## Minnesota Department of Natural Resources

## **Reference List: Useful Natural Resource Documents for Local Government**

## December 2001

The following list includes numerous documents that should be useful for local units of government and others interested in integrating natural resource conservation into local plans and policies. This list was put together by the Minnesota Department of Natural Resources and its partners as part of the Wildland Urban Interface Project. It is not an all inclusive list; please contact <a href="mailto:peggy.booth@dnr.state.mn.us">peggy.booth@dnr.state.mn.us</a> with suggestions for additions or corrections.

Each document included in this reference list is only listed once in whichever of the following categories seemed most reasonable. Since so many of these types of documents list no author, within each category they are listed alphabetically by title. When the title begins with something like "City of ..", it is listed alphabetically by the city's name.

## **Table of Contents**

<u>category</u>		<u>page</u>
Natural Resource Inventories		2
Comprehensive Plans/Policies	4	
Sustainable Development/Conservation Ordinances		5
Landscape Ordinances		6
Natural Area Management Plans		8
Water-Related (stormwater, watershed, etc.)		9
Wildlife-Related		12
Open Space Planning/Land Protection Tools		13
Other (including forest protection, wildfire-related)		14

Reference	Location	Contact	Comments	
Natural Resource Inventories				
Afton Natural Resources Inventory and Stewardship Plan: Natural Community Evaluation Final Report. 2001. (Prepared by Emmons and Olivier Resources)	City of Afton	Larry Whittaker, City of Afton, (651) 436-5090, or Tony DeMars, EOR, (651) 772-7938.	This document is similar to the Marine Natural Resource Inventory describe above.	
City of Burnsville Natural Resources Management Plan. 1998. (Prepared by SEH, Inc.).	Burnsville, MN	Beth Nixon, SEH, Inc., (651) 490-2054	The plan divides the city into 9 resource management units for which separate goals and strategies are presented. High, medium and low quality natural communities are identified within each management unit, and MCBS natural communities and rare species sites are highlighted. A technical appendix provides more detail about native plant communities, quality and rarity rankings, techniques for restoration and management, and land use planning/protection tools.	
City of Cottage Grove, Final Report: Natural Resources Inventory. 1998. (Prepared by Bonestroo Natural Resources)	Cottage Grove, MN	City of Cottage Grove, (651) 458-2800; Bonestroo Natural Resources 651.604.4812	The report is a comprehensive guide to the natural communities of Cottage Grove, and does an especially nice job of describing their location, quality, and management. The goal of the inventory was to protect and enhance the health of natural areas. It gives some fairly detailed species lists for each of the natural communities inventoried, and assigns a local value, based on the city's comprehensive plan, the ability to link other features in the landscape, etc.	
Goodhue County Natural Resources Inventory. 2001. (Prepared by Bonestroo Natural Resources)	Goodhue County, MN	William Root, Goodhue County 651.385.3107; Bonestroo Natural Resources 651.604.4812	This report dovetails work by MN DNR MCBS and documents natural areas or the entire 488,330 acres of Goodhue County. It provides management recommendations for natural communities, and identifies high priority sites for protection and/or management. The information is used at the city, township, county and watershed level to guide planning efforts.	

Chaska Natural Resource Inventory, 2001. (Prepared by Bonestroo Natural Resources	City of Chaska, MN	Bill Monk, City of Chaska 952. 448.2851;Bonestroo Natural Resources 651.604.4812	This comprehensive natural resource inventory within the East and West Creek Areas of Chaska identifies high quality natural areas for protection, identifies primary and secondary greenways. The information is integrated into the City's Surface Water Management Plan and served as a foundation of the Metropolitan Council's Smart Growth design project, Chaska Heights.
Marine Watershed Management Organization Natural Resources Inventory: Final Report 2001. (Prepared by Emmons and Olivier Resources).	Marine WMO; portions of New Scandia, May, and Stillwater Townships and City of Marine on St. Croix.	Jim Shaver, Marine WMO or Tony DeMars, EOR, (651) 772-7938	This document provides documentation and evaluation of the natural communities in the watershed, as well as identification of management issues and stewardship strategies. Intended for use by local communities in planning.
Minnesota Land Cover Classification System Training Manual, Version 4.0. 2000. Leete, P., B. Richardson, and E. Perry. Minnesota Department of Natural Resources, Metro Region.	Minnesota (tested completely for Metro Region only)	Bart Richardson, DNR-Metro GIS Coordinator, (651) 772-6150	MLCCS is a vegetation oriented classification system designed to identify natural and cultural land cover types using a standardized methodology. The MLCCS provides the ability to identify all lands in true land cover terms (rather than land use), regardless of ecological quality or function. Built-up areas are classified according to type and amount of vegetation, as well as the percentage of the area that consists of impervious surfaces. The MLCCS can be used for a variety of applications including: greenways and open space planning, municipal comprehensive plans, natural resource inventories, hydrological and non-point source pollution calculations.

