

GreenStep Cities Best Practices
Environmental Management Actions
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www.MnGreenSteps.org

15. Purchasing: Adopt an environmentally preferable purchasing policy.

Best Practice Actions

- All cities must implement this best practice by completing Action (1).
 - Category B and C cities must also complete at least one additional Action.
- (1) Adopt a policy directing that the city purchase only:
 - a. EnergyStar certified equipment and appliances and
 - b. Paper containing at least 30% post-consumer recycled content.
 - (2) Purchase 15% of city energy requirements from renewable energy sources.
 - (3) Establish a local purchasing preference and, working with a local business association, develop a list of locally-produced products and suppliers for common purchases.
 - (4) Set a standard requiring purchase of U.S. EPA Water Sense-certified products.
 - (5) Set minimum standards for the percentage of recycled-content material in at least 5 products typically purchased by the city, such as asphalt and roadbed aggregate.
 - (6) Require printing services to be purchased from companies certified by Minnesota Great Printers or by the Sustainable Green Printing Partnership.
 - (7) Specify the use of state and national green standards/guidelines for at least 3 of the following categories of purchasing:
 - a. Events
 - b. Electronics
 - c. Wood products
 - d. Organic food
 - e. Cleaning products
 - f. Paints, coatings and adhesives
 - g. Carpets
 - h. Furniture
 - i. Paper products

Note related best practices: *Efficient City Fleets*, *New Green Buildings*, and *Renewable Energy*.

16. UrbanForests: Increase city tree and plant cover.

Best Practice Actions

- Category C cities must implement this best practice by completing at least two Actions.
 - Category B cities must implement this best practice by completing at least one Action.
 - Category A cities, if they choose to implement this best practice, must complete at least one Action.
- (1) Qualify as a Tree City USA.

- (2) Adopt as policy MN Tree Trusts' *Best Practices* and use the guidelines in at least one development project to achieve an excellent an exemplary rating.
- (3) Budget tree installation and maintenance to, within 15 years, achieve the following tree canopy shading for streets, sidewalks and parking lots in the following zoning districts:
 - a. At least 25% for industrial and commercial zoning.
 - b. At least 75% for residential zoning.
- (4) Maximize tree planting along your main downtown street.
- (5) Adopt at least two of the following ordinances/policies:
 - a. Adopt a policy of no net loss of specified natural landscapes.
 - b. Adopt a policy relating to replacement of trees on public, or on public and private, property.
 - c. Adopt landscaping/nuisance ordinances that promote, rather than create barriers for, native vegetation.

See the related *Complete Green Streets* best practice for street tree standards, the *Stormwater Management* best practice for greening parking lots, and the *Conservation Design* best practice for addressing woodlands, native upland plant communities, wildlife, and steep slopes and bluffs.

17. Efficient Stormwater Management: Prevent stormwater generation.

Best Practice Actions

- Category C cities must implement this best practice by completing at least one of the following Actions.
 - Category A and B cities must complete at least two of the following actions if they choose to implement this best practice.
- (1) Complete the Blue Star City stormwater management assessment and achieve a minimum threshold of specific activities detailed in this program.
 - (2) Adopt by ordinance one or more of the following:
 - a. A narrower streets provision allowing 22-foot roads.
 - b. A 1.5 inch rainfall on-site rainwater infiltration design requirement for construction sites.
 - c. A 25% impervious surface area maximum provision (% of a new development project area).
 - d. A stormwater runoff volume limit to pre-development volumes for the 5-year, 24-hour rainfall maximum event.
 - (3) Maintain less than 12% impermeable surfaces in the watershed in which the city lies.
 - (4) Create a stormwater utility, which uses variable fees to incentivize stormwater reduction and fund community stormwater infrastructure and assistance.
 - (5) Adopt and implement design standards or guidelines for renovations or new construction in the city addressing at least one of the following:
 - a. Rain gardens.
 - b. Green roofs with or without cisterns and water/greywater reuse systems.
 - c. Green alleys.
 - d. Green parking lots.
 - (6) Adopt, with modifications as needed, the model *Stormwater and Erosion and Sediment Control Ordinance*.

