CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

INSTREAM FLOW PROGRAM

INSTREAM FLOW STUDY RESULTS CHECKLIST

The California Department of Fish and Wildlife (CDFW) is mandated to identify stream flow requirements for the protection of fish and wildlife. The CDFW Instream Flow Program (IFP) may use study reports and data from internal or external sources to support the development of flow requirements. Study reports and data from external sources are an essential source of information and allow the IFP to leverage funds and extend limited resources.

To ensure the credibility, comparability, coordination, and scientific defensibility of information on which the IFP relies, we review study plans and supporting information described in this checklist, as well as any other information that may be relevant to a particular study. Coordination with the IFP during project planning, study implementation, and project reporting will help identify specific information needs. We ask that study proponents include the following categories of supporting information when submitting reports and/or data to the IFP:

Required Components

☑ **A full description of the study design and methodology, including any modifications taken from the initial, approved instream flow study plan; justifications for any and all modifications taken from the original approved study plan during the course of the project; modifications can include, but are not limited to, changes in:**

- Study design
- Site selection and transect location strategy
- Frequency of sampling
- Timing of sampling
- Target assessment flows

☑ **Study site documentation, including:**

- Detailed map(s) of the study area, indicating site locations and names

☑ **Reach delineation and habitat mapping results:**

- An inventory of habitat types present by reach

☑ **Riverine component results (as applicable) for:**

- Biology: habitat suitability criteria, curves, and any transferability results
- Hydrology: unimpaired hydrology analyses (partitioned by water month and year)
- Sampling flow summary
- Reach gains and losses evaluation

Continued on Next Page...

☑ **Riverine component results (continued):**

- Connectivity: fish passage and habitat connectivity analyses; groundwater-surface water connectivity analyses; and other components as necessary
- Geomorphology: channel-forming flow analyses and other components as necessary
- Water quality: temperature, dissolved oxygen, conductivity, and other parameters and associated models as necessary

☑ **Hydraulic habitat modeling and empirical methods results, as applicable, including:**

- Flow versus habitat results for each species and life stage
- Hydraulic model calibration results
- Bed roughness and transmissivity calibration results
- Rating curve development results
- Habitat time series results
- Simulation flows and results
- Bed topography and mesh development results
- Model depth and velocity field validation data results

Recommended Components

☑ **Quality assurance and quality control results:**

- Any additional quality control results
- Post-project evaluation of stated quality objectives
- Corrective actions initiated during the course of the project, along with outcomes

☑ **Data management and reporting:**

- Project data location, storage process, and availability to users
- Location of technical report results and their availability to data users

NOTE: Supporting documentation such as raw data and photographs are not typically a component of the final report, but should be systematically stored and made available upon request. This documentation may include:

- A copy of the original instream flow study plan for the project, including goals and objectives, as previously approved by the IFP. The study plan template can be found online at: https://www.wildlife.ca.gov/Conservation/Watersheds/Instream-Flow/SOP
- Raw data generated for the project; these data may be in the form of electronic spreadsheets, photocopied field data sheets, or field notebook pages and should include:
  - -Site Information
  - -Stream survey data
  - -Hydraulic models and associated data input checks
- Photographs documenting each sampling site, including flow levels at each site during sampling