Reference	Location	Contact	Comments
Comprehensive Plans/Policies			
Comprehensive Plan for the City of Belle Plaine. 1998.	Belle Plaine, MN	John Anderson, City of Belle Plaine, (612) 873- 5553	The plan contains a good example of a natural resource section, including significant natural communities and rare species.
Itasca County Comprehensive Land Use Plan. 2000. (Prepared by Biko Associates Inc. and BRW Inc.)	Itasca County, MN		
City of Red Wing Comprehensive Guide Plan. 1993. Natural Environment (Section L).	Red Wing, MN	Brian Peterson, City of Redwing, (612) 388-6734	This plan identifies the standard "Areas in Need of Protection," but specifically addresses "Critical Habitat/Endangered-Threatened species" and preserving biological diversity. A table of rare species and natural communities present in Red Wing provides important specifics. It also acknowledges the need to develop a strong open space preservation/protection program and explicitly addresses both farmland preservation and urban forestry needs.
St. Louis County Land Department Policy 2740-1: Significant Resource Management Areas. 1997.	St. Louis County, MN		The policy addresses the management of Tax Forfeited Trust Lands to maximize biological, social and economic benefits. It contains good examples of language in support of wise stewardship of native flora and fauna and protection of critical natural habitats. It creates a special designation, "Significant Resource Management Areas," and the Procedures section refers specifically to perpetuating "significant examples of the ecological diversity" of the county's natural heritage.
Under Construction: Tools and Techniques for Local Planning. 2002. Minnesota Planning.	Minnesota	John Wells, Minnesota Planning John.Wells@state.mn.us	This document (to be released early in 2002) is a very thorough guide to incorporating a broad array of issues including natural resources into a comprehensive plan. It covers the planning process, community profile elements, developing a vision, goals, policies, indicators, and strategies as well as plan implementation. It has an extensive reference/resource list and glossary.

Reference	Location	Contact	Comments		
Sustainable Development/Conservation	Sustainable Development/Conservation Ordinances				
From Policy to Reality: Model Ordinances for Sustainable Development. 2000. Minnesota Planning/Minnesota Environmental Quality Board. (Prepared by Biko Associates, Inc., Desotelle Consulting, and BRW, Inc.)	Minnesota	John Wells, Minnesota Planning, (651) 297-2377; http:/www.mnplan.state.mn. us/SDI/ordinances.html	Biko Associates worked with numerous agencies and citizens to develop a package of model ordinances for sustainable development. The ordinances span seven topics ("clusters") including citizen participation, grant management, managing community resources, neighborhood design, infrastructure planning, resource efficient buildings, and economic development. The cluster on managing community resources divides significant natural environment areas into two categories: Natural Resource Protection Zones (highest protection status) and Natural Resource Conservation Zones (where management for economic production is an option).		
City of St. Cloud Environmentally Sensitive Areas Ordinance. Ordinance No. 1871. 1998.	St. Cloud, MN	Gerald Hengel, City of St. Cloud, (320) 255-7218.	An overlay district of natural areas and rare species sites is identified in this ordinance, and development is generally guided away from these areas. However, compliance with this ordinance is largely voluntary (lacks "teeth").		

