

GreenStep Cities Best Practice # 10 **- final draft for comment through May 2010 -**

❖ **Conservation Design:** Adopt development ordinances or processes that protect natural systems. **Optional** for all cities

Category: Land Use

Summary

The primary goal of conservation design is to conserve natural or economic resources or community character through low-impact development techniques and coupling development and restoration efforts. *Rural conservation design* protects agricultural practices, working forests, or open space for rural community character. *Transitional conservation design* creates a permanent urban-to-rural transition (transect) that maintains rural character and buffers rural economic uses from urban development. *Natural resource conservation design* protects or restores valuable natural systems and a community's natural resource heritage where these resources are in potential conflict with development. Conservation design actions retain or expand ecologically healthy woodlands, wetlands and open lands that sequester carbon. These actions also aim to lower development costs, decrease maintenance costs, preserve more usable natural areas, and protect surface and ground water when compared to the traditional models of development.

Best Practice Actions

- For all cities: complete at least one of the following actions if you choose to implement this best practice.
- (1) Conduct a Natural Resource Inventory and Assessment (NRI and NRA) and incorporate protection of priority natural systems or resources through the subdivision or development process, as described in Minnesota's *2009 Model Ordinances for Sustainable Development*.
 - (2) For cities outside or on the fringe of metropolitan areas, conduct a cost of public services study for development outside the city grid and adopt development standards or a concurrency ordinance to ensure staged urban growth that protects natural systems.
 - (3) For cities within metropolitan areas, incorporate by policy woodland best management practices into zoning or development review.
 - (4) For cities with undeveloped natural resource areas use, or adopt as policy the use of, a conservation design scorecard as a tool in negotiating development agreements.
 - (5) Develop and fund a conservation easement program, such as a purchase of development rights program, in collaboration with a land trust.

GreenStep Advisors

- Phil Hunsicker, 1000 Friends of MN: 218/824-5095, hunsicker@1000fom.org
- Sharon Pfeifer, MN Dept. of Natural Resources: 651/259-5790, sharon.pfeifer@dnr.state.mn.us

Implementation Resources

- (1) MN Dept. of Natural Resources NRI and NRA checklist for cities:
<http://www.dnr.state.mn.us/nrchecklists/index.html>
- (1) Natural Resource Guide: A Guide to Using Natural Resource Information in Local Decision-Making (MN DNR: 2004):
<http://files.dnr.state.mn.us/assistance/nrplanning/community/nrig/fullguide/overview.html>
- (1) *Model Community Conservation Subdivision District and Model Natural Resources Performance Standards* (Minnesota *Model Ordinances for Sustainable Development*: 2009):
<http://www.crplanning.com/susdo.htm>

- (2) *Development Impact Assessment Model: A Technical Resource* (DIAMaTR; developed by the MN Dept. of Agriculture): http://www.nextstep.state.mn.us/res_detail.cfm?id=1114
- (2) *Model Adequate Public Facilities Ordinance* (Minnesota Model Ordinances for Sustainable Development: 2009): <http://www.crplanning.com/susdo.htm>
- (3) *Conserving Wooded Areas in Developing Communities: Best Management Practices in Minnesota* (DNR: 2000) <http://www.dnr.state.mn.us/forestry/urban/bmps.html>
- (3) *Sustainable Development Principles for Protecting Nature* – 6-pages, includes implementation checklists (Chicago Wilderness:2003): <http://www.nipcc.org/environment/sustainable/content.htm>
- (4) *Conservation Design Scorecard* (North Central Lakes Collaborative: 2010): <http://www.1000fom.org/growing/lakes/conservation-design-scorecard>
- (4) *Redefining the Development Process: Choosing Collaboration over Contention to Protect Natural Resources and Maximize the Public Value of Private Development* (Brauer & Associates and Schoenbauer Consulting: 2007): http://files.dnr.state.mn.us/waters/watermgmt_section/shoreland/redefining_development_process_schoenbauer.pdf
- (4) *Growing Greener* (Randall Arendt: 2007) – free 18-page illustrated guide to creating open space networks and traditional neighborhoods through conservation design: <http://www.greenerprospects.com/products.html>
- (5) Background on conservation easements and purchase of development rights: <http://www.1000fom.org/library/fact-sheets/3>
- (5) The state-wide land trust, Minnesota Land Trust: <http://www.mnland.org>

Benefits

- Maintaining or restoring native vegetation and protecting natural systems sequesters carbon and limits the release of stored carbon.
- Well-managed open lands and rural development, whether fields, forests, agriculture lands, parks or wetlands, help sustain the community in a variety of ways, including:
 - Reduced volume of stormwater runoff, surface water pollutants and sediment
 - Enhanced groundwater recharge
 - Reduced erosion
 - Improved air quality
 - Additional wildlife habitat and recreational space
 - Preservation of rural community character
- Improved retention of housing values over time for properties near open space and functioning natural systems.
- Linking housing to green space results in increased bicycle and pedestrian travel, helping meet active living goals and encouraging non-motorized modes of travel.

Connection to State Policy

- This best practice is consistent with the goals of the MN DNR's shoreland management rules being updated, which encourage shoreland conservation that reflects the latest stormwater management practices, values open space, buffers and provides standards for shoreland conservation subdivisions. See <http://mndnr.gov/waters/shoreland.html>

DRAFT