Example CAWSC Data Management Planning Questionnaire

Introduction

Data management planning is:

1. required as part of the proposal review process
2. a collaboration between Projects and Science Support Data Management Section (DMS) intended to ensure that all aspects of the data lifecycle are considered.

Please note that this PDF is only to be used as an example. It is not a fillable form. Please contact the California Water Science Center Data Management team (GS-W-CAWSC_DMS@usgs.gov) for a link to the actual, up-to-date form.

Data Management Plan

1. Project name
2. What is the name of the project lead / chief / principal investigator?
3. Who will be responsible for managing the data?
   Explanation: Please provide a name as a contact for data management for this project. Note: this needs to be someone closely associated with the data collection and processing.
4. Would you characterize the proposed work as: (*Choose only one of the following*)
   a. ROUTINE (will use previously established methods AND a previously established study design)
   b. NONROUTINE (will use previously established methods AND a new study design)
   c. RESEARCH (will use new methods AND a new study design)
   d. Other
5. Will this project involve modeling? (*Choose only one of the following*)
   Explanation: Do you plan to either create new models or use existing models for this project? A model is defined herein as any mathematical representation of a system that is used to study the effects of individual system components and their interactions or predict future system behavior.
   a. No *(Skip to number 9)*
   b. Yes *(Skip to number 6)*

Modeling follow-up
6. Who will ensure that model(s) generated or used are appropriately tested or validated, and archived in accordance with USGS policy to support the reproduction of results in publications?

Explanation: policy is located at
http://water.usgs.gov/admin/memo/SW/sw2015.01.pdf
Skip to number 9

Groundwater quality data follow-up questions

7. Do you anticipate a need for training (for yourself or for any of your project staff) on how to use the water quality system known as QWdata (Water Quality data)? (*Choose only one of the following*)
   Explanation: QWdata is a component of the NWIS (National Water Information System) database. QWdata is used to login samples, add, modify or delete samples and results, review data, and retrieve data.
   a. Yes
   b. No

8. Do you expect your water quality analysis to be done at labs with existing agreements with the USGS? (*Choose only one of the following*)
   a. Yes
   b. No
   c. I don't know

   Skip to number 16

Groundwater data?

9. Do you plan to collect groundwater data? (*Choose only one of the following*)
   Explanation: This includes collection of groundwater level data or groundwater quality data.
   a. No (*Skip to number 16*)
   b. Yes (*Skip to question 10*)

Groundwater data follow-up questions

10. Approximately how many groundwater sites do you plan to establish? *(Choose only one of the following)*
    Explanation: Sites could be continuous or discrete.
    a. None – sites already exist
    b. 1 to 30
    c. 31 – 50
    d. More than 50

11. Of these sites, approximately how many will be CONTINUOUS?
    Explanation: Continuous sites include those where instrumentation is installed to record data unattended at a set interval.

12. Of these sites, approximately how many will be DISCRETE only?
    Explanation: DISCRETE sites include those that are physically measured at periodic intervals.

13. Groundwater data collection will include: (*Choose only one of the follow*)
    a. Quality (After the last question in this section, go to number 7)

      b. Levels

      c. Both Quality and levels (After the last question in this section, go to number 7)

14. Do you anticipate a need for training (for yourself or for any of your project staff) on how to use the groundwater system known as GWSI (GroundWater Site Index)? (Choose only one of the following)
Explanation: GWSI is a component of the NWIS (National Water Information System). It is used to enter, modify, delete, and retrieve groundwater levels.

      a. Yes

      b. No

15. Do you plan to measure or collect existing data to determine how much groundwater is pumped?
Explanation: Either volume or pumpage rate and time.

      a. Yes

      b. No

Skip to number 16

Surface water data?

16. Do you plan to collect surface water data? (Choose only one of the following)
Explanation: In addition to quantity and quality, this would also include measurements of temperature, salinity, etc.

      a. No (*Skip to number 23*)

      b. Yes (*Skip to number 17*)

Surface water data follow-up questions

17. Approximately how many surface water sites do you plan to establish?
Explanation: Sites could be continuous or discrete.

a. None - sites already exist
b. 1 to 30
c. 31 to 50
d. More than 50

18. Of these sites, approximately how many will be CONTINUOUS?
Explanation: Continuous sites include those where instrumentation is installed to record data unattended at a set interval.

19. Of these sites, approximately how many will be DISCRETE only?
Explanation: DISCRETE sites include those that are physically measured at periodic intervals.

20. Surface water data collection will include: (*Choose only one of the following*)
a. Quality (*Skip to question 21*)
b. Quantity
c. both Quality and Quantity (*Skip to question 21*)

Go to number 9

Surface water quality data followup questions

21. Do you anticipate a need for training (for yourself or for any of your project staff) onhow to use the water quality system known as QWdata (Water Quality data)?
Explanation: QWdata is a component of the NWIS (National Water Information System) database. QWdata is used to login samples, add, modify or delete samples and results, review data, and retrieve data.
a. Yes
b. No

22. Do you expect your surface water quality analysis to be done at labs with existing agreements with the USGS?
a. Yes
b. No
c. I don't know

Skip to number 23

NWIS?

