park Staff

Mobility Options { BP no. 12 }

3 Star(s) Action 1: Increase walking, biking and transit use by one or more of the following means:

- a. Produce/distribute route maps, signage or a web site.**
- b. Document increased bike facilities, such as racks, bike stations or showers.**
- c. Add bus infrastructure, such as signage, benches, shelters, park and ride lots, and real-time arrival data-streaming.**
- d. Increase the number of employers promoting multiple commuting options, including offering qualified transportation fringe benefits instead of only a tax-free parking fringe benefit.**
- e. Be recognized as a Walk Friendly or Bicycle Friendly Community.**

Date action report first entered: 08/22/2012

Implementation details:

Pioneering a Healthier Marshall in conjunction with the City of Marshall has developed and distributed updated maps to encourage walking and biking. There are also several kiosks located on the trail system to promote trail use.

Outcome measures/metrics:

Trail maps are available at city offices, the chamber of commerce, community businesses, trail kiosks and the city website. Bike racks have been expanded and include locations at: Aquatic Center, all public and private schools, all city parks, 3 downtown locations, city/county library, and Southwest Minnesota State University. Marshall was selected as the first MN city destination as part of the Tour de Kota cycling event in 2012 because of its reputation as a bike friendly community.

Descriptive links:

<http://www.swmnbiking.com/main/>

For more information contact:

Cindy Rosa (Community volunteer) | cindyr@marshallareaymca.org | 507-532-9622

Partners:

Pioneering a Healthier Marshall

1 Star(s) Action 3: Prominently identify mobility options : transit; paratransit/Dial-A-Ride; ridesharing/cab services; rental cars; bikes.

Date action report first entered: 08/22/2012

Implementation details:

The Marshall Visitors and Conventions Bureau home page has a link for various transportation options and Western Community Action, Inc. has specific route information available on their site as well. The bus service website is also prominently linked on the Marshall city homepage.

Outcome measures/metrics:

Link on the page have contact information, costs and schedules for Bus Service, Taxi, Car Rental and Aviation options.

Descriptive links:

<http://www.wcainc.org/transit/>

For more information contact:

Linda Erb (City staff) | info@GoMarshall.net | 507-537-1865

Partners:

Marshall Visitors and Convention Bureau

Environmental Management

Sustainable Purchasing { BP no. 15 }

1 Star(s) Action 1: Adopt a sustainable purchasing policy or administrative guidelines/practices directing that the city purchase at least:

- a. EnergyStar certified equipment and appliances and**
- b. Paper containing at least 30% post-consumer recycled content.**

Date action report first entered: 03/29/2016

Implementation details:

The City of Marshall has an administrative practice of purchasing Energy Star rated equipment and appliances, whenever they are available. Several years ago they started to move toward using recycled paper in their printers and copiers, but had some negative experiences with dust, jamming and warranty issues. Knowing that the quality of recycled paper has improved, they are committed to move forward with utilizing at least 30% post-recycled content paper and are soliciting feedback from other GreenStep Cities to see what brands they are using, what experiences they have had over the years, and any other recommendations that Marshall should consider. Once a cost effective and proven brand has been identified it will be tested in several printer/copiers for reliability. At that time Marshall will adopt guidelines to purchase at least 30% post-recycled content paper along with their current commitment to buy energy star rated equipment.

Outcome measures/metrics:

Monthly tracking of print and copy jobs processed with a goal of lowering paper consumption over time.

Descriptive links:

For more information contact:

Ben Martig (City staff) | Ben.Martig@ci.marshall.mn.us | 507-537-6760

Partners:

Marshall GreenStep Committee

2 Star(s) Action 2: Purchase energy used by city government - via green tags, community solar garden, 3rd party - with a higher renewable percentage than required by Minnesota law.

Date action report first entered: 04/16/2013

Implementation details:

The City of Marshall receives its power from Marshall Municipal Utility. Currently 15% of our electricity comes from wind resources and 17% is supplied by hydropower. Overall, renewable energy supplies 32% of total purchases by the City of Marshall.

Outcome measures/metrics:

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities

2 Star(s) Action 7: Lower the environmental footprint of meetings and events in the city.

Date action report first entered: 08/22/2012

Implementation details:

Tour de Kota bicycle event hosted nearly 400 bicyclists in June 2012 and was our first GreenStep City event. Marshall City Council meetings have adopted a paper-less meeting program.