Reference	Location	Contact	Comments
Landscape Ordinances			
City of Blaine, Chapter 11, Article II on Weeds and Tall Grass. 1996.	Blaine, MN	Marc Shippee, City of Blaine, (612) 785-6178	This ordinance is a modified weed law that allows some exceptions for native lawn (Sec. 11-24). Homeowners may seek approval of a land management plan to convert a portion of their property to a native lawn in the rear yard. To obtain approval, homeowners need support of >50% of their neighbors and screen the plantings with fence and shrubbery.
Chanhassen City Code - Ord. No. 222, 1, 9-26-94, Sec. 13-24. 1994.	Chanhassen, MN	Jill Sinclair, City of Chanhassen, (952) 937- 1900	The language describes an exception to the existing weed ordinance, stating that "Native grasses and wildflowers indigenous to Minnesota, planted and maintained on any occupied lot or parcel of land as part of a garden or landscape treatment are exempt from this article" (on weed prohibition). Three new developments in Chanhassen have been required by the City to use native plants in their landscaping.
The John Marshal Law Review. 1993. Vol. 26(4).	Madison, WI Long Grove, IL Ft. Collins, CO	http://www.epa.gov/glnpo/gr eenacres/toolkit/index.html	Good examples including the Madison "Permission Law," modified local weed laws, and promotional natural landscaping laws
Natural Landscaping for Public Officials: A Source Book. 1998. Northeastern Illinois Planning Commission, Chicago. (Chapter 4: The "How To" of Natural Landscaping (pp. 21-37); Appendix 6: Sample Local Ordinances (pp. 65-67).	National	(312) 454-0400; http://www.epa.gov/glnpo/gr eenacres/toolkit/index.html	Chapter 4 discusses the role of local government in encouraging the use of natural landscaping and describes a range of regulatory approaches that help eliminate local weed ordinances as a deterrent to natural landscaping. Appendix 6 identifies sources of several municipal ordinances. See website for full text.
An Ordinance Relating to Vegetation: Amending Crystal City Code, Section 640. 1996.	Crystal, MN	James Burks, City of Crystal, (612) 531-1162	This is an example of a modified local weed law with language that prohibits the uncontrolled growth of vegetation, while permitting planned landscape designs that use a diversity of plants, particularly those that use native vegetation.

Reference	Location	Contact	Comments
Site Development Guidelines, Bridal Veil/Southeast Industrial Area Master Plan. 1996 City of Minneapolis, Southeast Economic Development Steering Committee.	Minneapolis, MN	Peggy Booth, DNR Metro Region, (651) 772-7562	In this document, eight different types of landscape plans are described for various site conditions and desired landscape functions. The guidelines emphasize that priority should be given to establishing communities of plants native to the Twin Cities that achieve native biodiversity and wildlife habitat. However, there are situations in which other types of landscaping are more
Woodbury City Ordinance No. 16. 1997.	Woodbury, MN	Steve Kernik, City of Woodbury, (651) 714-3533	appropriate.  The language in this ordinance adapts a local weed law by adding a section on lawn maintenance that allows for certain areas to remain in a natural state providing a more natural character (Sec. 15-7). This portion of the ordinance allows for up to 35% of unmaintained/unmowed lawn. If native vegetation is maintained as a garden, 100% of the yard could be in native vegetation.

Reference	Location	Contact	Comments
Natural Area Management Plans			
City of Eden Prairie. 1997. Prairie Bluff Conservation Area Management Plan. (Prepared by Peterson Environmental Consulting, Inc.).	Eden Prairie, MN	Peterson Environmental Consulting, Inc., (651) 686- 0151	The plan gives good descriptions of the site's native plant communities and detailed species lists generated from releves. A clear map on which the communities are delineated is presented. The plan also gives a detailed list of animal records found on the site from 1997 MCBS work. A number of management and monitoring activities are proposed and clearly described, but unfortunately are not explicitly linked to specific portions of the site.
Management Recommendations for the Koch Petroleum Group Property within the Pine Bend Bluffs Natural Area. 2000. Minnesota Department of Natural Resources.	Inver Grove Heights, MN	Hannah Dunevitz, DNR Metro Region, (651) 772- 7570	The plan puts specific restoration and management recommendations into a landscape context, with information on geology and soils, pre-European settlement vegetation and wildlife, land use history, and present-day vegetation and wildlife. Four distinct restoration and management projects are described, although more detailed plans for implementation will be required.
Natural Areas: Protecting a Vital Community Asset. 1997. Allmann, L. Minnesota Department of Natural Resources, Natural Heritage and Nongame Research Program, Saint Paul. (pp. 77-89)	Minnesota	Hannah Dunevitz, DNR Metro Region, (651) 772- 7570	This chapter is a good overview on the management of natural areas, and can serve as a checklist for important components of management plans (e.g., avoid fragmentation, maximize interior environments, control exotic species, promote natural disturbance regimes, etc.)
Sandhill Crane Natural Area Master Plan. 2001. City of East Bethel, Anoka County, Minnesota Pollution Control Agency, and Minnesota Department of Natural Resources.	Anoka County, MN	Jeff Perry, Anoka County Parks and Recreation Department	A detailed plan for the conservation and management of a553 publicly owned natural area. This 102-page report includes sections on vision, history, resource inventory and analysis, program master plan, and implementation plan.

