Region 9 Bioassessment Decision Informal Comments *October 14, 2009*

WQAU Staff (staff) has reviewed Region 9 Biodiversity Impacts decisions as well as pollutant specific decisions (i.e. nitrogen, phosphorus, toxicity, etc...) that include Biodiversity Impacts LOEs as supporting evidence. Staff has noted inconsistencies in the decision language of Biodiversity Impacts decisions. Specifically, the use of Sections 3.9 and 3.2 of the Policy and the rationale of why data was or was not assessed for 303(d) listing. Use support ratings for Biodiversity Impacts LOEs have also been noted to be inconsistent.

To provide assistance in resolving the inconsistencies discussed above, staff has compiled a series of recommendations and "situations" for determining the appropriate use support ratings for bioassessment decisions. Each situation results in a different waterbody category assignment based on the use support ratings of the bioassessment LOEs and the pollutant specific LOEs associated with each waterbody. The recommendations and situations are included in the "WQAU Staff Recommendations and Flow Chart for Use of Bioassessment data in the 2008 Listing Cycle" document. Two spreadsheets are also included that summarize the Region 9 existing bioassessment decisions and existing bioassessment LOEs that are associated with pollutant specific decisions (i.e. nitrogen, phosphorus, toxicity, etc...) as of the date of this document.

Staff has also included below the recommended decision relationship language for bioassessment LOEs that have use support ratings of "Not Supporting", "Fully Supporting", or "Insufficient Information". This language is available in the CalWQA database to be selected when creating and/or modifying bioassessment decisions.

In Summary, after review of the available bioassessment LOEs and decisions in CalWQA, it appears that all of the existing and to be created decisions for bioassessment in Region 9 should be "Do Not List". This is based on the apparent lack of a scientifically defensible connection between bioassessment data exceedances and specific pollutant(s) for each waterbody that was noted to contain bioassessment data in CalWQA. This bioassessment/pollutant connection is required to "List" for bioassessment under section 3.9 of the Listing Policy. However, it is still possible to determine the use support rating associated with bioassessment data using Table 3.2 of the Policy. The use support rating of this data may result in a waterbody category placement significantly different than if the bioassessment data was not used or included in the final use rating of the waterbody.

Recommended Decision Language:

(BENTHIC COMMUNITY EFFECTS - DO NOT LIST - DATA SETS EXCEEDING TABLE 3.2)

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic

Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. [NUMBER] lines of evidence is/are available in the administrative record to assess this indicator. [NUMBER] of samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [NUMBER] of [NUMBER] samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy, however as required under section 3.9 of the Listing Policy. a pollutant(s) could not be directly associated with the Benthic Community Effects. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

(BENTHIC COMMUNITY EFFECTS - DO NOT LIST - DATA SETS NOT EXCEEDING TABLE 3.2)

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. [NUMBER] lines of evidence is/are available in the administrative record to assess this indicator. [NUMBER] of samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [NUMBER] of [NUMBER] samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

(BENTHIC COMMUNITY EFFECTS - DO NOT LIST - INSUFFICIENT SAMPLES TO USE TABLE 3.2)

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is

necessary to assess listing status. [NUMBER] lines of evidence is/are available in the administrative record to assess this indicator. [NUMBER] of samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [NUMBER] of [NUMBER] samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.