

**BIOLOGICAL MONITORING TRAINING AGENDA**  
**Texas Commission on Environmental Quality**  
**May 10 – May 12, 2016**  
**Mayan Dude Ranch, Bandera**

**May 10, 2016 – 1:00 PM - 6:00PM, Mayan Ranch, Bandera**

OVERVIEW, PREPARATION, AND COLLECTION – conference room

1:00	Course Introduction and Overview	L. Pulliam
1:15	Aquatic Life Monitoring (ALM) Overview and Introduction	B. Harrison
2:30	Trip Planning and Site Selection	L. Pulliam
2:45	BREAK	
3:00	Flow Measurement: SWQM Procedures, Volume 1 Chapter 3	L. Metzmeier
3:30	The Use of Fish in Biological Assessments: Fish Bioassessment Guidelines	M. Kelly, G. Linam
4:45	Benthic Macroinvertebrate Sample Collection and Processing: Wadeable Streams Rapid Bioassessment Protocols (RBP)	L. Metzmeier
6:00	Adjourn	
7:30	Optional evening session – Fish Identification (conference room)	C. Vaughn, S. Donovan

**May 11, 2016 – 8:00 AM - 6:00 PM, Mayan Ranch, Bandera**

COLLECTION: DEMONSTRATION AND PRACTICE – conference room and field

8:00	The Use of Digital Photography for Vouchering Fish Collections Laboratory Tracking, Preservation, and Labeling	G. Linam
8:45	Identification and Reference Materials	L. Pulliam
9:00	Aquatic Habitat Assessment Methods in Texas	A. Rogers
10:30	Break	
10:45	Enhancing Biological Assessments: GIS Basics	S. Whitley
11:30	LUNCH (meet at the river after lunch)	
12:30	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group (see “Biological Monitoring Training Overview” for rotation order)	All instructors

1:15	Rotate	
1:25	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group	All instructors
2:10	Rotate	
2:20	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group	All instructors
3:05	Rotate	
3:15	Collection Demonstration: fish, benthics, flow/habitat reach, or habitat transect group	All instructors
4:00	Practice Collection: Each group will be assigned a transect at the field site to perform a partial assessment with guidance from instructors	All instructors
6:00	Return all equipment and adjourn	
7:30	Optional evening sessions – Unique Habitat Assessment Situations, Benthic Macroinvertebrate Identification (conference room)	A. Rogers, B. Harrison, L. Pulliam

**May 12, 2016 - 8:00 AM - 12:30 PM, Mayan Ranch, Bandera**

**DATA ANALYSIS AND DATA MANAGEMENT – conference room**

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
10:30	BREAK	
10:45	Biological Data Review: Reviewing Biological Data Submittals	A. Smith
11:15	Biological Monitoring: Data Management	C. Anderson
12:30	Lunch	
1:30	Adjourn	