18. Green Infrastructure: Enhance city parks and trails.

Best Practice Actions

- Category A cities that choose to implement this best practice must complete at least one Action.
 - Category B cities that choose to implement this best practice must complete at least two Actions.
 - Category C cities that choose to implement this best practice must complete at least three Actions.
- (1) Identify gaps and connectivity breaks in your city's system of parks, trails and open spaces, and remedy at least one of them.
 - (2) Plan and budget for a network of parks, green spaces, water features and trails in all new development areas.
 - (3) Achieve a threshold of at least 20% of total city land area in protected green infrastructure (parks and protected natural resource areas and trails).
 - (4) Document that all residents are within a ½ mile of a park or protected green space.
 - (5) Adopt low-impact design standards in parks and trails that infiltrate or retain all 2 inch, 24-hour stormwater events on site.
 - (6) Create park management standards that maximize at least one of the following:
 - a. Low maintenance native landscaping.
 - b. Organic or integrated pest management.
 - c. Sources of non-potable water for irrigation.
 - (7) Certify at least one golf course in the Audubon Cooperative Sanctuary Program for Golf Courses.
 - (8) Construct all new park buildings to a green building standard, with special attention to highlighting and educating around the green features.
 - (9) Develop a program to involve community members in land restoration and stewardship.

19. Surface Water Quality: Improve local water bodies.

Best Practice Actions

- Any city that has at least one state-designated public water body within its boundaries must, if it chooses to implement this best practice, complete Action (4) and at least one additional Action.
 - All cities that have no state-designated public water bodies and that choose to implement this best practice must complete at least one of the following Actions.
- (1) Assist at least one lake or river association to earn the Star Lake/River designation for their lake/river.
 - (2) Assist at least one lake or river association to become Star Lake/River-ready by achieving nearly all of the program requirements.
 - (3) Work with other organizations to support citizen education about and involvement with actions to attain measurable, publicly announced lake, stream and wetland health improvement targets adopted by the city council and reported on each year.
 - (4) Adopt a shoreland ordinance consistent with MN Dept. of Natural Resources rules as modified.

20. Efficient Water and Wastewater Facilities: Assess and improve drinking water and wastewater facilities.

Best Practice Actions

- Category B and C cities, if they choose to implement this best practice, must complete Actions (1) and (2) and at least one additional Action.
 - Should a Category A city provide drinking water services and choose to implement this best practice, complete Actions (1) and (2) and/or Action (4).
- (1) Compare the energy use and performance of your facilities with other peer plants using standardized, free tools.
 - (2) Plan and budget for motor maintenance and upgrades so as to assure the most energy efficient, durable and appropriate equipment is available when upgrades or break downs occur.
 - (3) Establish an on-going budget and program for decreasing inflow and infiltration into sewer lines, involving at least gutter, foundation drains and sump pump disconnects.
 - (4) Assess energy and chemicals use, inflow and infiltration volumes, water reuse potential and pollutants, and implement one-third of recommendations with a payback of less than 3 years.
 - (5) Require property owners to have their private sanitary sewer lateral pipe inspected before a property sale or title transfer.
 - (6) Implement at least one of the following projects/programs:
 - a. Assist local businesses, institutions and/or residents in pre-treating and lowering volumes and toxicity of sewer inflows.
 - b. Co-generate electricity and heat from the wastewater treatment plant.
 - c. Reuse water (sell reclaimed water) from a wastewater plant for nonpotable ag-processing, irrigation or power plant uses.
 - d. A greywater reuse system in at least one public or private building.

21. Septic Systems: Implement an effective management program for decentralized wastewater treatment systems.

Best Practice Actions

- A city that chooses to implement this best practice must complete at least one of the Actions below.
- (1) Document noncompliant or failing septic systems and report that to landowners as part of an educational, informational and financial assistance and outreach program designed to trigger voluntary landowner action to improve septic systems.
 - (2) Create a program that follows the five-step process for addressing failing septic systems developed by the University of Minnesota's Onsite Sewage Treatment Program.
 - (3) Implement one or more organizational options for the proper design, siting, installation, operation, monitoring and maintenance of septic systems.
 - (4) Adopt a Subsurface Sewage Treatment System ordinance based on the Association of Minnesota Counties model ordinance template.
 - (5) Create a program to finance septic systems upgrades through, for example, a city revenue bond, repayable through taxpayers' property taxes.