Outcome measures/metrics:

Implemented the following green practices: -Refilling water stations eliminated plastic bottles. -Reduced printed material by developing a weblink and the use of QR codes for smartphones. -Recycling and waste stations located throughout campground. -Reusable signs for future events. -Posted event schedules vs. printed handouts. Marshall City Council meetings have lowered their environmental footprint by going paperless.

Descriptive links:

<http://council.marshallmn.com/>

For more information contact:

Tom Hoff (Contractor) | Tom.Hoff@swsc.org | 507-537-2271

Partners:

Marshall Chamber of Commerce, Visitors and Conventions Bureau, Marshall Public Schools, Public Safety

Urban Forests and Soils { BP no. 16 }

1 Star(s) Action 1: Certify as a Tree City USA.

Date action report first entered: 07/13/2015

Implementation details:

The City of Marshall has been recognized as a 2014 Tree City USA. This is a national recognition program of the Arbor Day Foundation that awards communities that meet the four core standards of urban forestry management. These standards are: maintaining a tree board or department, having a tree ordinance, spending at least \$2 per capita on urban forestry and the celebration of Arbor Day. Tree Board or Department: Glenn Olson, the Director of Public Works and Zoning Administrator, serves as this position for the City of Marshall. Tree Ordinance: A tree ordinance was established in Marshall on November 11, 1997. It can be found in Chapter 82 -Vegetation, Sections 82-1 and 82:21-33. Tree Expenses: The population of Marshall is 13,700 and in 2014, the total forestry expenditure was \$104,980. The expenses per capita were \$7.66. Arbor Day Celebration: Mayor Robert Byrnes proclaimed May 1, 2014 as Arbor Day. As an Arbor Day celebration, Marshall High School students planted trees near the athletic fields on school grounds.

Outcome measures/metrics:

The Tree City USA award was presented to the City of Marshall at a City Council meeting on May 12, 2015. High school students planted dozens of new trees near the school on May 5, 2015 which was part of the Arbor Day celebration.

Descriptive links:

[view file](#)

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

Partners:

City of Marshall; Marshall GreenStep Committee; Marshall Municipal Utilities

2 Star(s) Action 4: Maximize tree planting along your main downtown street or throughout the city.

Date action report first entered: 07/14/2015

Implementation details:

The City of Marshall has enacted a landscape ordinance that requires specific green space and tree plantings within developments. A copy is available on the City website. The landscaping ordinance is reviewed with all proposed development submissions. The ordinance specifies the rate of trees per square foot of exposed ground, per foot of lot street frontage, multiple species and disease resistance requirements, etc. The City has its own tree farm that includes a wide variety of evergreen and deciduous species and uses the trees throughout the City for replacements and new developments. Marshall Municipal Utilities invests in tree planting and sells trees at low prices to customers to be planted within the community.

Outcome measures/metrics:

In the five block stretch of Marshall's Downtown Main Street retail district there are 63 boulevard trees with an average spacing of 30 feet between them. Marshall's tree farm has over 600 trees located in three locations in the City. Marshall Municipal Utilities plants between 150 and 200 trees each year and sells an additional 400 per year to its customers for planting. The City of Marshall plants about 300 trees per year.

Descriptive links:

https://www.municode.com/library/mn/marshall/codes/code_of_ordinances

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

Partners:

City of Marshall; Marshall Municipal Utilities

Stormwater Management { BP no. 17 }

3 Star(s) Action 4: Create a stormwater utility that uses variable fees to incentivize enhanced stormwater management, minimize the volume of and pollutants in runoff, and educate property owners.

Date action report first entered: 04/06/2016

Implementation details:

The City of Marshall has a Surface Water Management Utility as identified by Chapter 78, Article III. of the City Code of Ordinances. The fees are variable and dependent upon land use and land size. Revenues derived from the utility are dedicated to the construction, maintenance, and operation of the storm sewer drainage system and for education of stormwater best practices.

Outcome measures/metrics:

University, high school, and middle school students monitor Redwood River water quality, as it enters and leaves the City of Marshall. Information gained is entered into the World Water Monitoring Database, and shared with City leaders and the Minnesota Pollution Control Agency.
<http://marshallindependent.com/page/content.detail/id/560506/Just-testing-the-waters.html?nav=5015>

Descriptive links:

www.municode.com/library/mn/marshall/codes/code_of_ordinances

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

Partners:

Marshall Municipal Utilities, Marshall GreenStep Committee, Southwest Minnesota State University, Marshall Public School, Minnesota Pollution Control Agency

Parks and Trails { BP no. 18 }

3 Star(s) Action 1: Make improvements within your city's system of parks, offroad trails and open spaces.

Date action report first entered: 01/26/2016

Implementation details:

In the past 5 years the City of Marshall has completed a comprehensive analysis of biking and walking paths in an effort to improve safety and connectivity. During this time the number of miles of paved trails has more than doubled. As part of this effort a Health Impact Assessment was conducted (see attached) through community surveys and listening sessions. A report of the Health Impact Assessment findings were presented to the Marshall City Council.

