

Groundwater Resources Program: Directory Structure for GWRP Groundwater Model Archive

For consistency in directory structure among the Groundwater Resources Program (GWRP) regional groundwater modeling archives, each archive should use the directory template indicated below. Note that certain subdirectories are given as examples, and the actual archive for a model should be adjusted to document that specific model.

Directory Name ¹	Subdirectories	Description
YYYY_PPxxx_ProjectName		The top-level directory name is YYYY_PPxxx_ProjectName where YYYY = year of publication PPxxx = publication series abbreviation and number ProjectName = project name Example: 2009_PP1750_MissEmbayment where PP1750 refers to USGS Professional Paper 175, published in 2009 about the Mississippi Embayment study.
1-Contents_and_ReadMe		The Contents directory will include one or more files that contain: (1) purpose, scope, and areal extent of the modeling study; (2) full reference for the subject report, including the persistent URL; (3) descriptions of the subdirectory structure and of the files contained in each subdirectory, (4) descriptions of data file formats, when appropriate; (5) the sequence of model runs; and (6) instructions for running simulations. Note: When the input data of one model depends directly on output from another model, both models are to be included in the archive. If the models are documented in separate reports, a cross-reference between the reports must be included in the CONTENTS directory of the archive entry for each report.
2-Report		Create a directory for each published report containing the ground-water flow or transport model analysis. The directory should include the final PDF report as published online, including any appendices. The subdirectories listed here are suggestions; the specific directories included should be adapted as needed.
	Report_Animations	If applicable, include any animations produced as part of the report.
	Report_Figures	If available, include the original figure files (such as AI),
	Report_Other_Files	If applicable, include any other report files.
	Report_Tables	
3-Input		Input files must be stored as read by the model. In cases where model input files are proprietary or machine-dependent, ASCII versions of the files should also be stored in the

Directory Name ¹	Subdirectories	Description
		archive, if it is possible to generate them. The ASCII version will make it more likely that the files can be used on virtually any computer without the need for specialized or proprietary software.
	A-Macros_and_shell_programs	If applicable, include any macros and shell programs.
	B-Steady_State-final	Include, if applicable.
	C-Transient-final	Include, if applicable.
	D-Scenario_1-explanation	Include an explanation of each scenario modeled.
	E-Scenario_2-explanation	Include, if applicable.
4-Output		Include (when applicable) the final calibrated steady-state and transient results and any predictive results described in the publication. Model results of minor importance, such as interim calibration runs, should not be archived. The model output files are included to allow future verification that the model reproduces the published results when the input files are rerun.
	A-Steady_State-final	Include, if applicable.
	B-Transient-final	Include, if applicable.
	C-Scenario_1-explanation	Include an explanation of each scenario modeled. Same comment as above.
	D-Scenario_2-explanation	Include, if applicable. Same comment as above.
5-Ancillary_Data		Examples of ancillary data that might be stored are GIS data files, data stored by pre-processor codes, or other data directly related to the model simulations. Where possible, these data should be stored in a widely supported format as opposed to a proprietary format. For example ARC/INFO offers the ability to export GIS data stored in their proprietary coverage format into formats that can be read by other applications. Documentation of ancillary data must include a description, the source, format, the version of software on which it was produced, etc.
	GIS	Include, if applicable.
	Other	Include, if applicable.
6-Model_Source_Codes		The model archive must include the source code, including any macros and shell programs. Each source code should be stored in a separate subdirectory using the code name as a

Directory Name ¹	Subdirectories	Description
		directory name and including a description of the name of the code and the version number. Macros and shell programs should also include a brief description of the purpose and origin of the code.
	SEAWAT	Include, if applicable.
	MODPATH	Include, if applicable.
	MODFLOW	Include, if applicable.
	Macros_and_shell_programs	Include, if applicable.

¹ Note: Directory and file names should not include spaces or special characters.