CHAPTER 12
BIOLOGICAL DATA MANAGEMENT

Data Handling

Transcription of data into electronic format creates a high possibility of error. Each phase of data generation and handling must have routine independent checks made on 10 percent of the data. Data from biological samples must be re-checked after data entry to ensure correct transcription. The TCEQ will provide a standard format for submission of data. Collectors must ensure that all data necessary to calculate multi-metric indices are provided.

Contracting and Institutional Standards

Desktop QA methods will also be employed to ensure identifications are correct. Those submitting biological data must check samples against known distributional information to determine if out-of-range organisms were identified. Primary sources include Hubbs et al. (1991) and Lee et al. (1980). This is not to suggest that new records cannot occur, but that they will be scrutinized and the appropriate vouchers required to ensure proper identification. If the out-of-range determinations prove incorrect upon review, then the collection will be reviewed for other similar species and those re-checked.

If a sample fails desktop QC checks and the error is uncorrectable, the data are invalid and will not be accepted. Possible consequences for failure include invalidating the data, requiring re-sampling, more frequent QA visits, and withholding payment.

Submitting Biological Data

Submit data associated with a biological sampling event (fish, macroinvertebrates, habitat, water chemistry, and field data) electronically according to standard procedures, described in the SWQM DMRG or specified by the TCEQ WQST. The SWQM DMRG can be found at: <www.tceq.state.tx.us/goto/swqm/dmrg>.

Additionally, hard copies of the data must be submitted as prescribed in the Biological Data Summary Packet found in Appendix C.