

2008 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 –
Bel Marin Keys Community Center
4 Montego Key, Novato CA 94949**

- 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 – Novato Creek location

- 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 – Novato Creek location

- 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