



Crow Wing County Water Plan News

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To Protect, Preserve, & Improve Water Resources in Crow Wing County

County Releases Water Planning Data

by Mitch Brinks

The Crow Wing County Land Services Department has begun revising the 2008 Local Comprehensive Water Management Plan (i.e. Water Plan). Water planning is identifying what works best to protect and enhance Crow Wing County's water resources. Part of this identification process is to measure the County's water resources to observe trends in order to prioritize resources for protection or restoration efforts. As part of the revision process, the Crow Wing County Land Services Department is working to include a number of recent scientific studies and data-driven measures that will provide a baseline to help guide land use planning and conservation project implementation.

In January, the County completed Phase II of a lakeshore research study project to calculate the amount of impervious surface coverage on larger lakes in Crow Wing County. This study was conducted in response to the 2011 Land Use Ordinance revisions which require performance standards depending on the

amount of impervious coverage per lot. Impervious surfaces are hard surfaces on a lot such as rooftops, sidewalks, patios and driveways that don't allow water to soak into the ground.

Impervious surface data was calculated on lakes 500-1000 acres in size using high-resolution aerial photography and property sketches from the Property Valuation and Classification Office. The amount of impervious surface was calculated for the entire riparian lot as well as within 250 feet and 500 feet of the shoreline to determine how much impervious surface was located closer to the lake.

The results of both phases of the project indicate that the average impervious surface percentage on riparian lots on the County's larger lakes is less than 10%. For example, Lake Edward, Hubert, and Lower South Long were all measured at 6%, Upper South Long was measured at 7%, and Whitefish was measured at 5%. The results of the lakes measured are listed below. Studies have shown that

In this issue:

Water Planning Data	1
CWC News	3
Grant Opportunities	4
Upcoming Events	4

Crow Wing Lakes: Impervious Surface Summary

Arrowhead	= 1.7%	Nokay	= 3.1%
Bay	= 7.2%	North Long	= 6.2%
Bertha	= 10.5%	Ossawinnamakee	= 7.6%
Big Trout*	= 5.4%	Pelican	= 5.5%
Borden	= 2.8%	Pig	= 1.9%
Camp	= 3.4%	Platte	= 2.3%
Clearwater	= 2.7%	Portage	= 6.4%
Crooked	= 3.8%	Rabbit*	= 6.5%
Edward	= 6.0%	Red Sand	= 4.8%
Gilbert*	= 3.5%	Round*	= 14.5%
Hanks	= 4.4%	Rush*	= 13.7%
Hubert*	= 6.4%	Serpent*	= 14.5%
Lower Hay	= 5.9%	Smith	= 2.2%
Lower Mission	= 2.2%	South Long	= 5.7%
		Upper Hay	= 5.6%
		Upper Mission	= 5.2%
		Upper South Long	= 7.1%
		Whitefish*	= 4.8%

* indicates lakes that have some parcels located within city limits (those were not included)



Environmental Services

CROW WING COUNTY
BRAINERD, MINNESOTA 56401

Water Planning Data (continued...)

water quality begins to decline when impervious surface coverage reaches 12-15 percent. The full report, including summary maps of each lake, can be viewed online at <http://www.co.crow-wing.mn.us/index.aspx?nid=925>

To the right are some example maps from the impervious surface study.

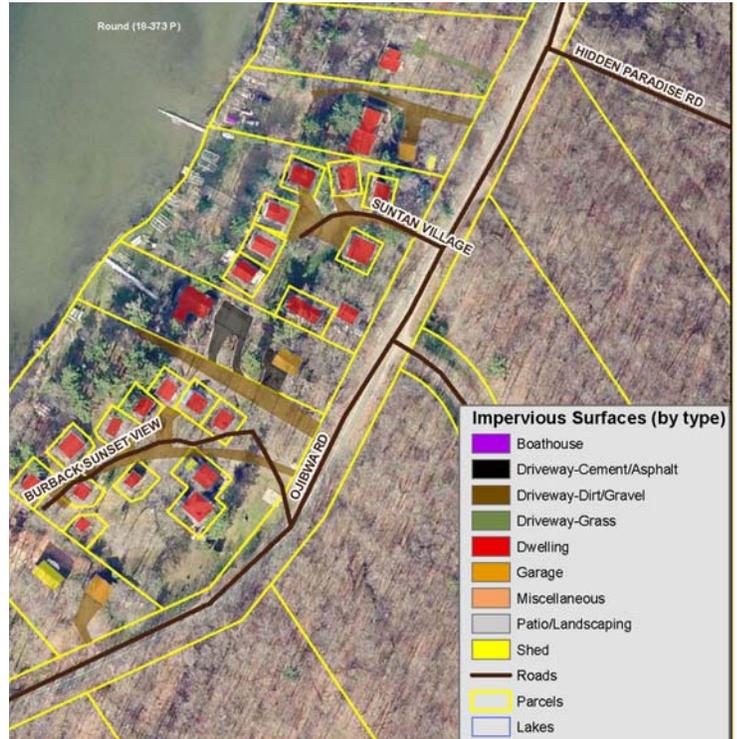
The lakes measured correspond with the lakes that were part of a water quality screening project that was conducted in 2009 and 2012 to determine whether a water quality trend could be determined based on all the available water quality data that had been collected over the years. These reports are available online at: <http://www.co.crow-wing.mn.us/index.aspx?NID=705>

