

**BIOLOGICAL MONITORING TRAINING AGENDA**  
**Texas Commission on Environmental Quality**  
**April 5 – April 7, 2016**  
**TCEQ Headquarters, Austin**

**April 5, 2016 – 8:00 AM - 5:00PM, Building B, Room 201A**

OVERVIEW, PREPARATION, AND COLLECTION – classroom

8:00	Course Introduction and Overview	L. Pulliam
8:15	Aquatic Life Monitoring (ALM) Overview and Introduction	B. Harrison
9:00	Biological Data Use for Standards Development	J. Godeaux
9:30	Trip Planning and Site Selection	L. Pulliam
9:50	BREAK	
10:00	The Use of Fish In Biological Assessments: Fish Bioassessment Guidelines	M. Kelly, G. Linam
11:15	Benthic Macroinvertebrate Sample Collection and Processing: Wadeable Streams Rapid Bioassessment Protocols (RBP)	L. Metzmeier
12:30	LUNCH	
1:30	Aquatic Habitat Assessment Methods in Texas	A. Rogers
3:00	Enhancing Biological Assessments: GIS Basics	S. Whitley
3:30	Break	
3:40	Flow Measurement: SWQM Procedures, Volume 1 Chapter 3	L. Metzmeier
4:00	The Use of Digital Photography for Vouchering Fish Collections Laboratory Tracking, Preservation, and Labeling	G. Linam
4:45	Identification and Reference Materials	L. Pulliam
5:00	Adjourn	

**April 6, 2016 – 8:00 AM - 5:00 PM, TCEQ Building B parking lot, then to field site**  
**COLLECTION: DEMONSTRATION AND PRACTICE – Bull Creek at St. Edwards Park**  
**(bring a snack/lunch, coolers will be provided)**

8:00	Meet in Bldg. B parking lot near gazebo, distribute field equipment to groups	All instructors
8:15	Depart for field site	
9:00	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group (see “Biological Monitoring Training Overview” for rotation order)	All instructors
10:00	Rotate	
10:15	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group	All instructors
11:15	Rotate	
11:30	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group	All instructors
12:30	LUNCH	
1:00	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group	All instructors
2:00	Practice Collection: Each group will be assigned a transect at the field site to perform a partial assessment with guidance from instructors	All instructors
4:30	Groups need to be done and begin to head back to TCEQ	
5:00	Arrive back at TCEQ Building B parking lot, return all equipment and adjourn	

**April 7, 2016 – 8:00 AM - 12:30 PM, Building B, Room 201A**  
**DATA ANALYSIS AND DATA MANAGEMENT – classroom**

8:00	-Index of Biotic Integrity (IBI): Overview, Derivation and Application -Guidelines for Applying the Regionalized Fish IBI Metrics -Statewide Benthic Macroinvertebrate IBI Metrics and Calculations -Habitat Quality Index Metrics and Calculations (practice calculations following index presentations)	B. Harrison, G. Linam, L. Pulliam, A. Rogers
10:00	BREAK	
10:15	Biological Data Review: Reviewing Biological Data Submittals	A. Smith
10:45	Biological Monitoring: Data Management	C. Anderson
12:30	Lunch	
1:30	Optional afternoon session – Aquatic Plants in Texas (Room 201A and Water Lab Room 1011A)	R. Ott M. Webb
2:45	Optional afternoon session – Unique Habitat Assessment Situations (Room B-129)	A. Rogers
3:30	Optional afternoon session – Fish Identification Benthic Macroinvertebrate Identification (Room 201A and Water Lab Room 1011A)	B. Harrison, G. Linam, L. Pulliam