23. Do you expect to archive data from this project in NWIS?
Explanation: The National Water Information System (NWIS) has 4 main subsystems for: [1] GWSI: site information and discrete groundwater levels , [2] QWDATA: samples/results of discrete analysis that describe chemical and other properties of water, solid, biological and air media , [3] ADAPS: information about continuously recorded surface water, groundwater, and water quality data , and [4] SWUDS/AWUDs: estimates of water use by individual users and for aggregated water use data by county, HUC or aquifer.

Followup questions for data destined for NWIS

24. Does NWIS already have parameter codes for all of data that you plan to archive there?
    a. Yes
    b. No
    c. I don't know
25. How will data get into the NWIS database?
    a. GOES satellite transmission
    b. LoggerNet cellular transmission
    c. USGS Field Computing software
    d. Manual entry
    e. Other:
26. Who will be responsible for approval of data archived in NWIS (includes timeseries, discrete QW, and discrete GW records)?
    Note: that this needs to be someone closely associated with the data collection, and processing.
27. Do you anticipate a need for training in time-series data processing?
    Explanation: ADAPS (Automated Data Processing System) is the component of NWIS that is used for processing of continuously recorded water data which includes surface water, groundwater, and water quality data. AQUARIUS is planned to replace ADAPS sometime in late FY16.
    a. Yes
    b. No
28. Do you plan to collect other data that won't fit into NWIS?
    a. Yes (Skip to number 29)
    b. No (Skip to number 35)

Skip to number 35

If data are not destined for NWIS…

29. Why won't the data be archived in NWIS?
30. What is the network address where your data will be stored while the project is ongoing? (e.g., \\igswcawwfsnas\)
31. Please describe your plan for storing backups of the data in multiple places and on different media types to protect against data loss from a single-point failure.
32. Who will routinely check to ensure that backups are being done according to that backup plan you just described? *Note: that this needs to be someone closely associated with actual storage and management of your project data while the project is ongoing.*
33. Where will these data be made accessible to the public?
    a. USGS's sciencebase.gov
    b. Aquatic.biodata.usgs.gov (biological community and physical habitat data)
    c. Cmgds.marine.usgs.gov (Coastal and Marine Geoscience Data System)
    d. Bison.usgs.ornl.gov (Biodiversity Information Serving Our Nation – U.S. species occurrence data and maps)

e. Other:
34. What format will your data be in?
   a. an obscure proprietary format used by an instrument manufacturer
   b. ASCII text
   c. HTML
   d. JSON
   e. Microsoft Word
   f. Microsoft Excel
   g. PDF
   h. Shapefile
   i. XML
   j. Other:

Skip to question 35

Questions about data quality management

35. Who will manage data quality throughout the project?
   Note: that this needs to be someone closely associated with the data collection, and processing
36. The quality of this project's data will be assured by following: (*Check all that apply*)
   a. our center's Quality Assurance plan for GROUNDWATER:
      http://cawscportal.wr.usgs.gov/sciencespt/gw/Documents/CAWSC%20Quality%20Assurance%20Plan%20for%20Groundwater.pdf
   b. our center's Quality Assurance Plan for SURFACE Water:
      http://cawscportal.wr.usgs.gov/sciencespt/sw/documents/Records_Guidance/SW_QA_Plan.docx
   c. our center's Quality Assurance Plan for WATER QUALITY:
      http://cawscportal.wr.usgs.gov/sciencespt/gw/Documents/CAWSC_WQ%20QA%20plan_15May2014/QAplanWQ_15May2014.pdf
   d. in a separate quality assurance plan tailored for this particular project
   e. Other:

Final data management questions

37. What is the name of the person responsible for creating and updating metadata compliant with metadata standards endorsed by the Federal Geographic Data Committee?
   Explanation: In other words, who will make metadata compliant with ISO19115 and ISO19139, or the FGDC's Content Standard for Geospatial Metadata. See this page for more detail:
   http://www.usgs.gov/datamanagement/describe/metadata.php *Note: This needs to be someone closely associated with the data collection, and processing.*
38. Do you anticipate the need for training for yourself or your project staff on how to create metadata?
   a. No

       b. Yes, please!
39. Please describe any access restrictions for the data to be collected and how those restrictions may impact the storage and protection of the data and public access to the data.
40. Please use this space to let DMS know anything else about your project that was not covered previously and that might help us better support your project.

Shameless attempt to get customer feedback

41. Overall, how satisfied are you with the data management support you get from DMS? (Highly dissatisfied = 1 to Highly satisfied = 10)