# Guidance and Instructions for the Preparation of Data Furnished to the USGS California Water Science Center (CAWSC) for Review and Publication – Annual Review of Furnished Records

The USGS Memo Water Mission Area Technical Memo 2016.04 sets out standards regarding acceptance of hydrologic data collected by other agencies into the USGS NWIS database. The USGS will accept data into NWIS that are collected (in all or in part) by other organizations, provided that the USGS quality assures the data; can attest that the data are collected using methods that result in data that have an accuracy comparable to the data collected by the USGS; and the data contribute useful information about the water resources of the Nation. Final authority and responsibility for ensuring compliance of furnished records with USGS standards rest with each WSC Director. Supplemental, more detailed information on how to comply with the policy concerning surface water data furnished by a cooperator can be found at: https://water.usgs.gov/osw/furnished\_records/

The CAWSC reviews and publishes surface-water data furnished by other agencies, organizations, and institutions. Most of the furnished surface-water data in the CAWSC is received in connection with hydropower development under the authority of the Federal Energy Regulatory Commission (FERC). More information and guidelines for CAWSC FERC and furnished records can be found at: https://ca.water.usgs.gov/FERC/

# Furnished Record Policy: Supplemental Information for Streamgage Data

USGS <u>Water Mission Area Technical Memo 2016.04</u> sets out standards for the use of furnished water records from Cooperators. The supplemental information below provides Water Science Centers with details on how to comply with the policy.

## **USGS Standards**

# **Data Quality**

- The Data Provider should follow USGS surface water data collection methods, procedures and policies. <u>Surface Water Technical Procedures</u> documents outline proper data collection methods that should be followed by the USGS and Data Provider. Taken together, these documents, each addressing different streamgaging activities, constitute "USGS surface-water data-collection standards". All require some interpretation and many require some adaptation to specific hydrologic conditions and circumstances. *If data collection varies from USGS standards, deviations should be documented in the project and Center Quality Assurance and Data Management Plans and should be acceptable to the Water Science Center accepting the data.*
- USGS should verify Data Provider data collection procedures at regular intervals to assure the data quality. Generally, this means, at a minimum, two annual site visits with the Data Provider.

 Streamflow measurement equipment including mechanical current meters, acoustic Doppler current profiles (ADCPs) and acoustic Doppler velicometer (ADVs) should have a regular calibration check to assure data quality has not been compromised. Data Providers should participate in the Hydrologic Instrumentation Facility (HIF) programs or provide documentation of measurement equipment calibration.

#### Site and Data Documentation

The Data Provider should provide a complete site description and all necessary field data to aid in review and interpretation. Required information includes:

- A station description
- · Electronic data logger files
- Copies of latest levels
- Field observations include copies of measurement notes and/or electronic files
- Rating curve or table used
- Station Analysis outlining procedures and correction used

#### **Date Timeliness**

- Data Providers should provide the data to the USGS in a timely manner in accordance with the agreement.
- USGS must review and approve the data in a timely manner.

# **Records Processing and Review**

The CAWSC employs two spreadsheets available at <a href="https://ca.water.usgs.gov/FERC/">https://ca.water.usgs.gov/FERC/</a> to guide and document its assessment of water discharge and lakes and reservoir records during annual reviews. Use of these spreadsheets facilitates systematic review of the entire data-collection, computation, and analysis process. The spreadsheets outline the review of many USGS policies and techniques and provides opportunities to document and evaluate the factors essential to collection of reliable and accurate surface-water data.

The receiving WSC should use this spreadsheet to assess the completeness and adequacy of the provided data. Any shortcomings should be communicated back to the data provider. Data should not be accepted if there is no intent to quality assure and publish.

# **Data Publication**

Generally, USGS will publish the furnished record on NWISWeb and code the data with the appropriate source/provided information. If, for any reason, there is a compelling and defensible reason for not publishing data, it should be documented in the Center QA Plan. Exceptions should be reevaluated periodically.