February 6, 2007

Office of Water Quality Water-Quality Information Note 2007.05

Subject: Field Methods— Release of Personal Computer Field Forms (PCFF) Version 6.0

The purpose of this Note is to announce the release of Version 6.0 (02/01/2007) of the Personal Computer Field Forms (PCFF) software. The Office of Water Quality and the Colorado Water Science Center jointly supported development of this software release. This software provides the users with an efficient way to record surface-water and ground-water water-quality field notes, calibrations, and measurements electronically. It also includes a function for downloading stream discharge measurement data from the JBS Instruments Aquacalc discharge measurement computer. All data entered into PCFF are easily uploaded to the National Water Information System (NWIS) using batch input routines. Some benefits of the PCFF software are:

- One-time data entry--no paper forms
- Use of pick lists—no need to look up codes, etc.
- Required entry of mandatory fields—more complete field notes
- Internal calculations for alkalinity titrations and microbiology counts—no math errors
- Batch data entry used to log samples into the NWIS database and enter field data—no transcription errors; saves time in the office
- Printing of completed Analytical Services Request Forms (ASRs) for the National Water Quality Laboratory (NWQL)
- Printing of completed field forms for review and filing

This release incorporates recently added NWIS data coding elements and includes the following fixes and enhancements:

1. Fixed bug that caused the calibration barometric pressure to be overwritten by the sample barometric pressure when the dissolved-oxygen (DO) calibration section was opened during a sample edit.

2. Added 5-digit method codes to field parameters and cross sections (NWIS mandated change).

3. Added new meter selection form that allows configuration of meter with parameter codes, method codes, and probes/electrodes.

4. Added functionality to allow a meter to be selected in the cross-section/well-purge logs. Selecting this meter also picks default parameter/method code combinations and reporting units for the cross-section parameters.

5. Deleted Analyzing Agency (parameter code 00027) and Collecting Agency (parameter code 00028) and added new Collection Agency field and associated codes.

6. Added a routine to add default parameter codes, method codes, and reporting units to the Water Temperature, Dissolved Oxygen, pH, Specific Conductance, and Turbidity fields of a surface-water cross section and ground-water well purge. This is accomplished by selecting a meter. The default parameter, method codes, and reporting units will automatically be populated.

7. Added a routine to make all elements of a cross section the same final depth to help save time when doing lake profiles.

8. Removed 5-day BOD (parameter 00310) as it wasn't implemented properly. A correct implementation of 5-Day BOD will be added in a later release.

9. Added the following Parameter Codes:

99104 (Spike vials)
99201 (2nd Inorganic Blank Water)
99203 (2nd Pesticide)
99205 (2nd Pesticide/VOC)
99112 Purpose, Topical QC data

1	Routine QC (non-topical)
10	Topical for high bias (contamination)
20	Topical for low bias (recovery)
100	Topical for variability (field equip)
110	Topical for variability (field collection)
120	Topical for variability (field personnel)
130	Topical for variability (field processing)
140	Topical for variability (shipping & handling)
200	Topical for variability (lab)
900	Other topical QC purpose

10. Added parameter pick lists for Water Level and Sampling Depth fields in the ground-water water-quality section.

11. Double clicking a well-purge (ground-water water-quality) or cross-section (surface-water water-quality) entry will now launch the editor to edit the purge or cross section.

12. Hydrologic Condition code "X" is now on the list in the ground-water water-quality form.

13. Increased the "Processed by" field to 20 characters in the microbiology data entry form.

14. Increased the "Remarks" field to 20 characters in the ground-water water-quality well-purge log.

15. Field parameter “dissolved oxygen (DO) percent saturation” (00301) no longer outputs to batch file for surface-water water-quality cross sections. Functionality to generate the DO saturation in the section using barometric pressure will be developed in a future release. DO percent saturation (parameter code 00301) is automatically calculated by NWIS upon data output.

Note: The long pick lists now have all but the most commonly-used values “hidden” by default. Click on the “All Values” tab to see the other choices. Double click the “Hide” button to have the values of your choice show up on the “Favorite Values” list.

The PCFF software can be obtained from http://water.usgs.gov/usgs/owq/pcff.html.

Instructions for installing and configuring PCFF, as well as recovering a backup, are also available at this link. User documentation and help for PCFF functions are available from within PCFF. **NOTE: in some instances the help file will not work the first time it is accessed. To ensure that the help file is available to the user, upon starting PCFF click the help drop-down menu then the help option. This should launch the help file. If the help file fails to launch – close PCFF and try to access the help option again. It should then open normally**

Users should make sure that their PCFF Version 5.2.1a database is backed up prior to updating to PCFF Version 6.0.*

The downloadable file available from the link above is named PCFF_CD6.zip. This file may also be used to create a CD-ROM from which PCFF can be installed or updated. To create the CD, unzip the files to a new folder. Then write the unzipped files to a CD. The PCFF install screen will open automatically when the CD is placed in the computer. PCFF 6 may also be installed by double clicking the "Setup" icon in the unzipped PCFF_CD6 folder. If a previous version of PCFF was installed, user configuration data and settings can be imported into PCFF 6 by clicking the "Import from version 5.2" button on the top of the "Configure PCFF" form.

****Note that previous field samples will not be retained from when updating to PCFF 6.0.****

Detailed information about fixes, enhancements, and updates in this version of PCFF is provided in the README file that's also available at the link above.

Questions about the software should be referred to Frank Crenshaw (fccrensh@usgs.gov).

If this Note was forwarded to you and you'd like to have your name placed on the WaQI Notes distribution, please send email to nlsnow@usgs.gov.

WaQI Notes are archived on the Office of Water Quality web site, http://water.usgs.gov/usgs/owq/WaQI/index.html