Kingswood Camp Natural Resource	Kingswood Camp,	Paul Harcey, Kingswood	The plan provides inventory information, by natural area
Management Plan	Minnetrista, MN	Camp 952.472.3586;	type with good descriptions of the site's native plant
		Bonestroo Natural	communities and detailed species lists ecologically
		Resources 651.604.4763	diverse area. It also includes management goals and
			objectives, and detailed, long-term work plans by
			community type. These are integrated across the site to
			give an overall priority management list with cost
			estimates.

Reference	Location	Contact	Comments
Water-related: stormwater/watershe	ds/shorelines/low	impact development/bes	t management practices, etc
Better Site Design: A Handbook for Changing Development Rules in Your Community. 1998. Center for Watershed Protection, Eillicott City, MD.	National	Center for Watershed Protection, (410) 461-8323	This handbook takes the user through a step by step evaluation of their ordinances to determine whether they prohibit or encourage 'better site design' techniques.  Provides advice on improving ordinances.
Buffer Literature Review– Brown's Creek Watershed District Second Generation Management Plan. 2001. BCWD, Stillwater, MN.	Stillwater, MN	Mark Doneux, BCWD, (651) 430-6826 or Camilla Correll. Emmons and Olivier Resources (651) 770-8448.	Short text with a table reviewing recent important documents related to buffers. Includes information on selected local governmental unit buffer ordinances.
Lakescaping for Wildlife and Water Quality. 1999. Henderson, C. L., C. J. Dindorf, and F. J. Rozumalski. Minnesota's Bookstore, Saint Paul.	Minnesota	Carrol Henderson, DNR Central Office, (651) 296- 0700	Lakescaping for Wildlife and Water Quality is a comprehensive reference book for shoreland owners. It gives background information on the ecology of shoreline habitats and provides instructions on how to preserve or restore a native plant buffer zone along shoreline areas that have previously been converted to bluegrass lawn to the waters edge. Traditional lawn management and removal of aquatic vegetation typically create a plethora of shoreline problems like land erosion, runoff of silt and chemicals into lakes, and goose use on lawns. A buffer zone helps correct those problems and is cheaper and less time-intensive than lawn management. An extensive appendix includes information on over 300 native plants that can be used for plantings and sources of plants and bioengineering materials.
Low-Impact Development. Design Manual. 1997. (Revised 11/25/97)	Maryland	Department of Environmental Resources. Prince George's County, Maryland.	
Natural Resource-Based Planning for Watersheds: A Practical Starter Kit for Watershed Projects, 2001. University of Connecticut.	National	Nonpoint Education for Municipal Officials (NEMO), (860) 345-4511 http://nemo.uconn.edu	This simple and brief document presents the basics of a six-step process for developing a watershed action plan.