The Crow Wing County Environmental Services Office also tracks the amount of impervious surfaces for each building permit that is issued in order to determine the amount of phosphorus loading that occurs and whether additional performance standards are required as part of the permit. These performance standards are from the County's revisions to the Land Use Ordinance in 2011 which require stormwater management and a shoreline buffer analysis at 15% and 20% total impervious coverage, respectively. The County's goal is to reduce phosphorus inputs by implementing enough stormwater plans to offset phosphorus loading from the increased impervious surfaces on permits that do not require stormwater management.

With over 500 lakes in the County, these assessment tools are very helpful in prioritizing which lakes to focus on protection or restoration strategies. This local data about Crow Wing County lakes will help guide land use decisions about keeping our lakes clean.

In addition to surface water, Crow Wing County is also gathering data on ground water quality, including levels of nitrate. Since Crow Wing County began testing for nitrates the last few years, it has been observed that nitrate levels County-wide are generally well below the safe drinking water standard of 10 parts per million.

All of this data will be included in the 2013 revision to the Water Plan, which has identified surface water, ground water, and aquatic invasive species as the top priority concerns. Water planning questions can be directed to Mitch Brinks at 218-824-1125 or mitch.brinks@crowwing.us



Lower Hay Lake

Impervious Surface Coverage by Parcel

- 0 - 15 %
- 15 - 20 %
- 20 - 25 %
- 25+ %
- Section Lines
- Roads
- Lakes

0.25 0.5 Miles



Crow Wing County News

Crow Wing County Water Plan Update: Priority Concerns Scoping Document Approved by BWSR

The Board of Water & Soil Resources (BWSR) water plan sub-committee recently recommended approval of Crow Wing County's Priority Concerns Scoping Document (PCSD) at their January 9, 2013 meeting. The full BWSR Board approved the PCSD on January 23rd, 2013. This document can be viewed online at:

www.co.crow-wing.mn.us/DocumentCenter/View/4097

Land Services Department Initiates County-Wide AIS Inspection Program

Crow Wing County is pleased to be able to offer DNR-trained Level I inspectors at public accesses located within Crow Wing County for the busy months of May thru September. Last year was the first year that the DNR had the Level I inspector designation, which offers a higher level of training and enforcement authority (www.dnr.state.mn.us/invasives/watercraft_inspect.html). In order to have Level I inspectors, the DNR requires a delegation agreement signed between the DNR and a local government unit (LGU). Because of this requirement, many lake associations approached Crow Wing County in order to participate. This prompted the County Board to initiate the following program:

Basics: Crow Wing County would contract with a local employment agency to provide Level I inspectors to participating lake associations. Crow Wing County will also provide one full-time AIS coordinator/supervisor during the length of the program to work with lake associations and the employment agency to come up with bi-weekly schedules for the inspectors. This person will also be the person responsible for any questions or quality-control issues with the inspectors and will be providing regular on-site supervision of the other inspectors.

Costs: The County Board required that this program be 100% paid-for by the participating lake associations (or other entities). The County is anticipating a final cost of \$13.50 to \$14.00 /hr, which includes: liability insurance, workers comp, payroll, and recruitment / training.

The Mississippi Northwoods Natural Area Deal is Completed

Recently, the \$11 million deal to conserve a nearly 2000 acres along the Mississippi River northeast of Brainerd was finalized. This unique piece of property includes nearly 3 miles of shoreline and provides a link to adjacent lands to create a 9 mile stretch of protected shoreline that provides critical habitat to numerous species of birds and wildlife. The property was purchased from Potlatch using funds from the state's Clean Water Funds, which was established after voters passed the Clean Water, Land, and Legacy Amendment to the Minnesota Constitution. The property will be owned and stewarded by Crow Wing County. Other partners involved in the project include: CWC, DNR, Nature Conservancy, The Trust for Public Land, Anglers for Habitat, Cuyuna Lake Trails Association, and Delta Waterfowl.

Crow Wing County Commissioners Receive 2012 Government Relations Award

The Crow Wing County Board of Commissioners has been awarded The Nature Conservancy's 2012 Government Relations Award for outstanding leadership in protecting Minnesota's natural heritage. The Nature Conservancy stated in the award letter that Crow Wing County showed great leadership by being open to new thinking and new land protection models. The commissioners opened the door to discussions with DNR on best alternatives to protecting and managing the Mississippi River Northwoods project long-term. Moving away from receiving Payment in Lieu of Taxes (PILT) from the State of Minnesota, the County Land Services Department developed an acquisition model that promoted economic returns for the County. Additionally the County emphasized the multiple benefits of the land ownership, and responded to local citizen support at every step in the process as it moved from a state acquisition to county ownership of the land.

