1. WHAT ARE STANDARD OPERATING PROCEDURES?

Standard operating procedures (SOPs) are written documents that detail the method for an operation, analysis, or action with thoroughly prescribed techniques and steps.

The following California Department of Fish and Wildlife (CDFW) Instream Flow Program SOPs are currently available on the program’s website (http://www.dfg.ca.gov/water/instream_flow.html):

- Critical Riffle Analysis for Fish Passage in California
- Discharge Measurements in Wadeable Streams in California
- Streambed and Water Surface Elevation Data Collection in California
- Flow Duration Analysis in California
- Wetted Perimeter Data Collection in California

2. WHY ARE SOPS IMPORTANT?

If multiple instream flow studies are performed using differing protocols or criteria, the resulting data may not be consistent or complete. Studies utilizing the same SOPs will produce data that is comparable to other studies that have used the same procedures. This allows data from disparate sources to be combined into a larger dataset that is usable by the CDFW and others. The Instream Flow Program’s SOPs have been produced following a systematic quality assurance process and their use in projects yields defensible data.

3. WHO DEVELOPED THE SOPS?

The SOPs were developed by the Quality Assurance Team from the Moss Landing Marine Laboratories, in cooperation with the CDFW Instream Flow Program.

The Quality Assurance Team provides infrastructure and quality management services to environmental agencies such as the State Water Resources Control Board (since 2004) and the California Bay-Delta Authority (1998-2007). Other collaborators include a variety of government, private sector, non-profit, and academic entities.

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3. WHO DEVELOPED THE SOPS? (CONTINUED)

The Quality Assurance Team provides training courses and regularly presents at national conferences.

In addition to the CDFW Instream Flow Program SOPs linked above, the Quality Assurance Team has a long history of publishing protocols on such topics as: benthic macroinvertebrate sampling and analysis; laboratory and database audits; analytical chemistry; metals speciation; data assessment; intercomparison studies; and field sampling.

4. IS THERE A SYSTEMATIC PROCESS THAT IS USED IN DEVELOPING THE SOPS?

In addition to following CDFW’s *Policy for Quality in Science and Key Elements of Scientific Work*, production of these SOPs follows strict quality assurance and quality control guidelines. The process may be summarized as follows:

- Identification and prioritization of SOP topics by CDFW staff
- Research of national and local methods, as well as relevant journal articles
- Research of current CDFW methods already in use
- Development of a draft document following SOP-creation guidelines
- Internal document review by the quality assurance program
- Review by CDFW Engineering, Fisheries, and Regions, as well as technical experts* outside CDFW
- Finalization of the SOP
- Website upload and distribution to all CDFW Regions

All peer review associated with this process is in accordance with this excerpt from the CDFW policy linked above:

*Written proposals, reports, data sets, and manuscripts (for submittal to a scientific journal) will be peer reviewed by DFG scientists or DFG-selected professionals having education and experience commensurate with the proposal or work under review. High profile proposals or work that has a substantial management impact or large expenditure of funds will be subject to formal independent peer review.*

*Example peer reviewers: Instream Flow Council, United States Geological Survey, Oregon Department of Fish and Game, Moss Landing Marine Laboratories, and California State Water Resources Control Board*
5. ARE THE SOPS REQUIRED FOR USE?
No. However, use of these SOPs is highly recommended to ensure data integrity and promote comparability within the State of California.

6. WHICH PROJECTS SHOULD USE THE SOPS?
The SOPs provide reference for CDFW staff conducting a procedure, when site conditions and research objectives indicate that the procedure is an appropriate methodology. The SOPs are also intended as an informational resource for staff from other state and federal agencies, nongovernmental organizations, private contractors and other organizations throughout California.

7. CAN MY PROJECT USE A DIFFERENT PROCEDURE/METHOD THAN THE SOPS?
The CDFW Instream Flow Program encourages use of the SOPs to promote data comparability among projects by standardizing procedures. However, other procedures are available, and the choice of procedures is up to the discretion of project managers. The CDFW Instream Flow Program encourages staff and contractors to contact us with any questions or for assistance with project planning, including choosing the procedure that best fits with the project.

8. HOW IS THE DEVELOPMENT OF INSTREAM FLOW SOPS COORDINATED WITHIN CDFW?
The SOPs are sent to each CDFW Region as part of the peer-review process. Further, the Instream Flow Program held an in-person kick-off meeting for its quality assurance program in 2012. All CDFW Regions were present at the meeting. The CDFW Instream Flow Program produces fact sheets several times each year to inform staff of updates and enhancements to the quality assurance program.

9. IS THERE TRAINING ON HOW TO USE THE SOPS?
Instream Flow Program staff are available to assist with training. For more information, please contact the Instream Flow Program Coordinator, Robert Holmes, at (926) 324-0838 or robert.holmes@wildlife.ca.gov.

10. HOW CAN I GET MORE INFORMATION ON THESE SOPS?
Please contact the Quality Assurance Help Desk at 206-525-0491 or QAHelpDesk@mlml.calstate.edu for more information on these SOPs and other aspects of quality assurance/quality control.