

U.S. Geological Survey
Scientific Investigations Report 2005-5283

Development and Application of a Screening Model for Simulating Regional Ground-Water Flow in the
St. Croix River Basin, Minnesota and Wisconsin

Authors: Daniel T. Feinstein, Cheryl A. Buchwald, Charles P. Dunning, and Randall J. Hunt

Disclaimer: Use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government; although this report is in the public domain, permission must be secured from the individual copyright owners to reproduce any copyrighted materials contained within this report.

How to use the appendix files for SIR 2005-5283:

These files are included with U.S. Geological Survey SIR 2005-5283. They contain data collected for the development and application of the screening model. See report text for further details about the study and refer to the text documents contained within the 'Documentation' directory for details about the datasets. Data sources have been listed in the supplemental information provided in the 'Codes' directory. The data files are located in the 'Appendixes' directory have been further subdivided by appendix.

The data collected for the St. Croix River Basin regional ground-water flow screening model are presented in tab-delimited American Standard Code for Information Interchange (ASCII) text files. The ASCII text files of the data can be imported into a spreadsheet or database for data analysis. However, the files specifically were created to allow import into a spreadsheet or database of the user's choice. Because of the tab delimiters in the text files, the data does not appear as neat columns of text in a text editor or word processing window.

Any abbreviations or codes that were used in creating the data files are explained in the 'Codes' subdirectory within the 'Data' directory. This reference is provided as an ASCII text document to be opened with a text editor or word processing program. Please note page setup should be selected for landscape orientation. Likewise, the file is provided as an Adobe (Adobe Acrobat Reader) PDF file to preserve this page setup for printing.

To view PDF documents, you need the Adobe Acrobat® Reader installed on your computer. A free copy of the Acrobat® Reader may be downloaded from Adobe Systems Incorporated at <http://www.adobe.com/products/acrobat/readstep2.html>

The file structure of the SIR 2005-5283 appendix digital data is as follows:

```
README.txt
README.pdf
Documentation\
Documentation\SIR05-5283 Appendix Documentation.txt
Documentation\SIR05-5283 Appendix Documentation.pdf
Codes\
Codes\SIR05-5283 Codes.txt
Codes\SIR05-5283 Codes.pdf
Appendixes\
Appendixes\Appendix A\
Appendixes\Appendix A\Well Logs.txt
Appendixes\Appendix B\
Appendixes\Appendix B\Lithology.txt
```

Appendixes\Appendix C\
Appendixes\Appendix C\Thickness of Lithologic Groups.txt
Appendixes\Appendix D\
Appendixes\Appendix D\Ground-Water Levels.txt
Appendixes\Appendix E\
Appendixes\Appendix E\Streamflow.txt
Appendixes\Appendix F\
Appendixes\Appendix F\Well Pumpage.txt

README.txt (or README.pdf)

This file provides an introduction to the contents of the appendix files; it explains the files and directories. This file should be the first one opened in a text editor or word processing program because it outlines the organization of the data and data documentation. The same file has been made available as an Adobe PDF file. (This file is README.txt)

Documentation\

Documentation is a directory containing data documentation. The documentation for each of the six datasets has been combined and is available in one ASCII text or Adobe PDF file.

SIR05-5283 Appendix Documentation.txt (or SIR05-5283 Appendix Documentation.pdf)

This file is the data documentation for the appendixes.

Codes\

Codes is a directory that provides supplemental information on data sources and an explanation of the abbreviations and codes used in the data attribute fields. This information has been summarized as a text document and as an Adobe PDF file. It is strongly suggested to review this file before accessing the appendix data files.

SIR05-5283 Codes.txt (or SIR05-5283 Codes.pdf)

This file contains abbreviations and codes used in the appendixes data files. Information has been provided to describe the data column headers, appendix data sources, geologic unit codes, lithologic unit codes, location accuracy, ground-water level accuracy, and water use classification for well pumpage.

Appendixes\

Appendixes is a directory containing all the summary data files used in the development of the screening model. This directory is divided into subdirectories that correspond to the assigned appendix letter stated in the report text. Each Appendix subdirectory contains one data file that is named according to its data type. The tab-delimited ASCII data files can be imported into a spreadsheet application.

Briefly, the appendix data within the 'Appendixes' subdirectories are as follows:

Appendix A contains well log data.

Appendix B contains available lithologic data for well logs in Appendix A.

Appendix C contains calculated thickness data for lithologic groups.

Appendix D contains ground-water level data.

Appendix E contains streamflow data.

Appendix F contains well pumpage data.

Please note that a description of each data file has been provided in the SIR 2005-5283 Appendix documentation text or PDF file that is within the documentation directory.