

3745-4-06 Appendix A Guidelines for the preparation of level 3 project study plans.

Persons preparing level 3 project study plans for the credible data surface water quality monitoring program should consult the following set of guidelines to ensure the adequacy of the project study plan. This appendix is meant to serve as guidance in the preparation of study plans developed under rule 3745-4-06 of the Administrative Code and does not have the force of law. The director may conclude that the project study plan is deficient if the following information is missing and there is no other comparable justification for the technical and scientific adequacy of the project study plan:

- (1) A clear statement of the objectives of the planned activities, including data quality objectives and the types of data to be collected: chemical, stream habitat, fish, or macroinvertebrate.
- (2) A detailed explanation and description, including georeferencing, of the specific point and nonpoint source issues (when applicable) that will be evaluated and other sources that may influence ecological conditions within the study area.
- (3) A detailed explanation of parameter coverage within each data type (chemical, stream habitat, fish, and macroinvertebrate) for which sampling will be conducted at each sampling location.
- (4) Identification of field collection and data assessment techniques for stream habitat, fish, and macroinvertebrate sampling and, for all chemical parameters sampled, identification of the sample collection methods, the field or laboratory analytical methods used, and the detection limits.
- (5) For all stream flow measurements, identification of the methods used.
- (6) A detailed explanation and map or maps of planned sampling locations, including the name of the water body and each sampling location. For each sampling location the following information shall be included: sampling location latitude and longitude; sampling location river mile; general locational information; the U.S. geological survey HUC 8 number and name; and the purpose for data collection at each sampling location.
- (7) A detailed schedule of planned sampling activities or criteria for sampling conditions.
- (8) A written quality assurance and quality control (QA/QC) plan which adheres to the general quality assurance and quality control principles described in Ohio EPA's "Surface Water Field Sampling Manual for water quality parameters and flows."

- (9) A detailed explanation of all anticipated work products which will be submitted to the director for use by the director in consideration of the data as level 3 credible data. Examples of anticipated work products that shall be submitted to the director include, but are not limited to, the following: measured chemical, stream habitat, and biological data; beneficial use attainment statistics; biological index metrics and scores; water quality criteria exceedences; and stream habitat index metrics and scores.
- (10) A list of all qualified data collectors and other persons who will be involved with sample collection, sample analysis, and data entry along with specific procedures (e.g., training, testing, follow-ups) outlining how persons not qualified as level 3 data collectors will be trained and supervised to ensure the accuracy of their activities. The list shall include the name, qualified data collector number, address, electronic mail address, and phone number of all qualified data collectors and shall identify the qualified data collectors designated as the lead project managers.
- (11) If a contract laboratory will be used for chemical or biological analyses, identify the laboratory and provide a contact name, address, electronic mail address, and phone number for the contact.
- (12) If applicable, a copy of an approved scientific collector's permit issued by the Ohio department of natural resources, division of wildlife.
- (13) A statement certifying that a digital photo catalog of all sampling locations will be maintained for ten years including photos of the specific sampling location, riparian zone adjacent to the sampling location, and general land use in the immediate vicinity of the sampling location.
- (14) A statement certifying that the qualified data collector acting as the lead project manager will provide to the director upon request two voucher specimens of each taxa or species of fish and macroinvertebrates that are collected at sampling locations. If a specimen is too large to preserve, a large game species, or a legally protected species, diagnostic photographs or the preservation of specific diagnostic material from the specimen, where allowed, may be submitted in lieu of a complete specimen. All voucher materials shall be kept for at least ten years.
- (15) A statement attesting that the qualified data collector acting as the lead project manager will maintain and make available to the director, for each sampling location, the name of the water body sampled, the sampling location latitude and longitude, the sampling location river mile where possible or practicable, general location information, the USGS HUC 8 number and name, and the purpose for data collection at each sampling location.

- (16) In the event that the lead qualified data collector is not approved for all project data types, a signed statement to attest that the qualified data collector for each additional data type or specialty is aware of the qualified data collector's responsibilities for that data (including vouchers, photos, and site information as described in this appendix). This statement should specify the name of that particular project.
- (17) A statement from each qualified data collector working on the project certifying that the qualified data collector has not been convicted of or pleaded guilty to a violation of section 2911.21 of the Revised Code (criminal trespass) or a substantially similar municipal ordinance within the previous five years.

Except as provided in this appendix, level 3 project study plans that use biological assessment methods shall provide for the collection of both fish and macroinvertebrate data at all sampling locations. If the level 3 project study plan does not include provisions for the collection of both fish and macroinvertebrates at all sampling locations, the project study plan shall include a detailed explanation of the circumstances, issues, and complexities associated with the proposed sampling location which preclude the use of both organism groups. If circumstances during project execution result in the failure to collect both fish and macroinvertebrates, then an explanation should accompany the data submission. Such circumstances may include, but are not limited to, problems with access to the sampling location, vandalism, on-site equipment failure, and extremely high or low stream flows.