5.3 Tip Sheet: How do I design a field form......and why would I want to?

❖ Field forms allow the user to design a data input file containing the parameters that are routinely entered for a particular project, field trip, a WSC water-quality field sheet, or data from a non-USGS laboratory.

❖ Creation of new field forms should be completed if the available field forms do not contain one that can be used for the needed purpose. This requires that the available field forms be reviewed prior to creating a new one.

❖ A field form is a file containing a list of parameter codes, method codes, parameter names or descriptions, and identification that a parameter is mandatory. Field forms are used in the Enter Field Results, program *(Section 3.2.1)*, the Enter Laboratory Results program *(Section 3.2.2)* and in the Login Sample program *(Section 3.1)*.

❖ Any editor that produces an ASCII output file can be used to create or edit a field form file.

❖ Any numeric parameter can be entered into a field form. Alpha parameters (such as GUNIT for geologic unit code) cannot be used in the field form.

❖ Up to 100 parameters can be included in a field form.

❖ Attach to the directory: */usr/opt/nwis/data/auxdata/qw_field_forms*

❖ **List the directory to see what field form numbers already exist before selecting a new 2-digit form number to create.**

❖ Initiate the editor from this directory and enter the data in the format shown below. Save the file as *field.parmsnn* where 'nn' is the new 2-digit number.

❖ The first line of the field form should be used to document the purpose of the field form by placing a "**#**" in the first column. Additional lines can be used for comments as long as a "**#**" is in the first column of the line. The format and an example of a field form are shown below.

❖ Use caution when creating descriptions for parameters to ensure that they are clear and match the definition in the PCD for that parameter. For example, if the parameter is defined as 'dissolved' in the PCD, then the description in the field form should contain 'dissolved' in the parameter description.

❖ Be sure that the final line of the field form contains a carriage return at the end. If this is not included, the last parameter will not be included to enter data.

Format of the field form

Line 1	**Begins with a "#" in column 1 and is used to describe the purpose of the field form, name of the person who designed the form, and date created. (This line is not required but is strongly recommended because the line is displayed if a list of field forms is requested.)**
Columns 1-5	**Parameter code [5 digits, use leading zeros].**
Column 6	**Method code [optional].**
Column 7	**Not used.**
Columns 8-32	**Parameter names or descriptions [could match WSC water-quality field sheet]**
Column 36	**Y indicates parameter is mandatory.**

Example of field form

```
#NAWQA SW field form for Biological project was created
#  by John Smith on 12-25-1999
#2345678901234567890123456789012345678890 Column numbers
00061  Streamflow
00065  Gage height
00010  Temp water
00020  Temp air
00400  pH
00095  Specific Conductance
00300  Dissolved Oxygen
00025  Barometric pressure
00452B CO3 Carbonate M=B
00453B HCO3 Bicarbonate M=B
39086B Alkalinity Inc. Titration
31625  Fecal Coliform
31673  Fecal strep
84164  SAMPLER TYPE                   Y
71999  PURPOSE                        Y
99105  REPLICATE
99111  QA DATA TYPE                   Y
```