

2007 FRESHWATER BIOASSESSMENT WORKSHOPS

PART I – SAMPLING DESIGN AND COLLECTION

AGENDA

Instructor: Jim Harrington - DFG Staff Environmental Scientist
Text: Measuring the Health of California Streams and Rivers - Harrington and Born
State Water Resources Control Board Bioassessment Protocols

Day 1 - Designing Freshwater Ecological Assessments - Rapid and Fully Integrated Approach

Class Room Instruction 9:00 am - 4:00 pm

Introductions

Presentation on the Natural State of Streams and Rivers

Presentation on Sampling Strategies for Detecting Impairment

Presentation on the Concept of Reference Conditions

Presentation on Developing an Index of Biological Integrity

Presentation on Evolution of Bioassessment Sampling Techniques

Discussion of Similarities and Differences with CSBP and New SWAMP Protocols

Overview of Sampling Techniques for Day 2 and 3

Day 2 - Physical/Habitat Assessments for Water Quality Projects - New Techniques Required by the Surface Water Ambient Monitoring Program (SWAMP)

Field Instruction 9:00 am - 4:00 pm

Introduction and Coordinating Day's Activities

Demonstration of Sampling Site Delineation for SWAMP Protocol

Demonstration of Vital Equipment Used in Freshwater Bioassessments

Overview of SWAMP Protocol Physical/Habitat Measures - Basic and Full Level

Demonstration of EPA RBP Based PHab Procedures

Day 3 - Sampling Biotic Communities in California Rivers and Streams

Field Instruction 9:00 am - 4:00 pm

Overview of Sampling Site Delineation for SWAMP Protocol

Demonstration of Targeted Riffle and Multi-habitat or Reach-wide BMI Sampling

Demonstration of SWAMP Protocol Physical/Habitat Measures - Basic Level

Demonstration of SWAMP Protocol Physical/Habitat Measures - Full Level

Discussion of QA/QC Requirements and Exercises