Outcome measures/metrics:

Reduced conflict intersection and pedestrian overpass (\$5.4 million) 2016 completion (access to residential and Marshall Middle School), Pedestrian Underpass (\$1.1 million) Connecting Southwest Minnesota State University, Marshall High School and the Amateur Sports Center under four lane interregional corridor (Minnesota Highway 23), Windstar Street pedestrian access from residential neighborhood to developing commercial area. Downtown bike path and pedestrian connection from downtown to YMCA, dog park, Library and the Marshall Middle School. 12.73 miles of on-street bike paths and 14.34 miles of off-street bike paths. Completion of off-street paved bike path connecting the City of Marshall, City of Lynd and Camden State Park (14 miles)

Descriptive links:

<http://swmnrider.com/main/index.php/biking.html>

[view file](#)

For more information contact:

Ben Martig (City staff) | Ben.Martig@ci.marshall.mn.us | 507-537-6760

Partners:

City of Marshall, City of Lynd, Minnesota Department of Natural Resources, Lyon County, Camden State Park Staff

3 Star(s) Action 5: Create park/city land management standards/practices that maximize at least one of the following:

a. Low maintenance turf management; native landscaping; organic or integrated pest management; pollinator/monarch-safe policies.

b. Recycling/compostables collection; use of compost as a soil amendment.

c. Sources of nonpotable water, or surface/rain water, for irrigation.

Date action report first entered: 01/29/2016

Implementation details:

Marshall Minnesota was officially designated as a Minnesota Amateur Regional Sports Center in 2008. Since that time the city has successfully lobbied for \$4 million in state bonding and passed a 1.5 percent lodging/food & beverage tax as well as a .5 percent general sales tax to fund construction of 4 competition baseball/softball field, improve existing soccer fields and the building of a two sheet ice arena. Keeping the grass on baseball and soccer fields in competition condition requires enormous volumes of water for irrigation. To reduce the use of city water and reduce the amount of water flowing into the stormwater system, a holding pond was constructed near the sports complex that will hold approximately 13.5 million gallons of water when it is filled to the normal water level. Additionally, the newly constructed baseball/softball fields have tiled infields, so the excess water is collected and flows directly into the holding pond, which can be used for irrigation at a later time.

Outcome measures/metrics:

One pond was constructed with capacity for 13.5 million gallons of water up to the normal water level. Up to 10 million gallons of water could be available to baseball/softball diamonds and soccer fields. The City anticipates using approximately 1.7 million gallons of water per month for irrigation at the complex. If the City had to purchase this water from the local utility, it would cost over \$10,000 per month to irrigate at the above stated rate.

Descriptive links:

<http://www.marshallindependent.com/page/content.detail/id/573900/The-MARSH-is-launched.html?nav=5015>

For more information contact:

Glenn Olson (City staff) | Glenn.Olson@ci.marshall.mn.com | 507-537-6773

Partners:

City of Marshall, Marshall Public School, Southwest Amateur Sports Commission

3 Star(s) Action 8: Develop a program to involve community members in hands-on land restoration and stewardship projects.

Date action report first entered: 03/29/2016

Implementation details:

In an effort to educate and engage community members about the problem of trash in the City, the Marshall GreenStep City Clean-up Day was established in 2013. The event occurs annually during Earth Day (week) and involves clean-up of parks, waterways and empty lots in the City of Marshall. In 2016 the event will expand beyond the clean-up of problem areas to help people recycle or properly dispose of common items in their homes (car batteries, mattresses, appliances, old paint, electronics, clothing, household items, etc.)

Outcome measures/metrics:

In 2016 868 pounds of trash were picked up in 15 problem areas in the city by 327 volunteers. Total volunteer hours equaled 8,127 hours. The trash from one lot was analyzed for content and to serve as a baseline for future years. That one lot had 7 lbs of plastic shopping bags (359 bags). Meetings were held with area businesses to determine management plans for reducing the blowing of trash in the community.

