

San Diego Regional Water Quality Control Board And Biological Assessment and Biocriteria

I. Ambient Bioassessment Monitoring Program (1998-2001)

- A. 93 stations sampled.
- B. Sampled 2-3 times per year.
- B. Identified 2 Index Periods for sampling (Spring: May/June; Fall: October).
- C. Determined seasonal and elevation IBI/Adjustment Factors were unnecessary
- D. Calculated a Preliminary IBI
- E. Recommendations

II. San Diego RWQCB Uses of Bioassessment Monitoring Data

The IBI will be a major component of biocriteria and the regulatory use of bioassessment data.

- A. Municipal Separate Storm Sewer System NPDES Permits.
 - 1. Adopted in San Diego and Orange County Permits
 - 2. Riverside Permit Monitoring and Reporting Requirements will be revised in 2003 to include bioassessment monitoring.
 - 3. Includes a toxicity-testing trigger where significant benthic impairment is suspected.
 - 4. Complete the triad approach.
- B. NPDES Permits for Live Stream Discharges
 - 1. Rancho California (Santa Margarita River).
 - 2. Padre Dam (San Diego River)
- C. CWA section 401 Water Quality Certifications.
 - 1. Poggi Creek 401 Certification.
 - 2. Establish endpoints for future stream realignments and restoration for mitigation.
 - 3. Future enforcement tool for violations.
- D. Grant Programs
 - 1. CWA 319(h) – Mission RCD.
 - 2. CWA 205(j) – A priority category.
 - 3. Proposition Grants (13, 40, and 50).
- E. Monitoring requirements under CWC enforcement authorities (CWC 13267, CWC 13225) for site/water body specific issues.
- F. CWA 305(b) Water Quality Assessment.
- G. CWA 303(d) Impaired Water Body Listing.
- H. Surface Water Ambient Monitoring Program (SWAMP).
- I. Adoption of Biological Criteria
 - 1. Narrative or numeric.
 - 2. Ohio, Florida, and North Carolina are potential models.

III. Southern California Regional IBI Project – Project Plan.

- A. Compile and analyze data from the coastal Regions of California south of Monterey.
 - 1. USFS data from Cleveland, San Bernardino, Los Angeles, and Los Padres National Forests.
 - 2. USEPA EMAP data from Regions 3, 4, 7, 8, and 9.
 - 3. San Diego IBI data
 - 4. San Diego, Ventura, and Orange County MS4 Permit bioassessment data.
 - 5. Heal The Bay bioassessment Data.
- B. Define reference conditions using CDFG/SNARL (Sierra Nevada Aquatic Research Laboratory) methods.
- C. Further evaluate and test the metrics currently comprising the IBI.
- D. Evaluate new metrics.
- E. Expand the set of metrics in the IBI from 7 to 10.
- F. Further evaluate the questions of seasonal and elevation changes in benthic communities.
- G. Evaluate data compatibility between multivariate (RIVPACS) and multimetric (IBI) data sets.
- H. Compare the discriminatory power of RIVPACS vs. IBI methods.
- I. Test the revised IBI data.
- J. Have report peer reviewed and revise accordingly. Candidates include:
 - 1. James Karr, University of Washington.
 - 2. Michael Barbour, TetraTech
 - 3. Phil Kaufman, USEPA
 - 4. Charles Hawkins, Utah State University
- K. Publish results in Journal of the North American Benthological Society in 2004.
- L. Project Costs and Timeframe for Completion
 - 1. Total cost estimated at \$35,000.
 - 2. RWQCBs have tentatively offered \$11,000-\$13,000, but available funding is uncertain.
 - 3. USFS expected to fund remainder of the Project, but may withdraw due to budget constraints.
 - 4. Work to begin in February 2003 and be completed in July 200.
 - 5. SMC could contribute and ensure that the Project is completed.
 - 6. Funding window for SMC is open through December 2004.