WQAU Recommendations on Use of Bioassessment data for the 2008/2010 Integrated Report (10/7/2009)
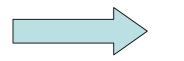
1. The Use Support Rating Decision tree (see flowchart) should be used to determine which use support category the bioassessment (benthic community effects) data be placed. Six specific situations that discuss the use of benthic community effects data when there are or are not existing pollutant specific LOEs in a given waterbody.

2. Bioassessment (benthic community effects) data shall be summarized in a separate decision so that it can be independently factored into the use support rating for a water body.

3. Bioassessment (benthic community effects) data is only used to suggest impairment due to pollution and not to a pollutant. Therefore, decisions that utilize benthic community effects data should have the "impairment due a pollutant box" unchecked in the CalWQA database.

4. Table 3.2 should be used to determine if there are "Sufficient" sample sizes and/or exceedances when determining use support rating.

5. To ensure consistency statewide and with carryover decisions from previous listing cycles, the pollutant name for all bioassessment decisions and LOEs should be "**Benthic Community Effects**". This may require changes from previous names such as Biodiversity Impacts or Benthic-Macroinvertebrate Bioassessments that were used in assessments utilizing Index of Biological Integrity (IBI) data.

6. When there is a <u>known</u> association between a pollutant and bioassessment data (data conclusively demonstrates a link), there must be separate decisions for both. However, the pollutant decision should be associated with the benthic community effects LOEs and the benthic community effects decision should be associated with the pollutant LOEs.

Bioassessment Use Support Rating Decision Tree

Situation #1

Pollutant LOEs are all "Fully Supporting" OR "Insufficient Information" AND IBI scores are "Not Supporting" (exceedances in sufficient quantities to satisfy Table 3.2)
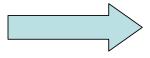
→ Category 4c

Situation #2

Polllutant LOEs are "Fully Supporting" AND IBI scores are considered to be "Insufficient Information" (insufficient number of samples to satisfy Table 3.2) OR are "Fully Supporting"

→ Category 2

Situation #3

There are no pollutant LOEs AND IBI scores are "Not Supporting" (exceedances in sufficient quantities to satisfy Table 3.2)
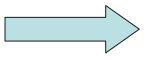
→ Category 4c

Situation #4

There are no pollutant LOEs OR all pollutant LOEs are "Insufficient Information" AND IBI scores are "Insufficient Information" (insufficient number of samples to satisfy Table 3.2)

→ Category 3

Situation #5

Pollutant LOEs are "Not Supporting" AND IBI scores are "Fully supporting" OR "Not Supporting" OR "Insufficient Information"

→ Category 5

Situation #6

There are no pollutant LOEs AND IBI scores are "Fully Supporting" (with sufficient samples to satisfy section 3.2)

→ Category 2