Descriptive links:

[view file](#)

For more information contact:

Tom Hoff (Contractor) | Tom.Hoff@swsc.org | 507-537-2271

Partners:

Marshall Public Schools; Marshall GreenStep; Cultures United; Southwest Minnesota State University; Marshall Fire Department; Holy Redeemer School; SMSU Enactus: Sentence to Serve; Karen Organization

Resilient Economic & Community Development

Benchmarks and Community Engagement { BP no. 24 }

3 Star(s) Action 1: Use a city commission, or committee to lead, coordinate, and report to and engage community members on implementation of sustainability best practices.

Date action report first entered: 07/14/2015

Implementation details:

In 2011 a group of public and private citizens began meeting to discuss environmental challenges in the City of Marshall. On April 26, 2012 the Marshall City Council officially designated the group as the Marshall GreenStep Committee. The committee is comprised of city staff, private business owners, agencies, and concerned citizens. They meet monthly to share information and work on various GreenStep Best Practices. Prioritization and completion of Best Practices are coordinated with city leadership and departments. Information about the GreenStep activities and Best Practice accomplishments is shared through newspaper articles, links from the City and Chamber websites, and frequent presentations to the City Council/Rotary/Kiwanis.

Outcome measures/metrics:

Two to three newspaper articles per year on Marshall GreenStep activities. Weekly links from the Chamber newsletter to the Marshall GreenStep web page. One to two presentations to the Marshall City Council each year. Two to three presentations to the Marshall Rotary and Kiwanis clubs each year. The Marshall GreenStep page has a direct link to the Marshall page on the Minnesota GreenStep Cities website so anyone can see the Best Practices completed.

Descriptive links:

<http://www.marshallgreenstep.org/>

For more information contact:

Tom Hoff (Contractor) | Tom.Hoff@swsc.org | 507-537-2271

Partners:

Marshall GreenStep Committee, City of Marshall, Marshall Municipal Utilities, Lyon County Recycling

1 Star(s) Action 2: Organize goals/outcome measures from all city plans and report to community members data that show progress toward meeting these goals.

Date action report first entered: 03/29/2016

Implementation details:

Reporting on all city goals and significant initiatives are available via video on <http://marshallstudio1tv.com> All City Council Meetings are also available via video at this same site. Reports, such as the Annual Finance Report and Economic Development Report are available at www.ci.marshall.mn.us Community members are invited to an annual Lyon County Summit, which is organized by the City of Marshall and Lyon County Economic Development to report on city goals/accomplishments and to discuss upcoming projects. The event is MC'd by the Mayor and other City leaders. Highlights can be seen at https://www.youtube.com/watch?v=MybK5H_Tllc

Outcome measures/metrics:

All project information and reports are available to community members via video and hard copy at the City website and on the Studio 1cable access channel

Descriptive links:

<http://marshallstudio1tv.com>

For more information contact:

Ben Martig (City staff) | Ben.Martig@ci.marshall.mn.us | 507-537-6760

**Partners:
Discover Southwest Minnesota**

Green Business Development { BP no. 25 }

2 Star(s) Action 6: Promote green businesses that are recognized under a local, regional or national program.

Date action report first entered: 04/17/2013

Implementation details:

The Marshall GreenStep Committee worked on a Marshall GreenStep Business Program in the fall of 2012 and implemented the program in January 2013. The program was based on Minnesota GreenStep Cities Best Practices and various formats from around the United States. The program has been advertised frequently in chamber newsletters and in newspaper articles. Businesses must submit an online application that totals at least 15 points in categories such as Solid Waste Prevention, Recycling, Purchasing, Energy and Water Conservation, Involving Employees and Customers, and Transportation. Completed applications are reviewed by the Marshall GreenStep Committee each month.

Outcome measures/metrics:

Marshall GreenStep Businesses are recognized each month in the Marshall Independent Business Briefs and on our website. Each business also receives a Marshall GreenStep Business window cling and permission to use the logo in their marketing materials. For a complete list of GreenStep businesses go to our website at: www.marshallgreenstep.org

Descriptive links:

<http://www.marshallgreenstep.org/green-business.html>

[view file](#)

For more information contact:

Tom Hoff (Contractor) | Tom.Hoff@swsc.org | 507-537-2271

**Partners:
Marshall Area Chamber of Commerce; Marshall GreenStep Committee**

3 Star(s) Action 7: Conduct or participate in a buy local campaign for community members and local businesses.

Date action report first entered: 04/16/2013

Implementation details:

The Marshall Area Chamber of Commerce has established a "Shop Local" campaign that provides information to the residents of Marshall and the business community. The information focuses on the Economic Growth Opportunity, and Community Benefits of shopping local. Information is presented through the local media (monthly full page news ads) and presentations are provided to various community groups throughout the year. Some strategies that are implemented as part of the campaign are: Use of Chamber Gift Checks as gifts that can only be redeemed locally and a low cost coupon book that features local businesses.