Crow Wing County and Social Media

Lately, Crow Wing County has had more of presence on social media websites, such as Facebook, Twitter, and YouTube. Please subscribe, follow, or friend us!

Facebook: <https://www.facebook.com/pages/Crow-Wing-County-Minnesota/129083803768680>

Twitter: <http://twitter.com/crowwingmn>

YouTube: <http://www.youtube.com/user/crowwingcounty>

*Citizens are encouraged to contact the Environmental Services Office at (218) 824-1125 or environmental.services@crowwing.us to discuss water planning efforts.
Crow Wing County information and resources can be found at www.co-crow-wing.mn.us*

Grants—Available to Landowners

Septic System Improvements

Crow Wing County and the Region Five Development Commission have received a grant from the Minnesota Board of Water & Soil Resources to assist with replacement or repair of septic systems for low and very low income landowners in order to improve and protect water quality in Crow Wing County. Applications are available online at: www.regionfive.org/forms. For more information or to have an application mailed to you, please contact Anne at Region 5: 218-894-6011 or Crow Wing County Environmental Services @ 218-824-1125 or environmental.services@crowwing.us

Mille Lacs Lake Watershed

Aitkin, Crow Wing, and Mille Lacs Soil & Water Conservation District have been awarded a grant for shoreline buffers / stabilization projects, rain gardens, conservation easements and agricultural best management practices within the watershed of Mille Lacs Lake. Eligible projects typically require a 50% funding match from landowners. Lakes in Crow Wing County that are within the Mille Lacs Lake watershed include Borden, Partridge, Turtle, Round (north of Garrison), Smith, Holt, Camp, and Little Whitefish. Contact Melissa Barrick with Crow Wing SWCD @ 218-828-6197.

Other lake-related grants

Crow Wing Soil & Water Conservation District (SWCD), the Department of Natural Resources, and the 30 Lakes Watershed District have grants available to help offset the cost of stormwater and shoreline projects. For more information, please contact Crow Wing SWCD @ 218-828-6197, DNR @ 218-833-8648, 30 Lakes Watershed District @ 218-828-0243.

Conservation Easements

The Minnesota State legislature approved a grant for *Protecting Sensitive Shoreland in North Central Minnesota Using Conservation Easements*. Crow Wing, Cass, and Aitkin Counties, in partnership with the Minnesota Land Trust and Leech Lake Area Watershed Foundation, will receive approximately \$1 million in funding to pay for the closing costs associated with establishing conservation easements on large parcels of sensitive shorelines. For more information on program eligibility, contact Mitch Brinks @ 218-824-1125 or mitch.brinks@crowwing.us

Well Sealing

The Crow Wing County Land Services Department received a BWSR Clean Water Fund grant for \$20,000 to start a 50/50 cost-share program for sealing abandoned / unused wells. For more information, please contact Mitch Brinks @ 218-824-1125.

Grants—Applications Due

Stormwater Reduction Grants: Crow Wing Soil & Water Conservation District (SWCD)

The Crow Wing Soil and Water Conservation District (SWCD) is seeking applications for Stormwater Reduction Mini-Grants to fund projects to be implemented in 2013-2014 within Crow Wing County (CWC). Project proposals from community partners will reduce stormwater runoff and improve lakes and streams in CWC. All projects require a minimum 25% in-kind cash match. Projects must also be designed for a 10-year minimum lifetime and include maintenance contracts with 2-year minimum duration.

The deadline for applications is Monday, April 1, 2013. Applications and application guidelines are available at Crow Wing SWCD Office located in the Crow Wing County Land Services Building, or online at <http://www2.co.crow-wing.mn.us/swcd/Grants.htm#GrantsforCitizens>. If you have questions contact the Crow Wing SWCD. Phone: [218-828-6197](tel:218-828-6197) or e-mail: robert.bauer@crowwingswcd.org

Upcoming Events

Crow Wing SWCD Open House and Tree & Plant Sale: February 8, 2013 9:00 to 3:00 PM in the Land Services Building

SWCD sells low cost native tree seedlings, flowers, grasses, and seed mixes. The public can pre-order and purchase plants until March 1, 2013. Pre-orders before February 9th receive the Early Bird Bucks: \$5.00 off every \$50 spent. This year features 16 tree species, 9 shrubs, and 18 plants, including rain garden plant kits and seed packets. Orders must be picked up at the Northland Arboretum in May. To receive an order form: visit <http://www2.co.crow-wing.mn.us/swcd>, e-mail robert.bauer@crowwingswcd.org, or call [\(218\)-828-6197](tel:218-828-6197)

Crow Wing County Shoreland Workshop: April 4th!

The annual Crow Wing County Shoreland Workshop for local contractors will be Thursday April 4th. Stay tuned for more info!

As the LGU responsible for the development and implementation of the Local Comprehensive Water Management Plan, the Crow Wing County Land Services Department is committed to protecting, preserving & improving water resources in Crow Wing County by being proactive, efficient, customer focused, organized, and innovative while being good stewards of the county's resources.