

3 GROUND-WATER SITE-INVENTORY MENUS

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There are two primary menus used to access GWSI programs, the GWSI Main Menu and GWSI System Menu. Most of the nationally supported GWSI programs used by the majority of users are accessed through the GWSI Main Menu. System Administrators or GWSI Database Administrators use the GWSI System Menu to perform database maintenance; the menu and the utilities on the menu are explained in the [NWIS Ground-Water Site-Inventory System Menu documentation](#). Both menus provide access to submenus, which contain additional GWSI functionality that is used less often than the primary functions. Common to all GWSI Menus are codes 98 and 99, which provide menu navigation and exit functions. If the user is attached to a directory that contains *usr/opt/nwis* in the pathname when the GWSI Main Menu is invoked, the directory will be changed to the GWSI origin directory. A UNIX command or user abbreviation may be executed from any GWSI menu. Virtually any command may be used, but if the command closes the unit on which the GWSI menu was active, control cannot be returned to the menu. The GWSI Documentation Menu structure is shown below:

- 3.1 *GWSI Main Menu*
- 3.1.11 *Utilities Menu*
- 3.1.11.1 *Database Checking Menu*
- 3.1.11.2 *GW Check List Menu*
- 3.1.12 *Documentation Menu*
- 3.1.13 *Local Menu*

The GWSI Main Menu allows access to utilities that prepare data for entry into the GWSI database, provides for editing of the data for accuracy, updating the local database, and retrieving data from the local database. The data are presented in tabular and graphical formats. The GWSI Main Menu structure contains the Main Menu and three submenus: Utilities Submenu, Documentation Submenu, and Local Submenu. The Utilities Submenu, in turn, contains two additional submenus that can be used to verify and correct data in the database.

3.1 GWSI Main Menu

The [GWSI Main Menu](#) contains the following functions:

- Prepare data for entry into the database (Query Entry and Screen Entry)
- Validate data and prepare for updating database (Interactive Edit and Batch Edit)
- Update database (Interactive Update, Batch Update, Sitefile Only Update)
- Access and display data (Retrieval/Table, Hydrographs)
- Provide data support (Utilities Submenu)
- Access user documentation (Documentation submenu)

```

*****
*   Main Menu for WRD GWSI Data Base # 01   --   NWIS_4_0+20010423
*****
Code   Program Description                    Code   Program Description
-----
 1 :   Query Entry                          11 :   Generate Field Forms
 2 :   Screen Entry                          13 :   Edit GW Data in Batch
 3 :   Edit GW Data (from 1-2)              14 :   Update GW Data in Batch
 4 :   Update GW Data (from 3)
 5 :   Update Sitefile Only (runs 2,3,4)
 6 :   Retrieval/Tables                      16 :   Plot Hydrographs
 7 :   Copy File (from 1-2) to Directory watin

10 :   Change GW/QW Database #

96 :   Documentation Menu                    91 :   Utilities Menu
98 :   Exit to Previous Menu                 97 :   Local Menu
                                           99 :   Exit to UNIX

```

Note: Users with read-only access will not see the Update programs indicated by codes 4, 5, and 14 on the Main Menu.

3.1.1 Option 1: Query Entry

This program displays a sequence of prompts to the user for entry of all or selected GWSI data components. The entered data are output into a file with a defaulted or user-designated name for use by the Edit software. Additional information about entering data into GWSI using the query entry option is available in [Chapter 4](#). Information about the fields that can be entered into GWSI is available in [Chapter 2](#) of this document.

3.1.2 Option 2: Screen Entry

This program displays screens on the monitor with data grouped in categories (site, construction, etc.) for entry of GWSI data components. The entered data are output into a file with a defaulted or user-designated name for use by the Edit software. Additional information about entering data into GWSI using the screen entry option is available in [Chapter 5](#). Information about the fields that can be entered into GWSI is available in [Chapter 2](#) of this document.