Reference	Location	Contact	Comments
Protecting Our Waters, Shoreland Best Management Practices.	Minnesota	University of Minnesota county extension Distribution Center (612) 625-8173 or on the web at: <a href="http://www.extension.umn.edu/distribution/naturalresources/DD6946.html">http://www.extension.umn.edu/distribution/naturalresources/DD6946.html</a>	The fact sheets in this folder are a series designed to assist shoreland property owners to protect and preserve water quality.
Protecting Water Quality in Urban Areas, Best Management Practices for Minnesota.	Minnesota	Mary Osborn, MN Pollution Control Agency, (651) 296- 7523 or (800)657-3864	This manual will help local government officials, urban planners, developers, contractors and citizens understand urban nonpoint-pollution problems.
Protecting Wetlands, Managing Watersheds: Local Government Case Studies. 1999. International City/County Management Association, Washington, D.C.	National	ICMA, 777 North Capitol Street, NE, Suite 500, Washington, D.C., 20002- 4201.	This publication contains information on comprehensive planning, constructed wetlands, education, finance, mapping, mitigation banking, regulatory strategies, and restoration. Each chapter contains at least one case study from a local government.
Rapid Watershed Planning Handbook: A Comprehensive Guide to Managing Urbanizing Watersheds. 1998. Center for Watershed Protection, Ellicot City, MD.	National	Center for Watershed Protection, (410) 461-8323 http://www.cwp.org	This comprehensive review gives details on many aspects of watershed planning for urbanizing areas.
Residential Cluster Development: Fact Sheet Series. 1998. University of Minnesota Extension Service.	Minnesota	University of Minnesota Extension Service, (612)625-8173, or local extension office, or <a href="http://www.extension.umn.e">http://www.extension.umn.e</a> du	A short overview of cluster development– addresses alternative wastewater treatment and stormwater management.
Restoring and Managing Stream Greenways: A Landowner's Handbook. 1998.	NA	Northeast Illinois Planning Commission, (312) 454- 0400	This guidebook discusses how to manage stream riparian zones.
Site Planning for Urban Stream Protection. 1995. Schueler, T. The Center for Watershed Protection and Department of Environmental Programs, Metropolitan Washington Council of Governments.	National	Tom Schueler	The document presents strategies to reduce pollutant loads and protect aquatic resources through non-structural practices and improved construction site planning. Includes recommendations for implementation at the local level.

Reference	Location	Contact	Comments
Stormwater BMP Design Supplement for Cold Climates. 1997. Center for Watershed Protection, Ellicot City, MD.	National (cold climates)	Center for Watershed Protection, (410) 461-8323 http://www.cwp.org	This manual addresses some of the unique challenges in cold climates and makes design recommendations for BMPs to make them more effective in cold regions.  Includes a list of 12 Minnesotans who contributed.
Stormwater Infiltration Overview. Rice Creek Watershed District. 1996.	Rice Creek Watershed District	Montgomery Watson, (651) 766-4191	This document provides an overview of stormwater controls utilized by local government officials and planners
Stormwater Infiltration Guidance. Rice Creek Watershed District. 1996.	Rice Creek Watershed District	Montgomery Watson, (651) 766-4191	This document presents guidance for infiltration practices in the Rice Creek Watershed District. Historically, stormwater management in the District focused on controlling peak runoff rates. However, scientists and engineers now understand the additional need to manage the volume of runoff.
Watershed Protection Techniques. 1997.	NA	Center for Watershed Protection, (410) 461-8323 http://www.cwp.org	This periodical address many issues related to protection of watersheds. Published infrequently on an irregular basis. Many back issues or individual articles are available from the Center's website.

Reference	Location	Contact	Comments				
Wildlife Related							
Planning for the Birds. 1998. Pearson, C. W. Minnesota Department of Natural Resources, Saint Paul.	Minnesota	Joan Galli, DNR, (651) 297- 2277	This guidebook describes forest management practices aimed at increasing bird habitat including ones for specific forest types.				
Birds and Forests - A Management and Conservation Guide. 1995. Green, J. C. Minnesota Department of Natural Resources, Saint Paul.	Minnesota		This book is about birds in Minnesota forests and how they respond to a changing landscape. Planners, biologists, foresters and others charged with maintaining healthy forest ecosystems and at the same time providing forest products have a daunting task of integrating these often contradictory objectives into land management plans. The knowledge needed to document, evaluate, and mitigate the effects of forest management on birds is brought together in this book which provides the information needed to understand the relationship between forest birds and forest management.  Information is provided that will give managers guidance in providing essential habit for birds that use forests in many diverse ways.				

