

Water Pro

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...And More!

Information for professionals working with water issues.

MAKE THE MOST OF YOUR COMPREHENSIVE PLAN

Natural Resources, Quality of Life

A recent survey* showed that 39% of people said the single most attractive feature the Twin Cities is 'parks, trails, lakes, rivers and open space.' The next important quality of life indicator was 'arts and culture' at 9%. This tells us that nature is overwhelmingly important to our quality of life here in the Twin Cities.

Without careful planning, population growth could cause communities to lose the open space areas and natural features that people value most. Knowing this, state and regional agencies have stepped up efforts to make natural resource conservation an integral part of comprehensive planning.

In addition to quality of life benefits, planning around natural resources can have water quality benefits. "Because natural areas provide free services like filtering stormwater and decreasing runoff volume, we see natural resource-based planning as an effective means of protecting water quality and important community resources," said Mike Wyatt, District Planner.

To help conserve natural areas, the MCWD initiated a Land Conservation Program. See more about how this program is reaping

the benefits of natural resource planning, see the article on Page 3.

New Planning Tools

A number of new tools can help communities take a natural resource-based planning approach to their next comprehensive plan update.

On Course for 2008 – Natural Resources Planning Forums will be held August 17 and 24 at the Metropolitan Council. The Council provides technical assistance on several comprehensive plan topics in this 8-session series. Register at <http://www.metrocouncil.org/OnCourse2008/registration.htm> or by calling 651-602-1400.

The **Natural Resources Digital Atlas** for the Twin Cities region, developed by the Metropolitan

Council and MetroGis, provides six maps, some with as many as 20 data layers. It inventories terrestrial resources, aquatic resources, outdoor recreation, health and public safety, community character, and working lands. To learn more, contact Rick Gelbman, Met Council GIS Manager, at 651-602-1371.

Using Natural Resources Information in Comprehensive Planning was designed to serve as a companion to the Metropolitan Council's Local Planning Handbook. It answers eight key questions about incorporating natural resources conservation in community plans for development.

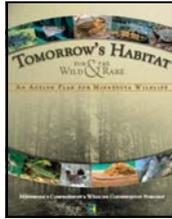


The City of Minnetonka recently installed new parking lot rain gardens, or vegetated swales, at City Hall. Read more about the effectiveness of this Low Impact Development Technology on Page 2.

*Metropolitan Council, 2005 Metro Residents Survey

PLANNING TOOLS FOR NATURAL RESOURCES, Cont.

Case studies and a ranking matrix are featured. Available on CD or online at http://files.dnr.state.mn.us/assistance/nrplanning/community/nrplanning_guide/handbook.pdf



found at levels below those expected to ensure long-term health and stability. The plan focuss on species in greatest conservation need, nearly one-fourth of the 1,200 Minnesota's species that were assessed as part of the project.

Access the plan online at <http://www.dnr.state.mn.us/cwcs/index.html>.

Growth Pressures on Sensitive Natural Areas, available from the DNR at <http://www.dnr.state.mn.us/nrplanning/>

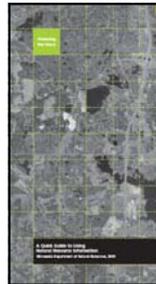
[community/ameregisreport/index.html](http://www.dnr.state.mn.us/nrplanning/community/ameregisreport/index.html),

warned that nearly 75 percent of the Twin



Cities metro area's sensitive natural areas could be threatened by development. Read the report to learn more and access the planning recommendations that arose from the study.

DNR's **Natural Resources Guide** is a primer on natural resource based planning. Features guidance on natural resource inventories and assessments, open space, and 20 project profiles of how Minnesota communities have collected and used natural resource information. Brochure and companion CD-ROM available from DNR or online at <http://www.dnr.state.mn.us/nrig/index.html#>.



