

Water Quality Interpretation Tool



Web based water quality interpretive tool.

The Northern Plains and Mountains Regional Water

Quality Team has developed an online assessment tool that offers you instant water quality interpretation. The interpretations provide an increased awareness of methods to reduce contamination and illness due to water-borne contaminants.

Good-quality drinking water is essential to the well-being of rural homeowners, small towns, and the economy of North

Dakota. Drinking water quality standards for human consumption are enforced in public water supplies but are not regulated for private wells. Consequently, private well water users are responsible for their own assurances of the suitability of water supplies for domestic, livestock, and irrigation use.

Livestock drinking water quality is not protected by regulatory oversight, putting the management burden on livestock producers and landowners to test, treat, and protect water resources used by livestock. Livestock problems commonly observed result from high levels of nitrate, sulfate, total dissolved solids, and blue-green algae.

Once you have your water tested, entering the results into this tool is easy. After indicating if this is drinking water or livestock water, the tool tells you if the water falls within the standards for human drinking water or the recommendations for livestock water quality.

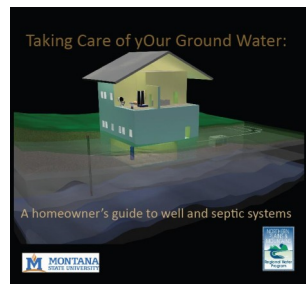
The tool includes recommended treatment processes to correct drinking water problems and links to information and resources, and will soon include an irrigation water tool.

To access the Water Quality Interpretation Tool visit:

www.region8water.org

Taking Care of yOur Ground Water Resources

Well and septic owners have a direct connection to ground water resources. Montana State University water quality specialists, along with other partners in the Northern Plains & Mountains Regional Water Program, developed a video to illustrate the connection a homeowner has to the water cycle, both as a user dependent on ground water for domestic water and as one who relies on components of the hydrologic cycle for domestic, on-site waste disposal.



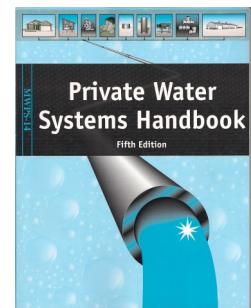
The main section is 17 minutes long; additional sections run from six to 11 minutes. Supplemental chapters include Protecting the Wellhead, Septic System Function and Maintenance, Water System Considerations for Buying or Building a New Home, Sampling for Well Water Quality, Interpreting Water Quality Results, Chlorinating a Well & Water System, Water Treatment Basics, and Bloopers.

The NDSU Extension Service has recommended Section 6 to people cleaning private wells following the past weeks' floods. The video will be available at your county Extension office or on-line at:

http://waterquality.montana.edu/docs/WELL_EDUCATED/Well%20and%20Septic%20DVD/Educational_Videos2.shtml

Private Water Systems Handbook Available

For anyone living in a rural area, the newly revised *Private Water Systems Handbook* is a must. A well-designed and maintained water system is not only essential for your health and well-being, but also improves the value of your home. This latest edition provides complete information about sampling and testing water to ensure safety. Discussions include water reducing modern appliances, reverse osmosis water treatment systems, selection, design, use of PEX modern piping systems, and energy-saving equipment; such as on-demand hot water heating systems and variable speed well pumps. Maintenance of a quality water system is also addressed. Not only are wells discussed, but also use of cisterns, springs and ponds to provide water to the home or farm.



First published in 1968, *Private Water systems* was one of the first comprehensive handbooks for users of private water systems, providing a thorough coverage of how home and farms could be assured of obtaining adequate water from wells, cistern, springs and ponds.

Tom Scherer, NDSU Extension Ag Engineer recommends this handbook for anyone dealing with private water systems. Copies can be ordered on-line at www.mwps.org, by phone at 800-562-3618, or by writing MWPS, 122 Davidson Hall, Iowa State University, Ames IA 50011-3080. Cost is \$32 plus S&H.

NDSU Water Table

Have Your Water Tested at NDSU REC Field Days



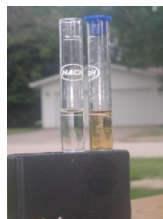
Roxanne Johnson and Tom Scherer screening water samples at the Central Grassland REC in Streeter in June 2008

The North Dakota State University Extension Service will offer water quality screening during NDSU Research Extension Centers' annual field day events again this year. This is an opportunity to have your private well water or your livestock water tested for nitrates, pH, total dissolved solids and hardness at no charge.

Samples should be collected in a clean plastic or glass bottle (15-20 ounces) and brought into the center within 48 hours of collecting. Water quality specialists will review results

with you the same day.

Bacteria testing kits will be available from the specialists at the field day testing site for a discounted price of eight dollars. After obtaining the sample in the sterile jar you can mail it in to Minnesota Valley Testing in Bismarck for analysis. Specialists will contact you with your results.



Field Days are scheduled for:

Central Grassland REC, Streeter June 24, 2009
Hettinger—July 7, 2009
Dickinson—July 8, 2009
Williston—July 9, 2009
Casselton Agronomy Seed Farm—July 13, 2009
Carrington—July 14, 2009
North Central REC, Minot—July 15, 2009
Langdon REC—July 16, 2009

Information Abounds!

Websites

NDSU Agricultural & Biosystems Engineering
<http://www.ageng.ndsu.nodak.edu/>

NDSU Extension
<http://www.ag.ndsu.edu/extension/>

North Dakota State Water Quality
<http://www.ndsu.edu/waterquality>

Irrigation in North Dakota
<http://www.ag.ndsu.nodak.edu/abeng/irrigationinnd.htm>

NDSU Flood Website
<http://www.ag.ndsu.edu/disaster/flood.html>

Publications

WQ-1341, Drinking Water Quality: Testing and Interpreting Your Results
<http://www.ag.ndsu.edu/pubs/h2oqual/watsys/wq1341.htm>

WQ-1352, What's Wrong With My Water
<http://www.ag.ndsu.edu/pubs/h2oqual/watsys/wq1352.htm>

AS-954, Livestock and Water
<http://www.ag.ndsu.edu/pubs/h2oqual/watanim/as954.pdf>

AE-966, A Guide to Plugging Abandoned Wells
<http://www.ag.ndsu.edu/pubs/h2oqual/watgrnd/ae966.pdf>

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“WATER IS LIFE'S
MATER AND
MATRIX, MOTHER
AND MEDIUM.
THERE IS NO LIFE
WITHOUT WATER.”
ALBERT SZENT-
GYORGYI