- (6) Work with homeowners and businesses in environmentally sensitive areas and areas where standard septic systems are not the least-cost option to promote innovative waste water systems.
- (7) Arrange for assistance to commercial, retail and industrial businesses with water use reduction, pollution prevention and pretreatment prior to discharge to septics.

22. **Solid Waste: Increase waste reduction, reuse and recycling.**

Best Practice Actions

- Category A cities must complete at least one Action if they choose to implement this best practice.
 - Category B cities must complete at least one of Actions (1) through (4), and at least one of Actions (5) through (9) if they choose to implement this best practice.
 - Category C cities must complete at least Action (1) or (2) and at least one of Actions (5) through (9) if they choose to implement this best practice.
- (1) Adopt percentage reduction goals for waste and toxicity generated from city operations (including schools, libraries, parks, municipal health care facilities). Accomplish reduction goals in at least three of the following areas:
 - a. Overall waste generation.
 - b. Paper use and junk mail.
 - c. Pesticide/herbicide use.
 - d. Water use/waste water generation.
 - (2) Adopt and meet aggressive goals for the overall percentage diversion of currently disposed waste from city operations into recycling and organics collection.
 - (3) Document signing of at least one resource management contract with a waste hauler for one or more of:
 - a. City government operations.
 - b. Schools, libraries, parks, or municipal health care facilities.
 - c. A commercial or industrial business.
 - (4) Publicize, promote and use the varied businesses collecting and marketing used and repaired consumer goods in the city/county.
 - (5) Arrange for a residential or business/institutional organics collection/management program (food-to-people, food-to-animals, composting, anaerobic digestion, and backyard composting).
 - (6) Organize residential solid waste collection by private and/or public operations to accomplish multiple benefits.
 - (7) For cities that provide direct or contract waste collection services, offer volume-based pricing on residential garbage and/or feebates on recycling so that the price differences are large enough to increase recycling/composting but not illegal dumping.
 - (8) Adopt a construction and demolition ordinance for projects over a specified size that mandates levels of recycling and reuse for materials and soil/land-clearing debris and is tied to demolition permits.

See the related *Environmental Purchasing* best practice.

23. Local Air Quality: Prevent generation of local air contaminants.

Best Practice Actions

- Category A and B cities must complete at least one of the following actions if they choose to implement this best practice.
 - Category C cities must complete at least two actions if they choose to implement this action.
- (1) Conduct an education/financial assistance campaign around one of the following issues:
 - a. Indoor wood burning behavior, to ensure that wood burning is only done with seasoned wood and in a manner that doesn't negatively impact neighbors.
 - b. Indoor wood burning technology, to result in community members upgrading from inefficient/more polluting fireplaces and wood stoves to natural gas stoves and fireplaces or the most efficient certified wood stoves.
 - c. Smoker cars - older model/high polluting vehicles, to result in repairs spurred by repair vouchers.
 - (2) Regulate outdoor wood burning, using model ordinance language, performance standards and bans as appropriate, for at least one of the following:
 - a. Recreational burning.
 - b. Outdoor wood boilers.
 - (3) Conduct one or more education/behavior change campaigns on the topics below and document:
 - a. Decreased vehicle idling in specific locales or by specific fleets.
 - b. Increased sales by retail stores of low and no-VOC household products.
 - c. Replacement of gasoline-powered equipment with lower polluting equipment.
 - (4) Document the participation of at least 3 larger businesses/fleets in at least one of the following:
 - a. Clean Air Minnesota's Project GreenFleet.
 - b. U.S. EPA's SmartWay Transport program.
 - c. Installation of auxiliary power units that reduce truck and bus idling.
 - (5) Install at least two public charging stations for plug-in hybrid and full electric vehicles.

See related best practices *Renewable Energy* for community-scale biomass energy plants and *Efficient City Fleets*.