Lake Minnetonka Area Natural Resources Inventory provides local land cover and natural resource data for 14 lake communities. Contact David Thill, Hennepin County Environmental Services at david.thill@co.hennepin.mn.us or 612.348-0124

Water-Focused Smart Growth Resources From EPA highlight water resource protection by increasing (yes, increasing) density and other strategies. All available at

<http://www.epa.gov/dced/>

- *Protecting Water Resources With Higher Density Development*
- *Using Smart Growth Techniques as Stormwater Best Management Practices*
- *Growing Towards More Efficient Water Use: Linking Development, Infrastructure, and Drinking Water Policies*

MORE online!

Use our new Natural Resources Based Planning page with links to all the information featured here, plus much more! Visit www.minnehahacreek.org/nrpb.php

LID CORNER: Parking Lot Vegetated Swales

Have you ever parked your car in front of a sad looking, 'Charlie Brown' style tree on a parking lot island, and wondered why it's there? It's a good question. Landscaping on raised islands in parking lots may provide visual relief from expanses of pavement, but seldom much else. Lone trees and shrubs are not part of an ecologically functional system. And such planting requires extra water to sustain trees and shrubs in a sea of black-top, adding to water problems, not solving them.

Now consider an alternative. What if parking lot landscaping could be help handle runoff volume, take up pollutants, and bring habitat to the urban landscape? Now we're talking about an ecologically functional system: that's what Low Impact Development (LID) is all about.

Vegetated swales in parking lots (or parking lot rain gardens) can be part of the solution to the water quality problems that come along with increasing development. "These are engineered systems that are designed to handle inflows of stormwater. They've got specialized soils and plants that can take up runoff volume and stormwater pollutants instead of sending them downstream," said Larry Coffman, nationally known LID expert.

The City of Minnetonka recently installed a new parking lot with vegetated swales. "We wanted to be a leader and show people that this innovative technology works. It's a gorgeous parking

lot, and now we're infiltrating a lot of water out there," said City Engineer Lee Gustafson. "You really need to come and see it."

The HB Fuller Company's 'wetland cell' parking lot in Vadnais Heights, MN (pictured below) has gained local fame among LID aficionados. The Ramsey-Washington Metro Watershed District monitored the parking lot and found that this technology far outperformed the standard stormwater pond at pollutant removal (70% reduction in phosphorus and 94% reduction in sediment) and was able to significantly reduce volume (73%) of stormwater coming from the site. "Nobody's arguing against better technology," said Coffman, "and this is definitely better". For more on LID, see www.minnehahacreek.org/lid.php.



FORMER FARM TO PROTECT WATER, HARBOR WILDLIFE

The Minnehaha Creek Watershed District (MCWD) has long led the region with innovative conservation practices, and its decision last January to purchase a Minnetrista farm continues that trend. “We see this as a way to improve our stewardship of water resources,” said Board chair Jim Calkins, “while also maintaining excellent stewardship of taxpayer dollars.” The farm is located within the Painter Creek Subwatershed, which is located at the northwest corner of the District.

The District plans to restore and preserve approximately 30 acres of the land to its natural state. The remaining land, approximately 4-8 acres, will be sold to a builder or developer who would be interested in developing up to three homes on the site. Selection of a builder will be based on purchase price as well as the builder’s incorporation of water quality best management practices into the site design and the use of other green building strategies. MCWD is currently seeking proposals from builders for this project. Find more information at www.minnehahacreek.org.

“Developing those parcels should allow us to recover a significant portion of the (\$792,500) purchase price,” said Michael Pressman, Land Conservation Specialist, “and the remaining acres will be permanently protected for water quality and wildlife.”

According to Pressman, once restored the site will contain three distinct habitats: oak savanna, wet meadow, and emergent wetland. Each is characterized by conditions that provide homes to a variety of indigenous plants and animals. The site is also adjacent to existing wetlands and forest areas, and restoration will help extend and connect important wildlife corridors, which



Most of this former farm will be restored and permanently protected for water quality and habitat.

The remainder, available for development of up to three homes, will enjoy scenic views and other benefits of being adjacent to a conservation area.

is one of the MCWD’s Land Conservation Program’s goals.