Outcome measures/metrics:

700 Chamber Saver Coupon Books sold for \$25 each that provide over \$400 in savings per book. Over \$100,000 in Chamber Gift Checks sold annually that are redeemable at over 380 local businesses. Three new local taxes that were approved by voters in November 2012 rely on shopping local to fund two important economic generators in the community: MERIT Center and the SW MN Amateur Sports Center.

Descriptive links:

<http://www.marshall-mn.org/index.php/programs/shoplocal>

For more information contact:

Erin Raveling (City staff) | erinr@marshall-mn.org | 507- 532-4484

**Partners:
Marshall Area Chamber of Commerce**

Renewable Energy { BP no. 26 }

2 Star(s) Action 2: Consistently promote resident/business purchases/generation of clean energy by means of:

a. A local utility's green power purchasing program that allows residents/businesses to order/buy new renewable energy.

b. Local, state and federal financial incentives for property owners to install renewable energy systems.

Date action report first entered: 08/29/2012

Implementation details:

Electricity for the City of Marshall is provided by Marshall Municipal Utilities which has various purchase power contracts in place. Renewable purchases for 2011 consisted of 10.25% wind energy and 19.7% hydro power. The City of Marshall has established Wind Energy Conversion System and Solar Ordinances, and Marshall Municipal Utilities has adopted a Distributed Generation Interconnection Workbook to provide guidance and direction to potential renewable energy systems in Marshall. Marshall Municipal Utilities offers rebates for Solar Thermal Water Heating Systems. A local business has installed a new 28.8 kW solar PV system on its new office building which has been highlighted in various ways.

Outcome measures/metrics:

Long term wind and hydro power contracts will provide the City of Marshall with renewable energy for many years. A new hydro electric power plant being built near Pella, Iowa will add additional hydro electric power to our resource mix beginning in 2016.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities

3 Star(s) Action 5: Install a public sector/municipally-owned renewable energy technology, such as solar electric (PV), biomass, solar hot water/air, micro-hydro or wind.

Date action report first entered: 08/29/2012

Implementation details:

Marshall Municipal Utilities entered into a joint partnership with its wholesale power provider and a private developer to construct 18.7 MW of wind generation near Marshall in 2007. The 9 wind turbines generation output is fed directly into MMU s distribution system.

Outcome measures/metrics:

Annual kWh production from the 9 turbines is approximately 62,640,000 kWh s, enough energy to power about 5,800 homes per year. Marshall Municipal utilities has a 20 year contract in place to receive a portion of the turbines output.

Descriptive links:

For more information contact:

Mark Antony (City staff) | MarkA@marshallutilities.com | (507) 537-7005

Partners:

Marshall Municipal Utilities

Local Food { BP no. 27 }

2 Star(s) Action 2: Facilitate creation of home/community gardens, chicken & bee keeping, and incorporation of food growing areas/access in multifamily residential developments.

Date action report first entered: 08/27/2012

Implementation details:

Community Blooms is a transformative model of community gardening that creates community, provides affordable nutritious food to participants, gives back to the community by providing surplus produce to the local free food shelf, and generates revenue to sustain the garden by also selling some of the surplus produce at the local farmer s market. The community gardens are located on Western Community Action grounds which are located directly across the street from a low-income trailer park. The goals of Community Blooms include: grow nutritious affordable food for participants from low-income neighborhood, reduce the number of missed meals among low-income people, increase the family budget by reducing money expended on produce, be a catalyst for community development. Future expansion includes a water reclamation pond to recycle water from the parking lot and roof as well as a hoop house for extending the growing season and starting our own seedlings.

Outcome measures/metrics:

The total number of participants in its first year included 69 adults and 29 children and the second year had 64 adults and 31 children. The size of the garden is 280 X 140 and has been planted using a surplus style of arranging plants.