3.1.3 Option 3: Edit GW Data/Option 13: Edit GW Data in Batch

These programs use the files generated in either option 1 or 2 above to provide a second level of data verification and to create transaction files used by the UPDATE software to transfer the data to the Ingres database. In both processes, a ‘batch’ ID is entered after the input file name is identified; this ID is used by UPDATE to identify the data set that is to be transferred to the Ingres database. The difference between the two options is that Option 3 is interactive with the user, Option 13 defers processing to a background process. Additional information about using this program is available in [Chapter 6](#).

3.1.4 Option 4: Update GW Data/Option 14: Update GW Data in Batch

These programs use the transaction files generated during the Edit step to further validate the data and load the data into the Ingres database. Both processes prompt the user for the 'batch' ID entered from the Edit step to identify the data set that is to be transferred to Ingres. The difference between the two options is that Option 4 is interactive with the user. Option 14 defers processing to a background process. Additional information about using this program is available in [Chapter 7](#).

3.1.5 Option 5: Update Sitefile Only

This program combines Options 2, 3, and 4 into one process. Only Sitefile data can be loaded with this option.

3.1.6 Option 6: Retrieval/Tables

This program provides access to data entered into the database and displays it in several different formats. Data selection is facilitated by gross and detailed selection criteria. Data may be output in table format or in files that may be used for further processing of the data. More detailed information about how to run this program is available in [Chapter 8](#).

3.1.7 Option 7: Copy File (from 1-2) to Directory watin

This program copies files from the user's current directory to a common repository directory, 'watin.' The UPDATE process may be restricted to certain users; files are copied to watin because it is the common repository for database update files.

3.1.8 Option 10: Change GW/QW Database Number

This program allows the user to change the database number for either or both the Ground-Water database and the Water-Quality database.

3.1.9 Option 11: Generate Field Forms

This program generates a custom form for use in the field. Any of the GWSI data components may be selected for display on the form, and the form may be blank or populated with current data available for the selected sites. More detailed information about this program is available in [Chapter 10](#).

3.1.10 Option 16: Plot Hydrographs

This program provides a graphical representation of water level data for selected sites either to the monitor screen or to a printer. More detailed information about this program is available in [Chapter 9](#).

3.1.11 Option 91: The Utilities Submenu

- Code 1 - translates a station name into agency and site identification (Site ID) number. Detailed information for this option is available in [Chapter 11](#).
- Code 2 – inventories, changes, or deletes stations. Detailed information about the station change program is available in [Chapter 12](#).
- Code 3 - accesses support files (parameter code dictionary, geologic unit code file, FIPS code file, and state/county code file, etc.) Detailed information for the support files menu is available in [Chapter 13](#).
- Code 4 - accesses the Data Dictionary (either a short or a long list).
- Code 5 - lists records for one or more sites, as specified by the user.
- Code 10 - changes a user's default database number when multiple databases are used at a site and the user has access rights to more than one database. Detailed information for this option is available in [Chapter 14](#).

```

*****
* Utilities Menu for WRD GWSI Data Base # 01 -- NWIS_4_0+20010423
*****

Code  Program Description
-----
  1 : Translate Station Name Into Agency and Site ID
  2 : Station Change: Inventory, Change or Delete
  3 : Query Support Files
  4 : Data Dictionary List
  5 : List Site Records

10 : Change GW/QW Database #

92 : Database Check Menu           93 : List Utilities Menu

98 : Exit to Previous Menu        99 : Exit to UNIX

Enter UNIX Command or Select Program Code:

```

3.1.11.1 Database Checking Menu

- Code 1 and 11 - perform data verification on Sitefile and Ground-Water data components and provide a statistical report of the results of the data verification.
- Code 2 - finds orphaned Ground-Water records, records without Sitefile data or without parent records.

```

*****
* Database Check Menu -- NWIS_4_0+20010423
* Current GW Database is: 01 Current QW Database is: 01
* WARNING: These options can take a very long time to complete.
*****

Code Program Description          Code Program Description
-----
 1 : Check Sitefile/GWSI Data      11 : Generate Report from 1
 2 : Find GW Orphaned Records

 6 : Get Database Record Statistics
10 : Change GW/QW Database #

                                93 : List Utilities Menu

 98 : Exit to Previous Menu        99 : Exit to UNIX

Enter UNIX Command or Select Program Code:

```

3.1.11.2 List Utilities Menu

This menu performs checks on various categories of data. These checks can be performed on all stations (a), site IDs contained in an external file (f), a range of station IDs (r), or by single station ID (s). Functionality includes:

- Codes 1 and 11 - determine any NWIS site with missing mandatory data elements and provide a means to easily update records with missing mandatory data.
- Codes 2 and 12 - determine any Ground-Water sites with missing mandatory data elements and provide a means to easily update records with missing mandatory data.
- Codes 3 and 13 - determine sites with missing altitude accuracy and/or method of altitude determination codes and provide a means to easily update records with the missing codes.
- Codes 4 and 14 - determine sites with Sitefile aquifer codes (C714) that do not match geologic unit codes (C93) in the Geohydrologic record and provide a means to easily update records.
- Code 5 - determines water level records where the water level equals 0.00.
- Code 6 - determines sites that have water level data available and the number of water levels available.
- Code 7 - determines sites that have water-quality data available and the number of water-quality records available.
- Code 8 - determines sites where the Sitefile web code is set to C.
- Code 9 - identifies those sites that have components that do not have parent information.

- Code 16 - determines sites that have water-level information available and creates a file that can be edited and re-entered into GWSI for any corrections.
- Code 18 - produces a list of unique project numbers in the Sitefile, and the number of occurrences of each.
- Code 19 - produces a list of unique map names found in the Sitefile, and the number of occurrences of each.

```

*****
* List Utilities Menu for WRD GWSI Data Base # 01 -- NWIS-4_2_0-20021001
* Select option = all stations
* WARNING: These options can take a very long time to complete.
*****

Code  Program Description          Code  Program Description
-----  -----
  1 : Any Site w/Missing Mand Site Data  11 : as 1 but output edit file
  2 : GW Sites w/Missing Mand Site Data  12 : as 2 but output edit file
  3 : Sites w/Missing Alt Accy/Meth      13 : as 3 but output edit file
  4 : Sites w/Mismatched Prim Aqfrs     14 : as 4 but output edit file
  5 : Sites w/Zero Water Levels
  6 : Sites w/Water Level Data          16 : Water Level edit file
  7 : Sites w/QW Data
  8 : Sites w/"C" web_code              18 : List Project Numbers
  9 : Sites w/Orphaned Components        19 : List Map Names

10 : Change GW/QW Database #            20 : Change Select Option

98 : Exit to Previous Menu              99 : Exit to UNIX

Enter UNIX Command or Select Program Code:

```

3.1.12 Documentation Submenu

The Documentation Submenu (code 96) launches Netscape and the user is automatically taken to the GWSI User Documentation.

The NWIS 4.3 documents are stored in PDF files, which require the Adobe Acrobat Reader to view and print.

3.1.13 Local Menu

The local menu is available for District-specified options.

This is intended to be a user-modifiable script and can be found at */usr/opt/nwis/util/gwlocal*.

Please contact NWIS if you need assistance modifying this script with District-specified options.

```
*****
* Local Menu for WRD GWSI Data Base # 01 -- NWIS [version
no.+yyyymmdd]
*****
Code  Program Description          Code  Program Description
-----
  1 : Local Option 1
  2 : Local Option 2
  3 : Local Option 3
  4 : Local Option 4
  5 : Local Option 5
  6 : Local Option 6
  7 : Local Option 7
  8 : Local Option 8
  9 : Local Option 9
 10 : Change GW/QW Database #

80 : Local Menu 1                81 : Local Menu 2

98 : Exit to Previous Menu      99 : Exit to UNIX

Enter UNIX Command or Select Program Code:
```