Restoration of the site will also serve to improve and protect water quality in Painter Creek, which currently carries high levels of phosphorus and sediments into Lake Minnetonka. This will be achieved by limiting future development and by breaking up existing drainage tiles to allow reestablishment of former wetlands for water retention and infiltration. These measures will reduce stormwater runoff by improving infiltration, and will improve the quality of water that does run off by providing natural filtration before it flows into Painter Creek. Invasive species will also be controlled, and indigenous species will be reintroduced.

The Johnson property is MCWD’s second land purchase. An earlier purchase obtained 34 acres and a permanent conservation easement on 81 adjoining acres. The District has also acquired several donations, including a 52-acre conservation easement along School Lake in Medina. Through a partnership with the City of Orono, the District also acquired a 56-acre conservation easement on the former Veteran’s Camp on Big Island in Lake Minnetonka.

Pressman said the district expects the Land Conservation program will prove that protecting land at strategic locations in the upper watershed is an effective tool for protecting downstream waters. “It’s cheaper and more effective to make sure water coming into the streams is clean than to treat contaminated water,” he said. “Protecting the wetlands provides natural runoff protection and improves recharge to the ground and surface waters.”

DNR Shoreland Vegetation Grants

The Minnesota DNR has \$300,000 available for projects across the state that ‘expand the diversity and abundance of native aquatic and shoreland plants; improve and protect the quality of shoreline habitat; enhance and protect water quality; raise awareness of the value of native shoreline and aquatic vegetation.’

Applications due September 18.

To learn more, go to <http://www.dnr.state.mn.us/grants/habitat/shoreland.html> or call 651- 259-5212.



Amenities added to Minnehaha Creek Headwaters Park

AT MINNEHAHA CREEK WATERSHED DISTRICT

New Features at Minnehaha Creek Headwaters

“Awesome” views, the sounds of birds and water, and the scents of nature will surround visitors when they first venture onto a new deck and boardwalk at Gray’s Bay Dam early this fall. A unique partnership between the Minnehaha Creek Watershed District (MCWD) and the City of Minnetonka allowed the partners to reduce their costs and coordinate design, construction and schedules for the project.



The \$350,000 Gray’s Bay deck complements a \$130,000 shoreline restoration installed by MCWD in 2004 and 2005. Portions of the project reflect public input gathered by the Minnetonka Parks Commission.

“This is a historically significant site,” said district technician Renae Clark, “and with these projects, it can become a destination, a place where the public can access amenities that allow people to appreciate the value of protecting these critical natural resources.” She explained that, in addition to the dam, the site is home to the headwaters of Minnehaha Creek, rich wetland habitat, and a picturesque portion of Lake Minnetonka.

The city’s new boardwalk links the deck to city trails on the north side of the wetland. New fishing piers allow

visitors to capitalize on improved fishing habitat provided by the shoreline restoration project. Water quality improvements include reduced erosion and sediment, and the shoreline’s restored native plant communities provide natural filtration and contaminant removal. A public dedication is planned for September.

Angela Hammers new District Technician

After two years as a district representative assisting with permitting and education, Angela Hammers has accepted a position as district technician. Her new responsibilities include managing wetland buffer monitoring, surety, inspection and releases. She will also review wetland delineation and respond to wetland inquiries. Hammers holds an MS Degree in Biology from Western Carolina University, North Carolina. “Work in natural resources is my passion,” she said, “I like making a difference for the quality of water and land around us.”



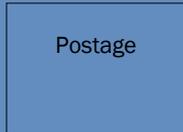
Angela Hammers

Jeff Casale Joins MCWD Board of Managers



Jeff Casale

In March, the Hennepin County board of Commissioners appointed Shorewood resident Jeff Casale to MCWD’s board of managers. They also reappointed Plymouth resident Lee Keeley. Visit www.minnehahacreek.org to learn more.



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Board of Managers

Pam Blixt, James Calkins, Jeff Casale, Lance Fisher, Lee Keeley, Dick Miller, Ethel Smith