Reference	Location	Contact	Comments			
Open Space Planning/Land Protection Tools						
Blufflands Design Manual: Winona County/LaCresent Area Common Visions Project. 1998. Hurt, R. J. Minnesota Department of Natural Resources.	Blufflands of southeastern Minnesota	Robert Hurt, Architectural Environments, (507) 643- 6765	This guidebook describes a common vision for this region. It provides extensive set of 1-page descriptions of a broad range of implementation options (including various zoning tools, tax incentives, design guidelines, etc).			
Creating Green Corridors in Chisago & Washington Counties	Chisago/Washing- ton Counties	1000 Friends of Minnesota, (651) 312-1000	This booklet describes the goals, planning process, tools, and maps of the Green Corridor Project in Chisago and Washington Counties. 1999			
Ecological Principles and Guidelines for Managing the Use of Land. 2000. Dale, V.H., S. Brown, R.A. Haeuber, N. T. Hobbs, N. Huntly, R. J. Neiman, W. E. Riebsame, M. G. Turner, and T. J. Valone. Ecological Applications 10(3): 639-670	National	For a copy of this report, available for \$4.75, or for further information, contact Ecological Society of America, 1707 H Street NW, Suite 400, Washington, DC 20006	This article is the Report of Ecological Society of America Committee on Land Use (V.H. Dale, Chair). It scientifically addresses land use and land management as increasingly fundamental sources of change in the global environment. The article describes five principles of ecological science that have particular implications for land use and can assure that fundamental processes of Earth's ecosystems are sustained. Based on these principles, 8 guidelines for land use are recommended and actions required to develop the science needed by land managers are suggested.			
The Green Corridor Project. 1999. Planning for Open Space Conservation in Your Community. 1000 Friends of Minnesota and State of Minnesota. (Prepared by S. Hess)	Minnesota	1000 Friends of Minnesota, (651) 312-1000	Documents the process used to establish a plan for open space conservation in Washington and Chisago Counties and shares lessons learned from that process. Includes fact sheets on land protection options, information on Purchase of Development Rights and Transfer of Development Rights, as well as draft ordinances.			
Natural Areas: Protecting a Vital Community Asset: A Sourcebook for Minnesota Local Governments and Citizens. 1997. Allmann, L. Minnesota Department of Natural Resources.	Minnesota	Hannah Dunevitz, DNR Metro Region, (651) 772- 7570	This guidebook includes overview s of many land protection and land acquisition tools as well as management plan guidelines. It includes short case studies and some sample ordinance language.			

Reference	Location	Contact	Comments			
Other: including forest protection, wildfire-related, neighborhood design						
Conserving Wooded Areas in Developing Communities: Best Management Practices in Minnesota. 1999. Minnesota Department of Natural Resources.	Minnesota	Jean Mouelle, DNR Metro Region, (651) 772-7567	This guidebook provides recommended steps for conserving wooded areas at the landscape level (i.e. in planning at the county, township, or city scale), subdivision level (i.e. related to subdivision ordinances), and at the lot level (i.e. related to site development and site plan review). It also gives guidance to practitioners on these topics as well as wooded area/tree conservation during planning and construction of transportation systems and utilities.			
Creating a Landscape in the Pleasure Creek (Blaine) Neighborhood. 1999. Morrish, W., R. Bonsignore, F. Fitzgerald. Design Center for American Urban Landscape, College of Architecture and Landscape Architecture, University of Minnesota.	Blaine, MN	City of Blaine, Marc Shippee, (763) 785-6178	This 8x11 stapled handout shows a Yard Landscape plan & how it fits the big picture.			
Protecting Life & Property from Wildfire: Intro to Designing Zoning & Building Standards for Local Officials. 2000.	NA	Dave Schuller, DNR Metro Region, (651) 772-7931 or on the web at http:// www.dnr.state.mn.us/www/f md/fire/zonguide.htm	This document discusses the urban/interface fire problem and provides zoning and ordinance solutions. Published by the Great Lakes Forest Fire Compact.			
Working Trees for Communities	NA	National Agroforestry Center available on the web at: http://www.unl.edu/nac/pubs /brochures/wtc	This publication discusses the term "Working trees" which are in the form of windbreaks, living snow fences, and streamside buffers and work to protect homes, industry, schools, emergency facilities, roadways, and people.			