Descriptive links:

<http://www.marshallindependent.com/page/content.detail/id/534638/Putting-water-to-work.html?nav=5023>

For more information contact:

Allan Bakke (Community volunteer) | allan.bakke@wcainc.org | 507-537-1416

Partners:
Western Community Action

1 Star(s) Action 3: Create, assist with and promote local food production/distribution within the city:

a. A farmer's market or co-op buying club.

b. An urban agriculture business or a community-supported agriculture (CSA) arrangement between farmers and community members/employees.

c. A community or school garden, orchard or forest.

Date action report first entered: 08/22/2012

Implementation details:

Marshall has a Farmers Market that provides diverse local foods during the growing season near downtown. Marshall Area Christian School, Holy Redeemer School and Marshall Public School participate in the Farm to School Program. Community Members can rent a small plot of land that they can plant and tend throughout the growing season. Marshall Area Food Coop provides food service directors, restaurants, grocery stores and community members an ordering system with access to local producers.

Outcome measures/metrics:

The Farmer's Market has 50+ sellers each Saturday morning and Thursday evening July to October. 75% of food for MACS school lunch program is organic and local (less than 1 hour away). The Marshall Area Food Coop has produced a catalog of local growers for SW Minnesota. It is also online at: www.marshallareafoodcoop.com Marshall Community Services has 54 plots (25 X 57), each rented individually each season for \$30. They are highly sought after and we have a waiting list every year. The rental fee covers two tillings (spring and fall) and access to water. Individual renters are responsible for care and cleaning of gardens throughout the growing season. There are expansion plans for 2013.

Descriptive links:

www.marshallareafoodcoop.com

For more information contact:

Tom Hoff (Contractor) | Tom.Hoff@swsc.org | 507-537-2271

Partners:
Marshall Area Christian School

Climate Adaptation and Community Resilience { BP no. 29 }

1 Star(s) Action 1: Prepare to maintain public health and safety during extreme weather and climate-change-related events, while also taking a preventive approach to reduce risk for community members.

Date action report first entered: 03/29/2016

Implementation details:

The Lyon County Hazard Mitigation Plan documents the multi-jurisdictional, multi-hazard mitigation planning process in Lyon County, Minnesota, which is intended to meet the requirements of the federal Disaster Mitigation Act of 2000. The Lyon County All-Hazard Mitigation Plan brings resources together to mitigate and respond to hazards, protecting public health, safety and welfare in a useful and easily understood all-hazards approach. This project was undertaken so that all local units of government in Lyon County that wished to participate could become eligible to adopt the plan. All cities participated in Lyon County's hazard mitigation planning process: Balaton, Cottonwood, Florence, Garvin, Ghent, Lynd, Marshall, Minneota, Russell, Taunton, and Tracy. The Lyon County All-Hazard Mitigation Planning Team, comprised of a number of stakeholders, identified the natural hazards which are High Rank Hazards for Lyon County. This planning process was conducted by the Southwest Regional Development Commission (SRDC) and Lyon County Emergency Management. Lyon County utilizes the CodeRed Community Notification System that provides emergency notification to residents and businesses. Climate related warnings and instructions related to severe weather, lightning, hail, floods, tornadoes and extreme heat would be distributed by telephone, cell phone, text message, email, and social media. The City of Marshall's Emergency Operations Plan was updated in 2015 and approved at the February 10, 2015 City Council Meeting. The Emergency Operations Plan (EOP) to guide the City's response plans for major natural disasters (i.e., floods, tornadoes, storms, etc.) or man-made events. The Police Department on behalf of the Mayor has primary responsibility in the City of Marshall for emergency preparedness and has recently finished revising the plan. It is all-hazards and incident command based following the NIMS national framework. This is a living document both expanding to address areas that it doesn't provide at this time and to reflect future environmental changes. This has been extensively reviewed by senior city staff and community members with an interest in emergency preparedness, through the community emergency preparedness planning group.

Outcome measures/metrics:

The City of Marshall Emergency Operations Plan was updated in 2015 The Lyon County Hazard Mitigation Plan is being updated in 2016. A Climate Resilience Workshop, like the one held in Burnsville, MN is being discussed for agencies in southwest Minnesota.

Descriptive links:

<http://www.lyonco.org/attachments/article/212/Lyon%20County%20AHMP%202010.pdf>

For more information contact:

Rob Yant (City staff) | rob.yant@ci.marshall.mn.us | 507-537-7000

Partners:
Lyon County; City of Marshall Administrative Divisions; Southwest Regional Development Commission; Law Enforcement; Minnesota Pollution Control; Emergency Preparations Planning Group; Marshall Fire Department; Red Cross

