

Assessment of Ecoregional Dissolved Oxygen Regimes  
Data Report for 2006 Study Season

**SECTION 3**

**MATERIAL AND METHODS**

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Quality assurance documents prepared by MEC to support AERDOR field investigation efforts include a U.S. Environmental Protection Agency - Region 7 (EPA) and MDNR – approved general Quality Assurance Project Plan (QAPP). A MDNR-approved Sampling Analysis Plan (SAP) was also prepared to specify locations to be monitored in the study. The sampling framework prescribed by these documents were implemented during the 2006 field season with the following exceptions:

- Cedar Creek near Route B was discontinued on August 6, 2006 and moved to a downstream location near County Road 1320 (E420934, N4173749). Discontinuation of the Route B was approved by MDNR and in response to in-stream livestock watering observed during site maintenance visits.
- Monitoring activities were extended beyond the prescribed six-week deployment period to capture dissolved oxygen regimes during cooler September temperatures and higher anticipated streamflows.
- Monitoring activities in Little Drywood Creek near County Road 530 (LDC5) were continued beyond the two week period prescribed in the SAP. In response to extremely low dissolved oxygen levels (daily maximum ~ 2.0 mg/L) observed at LDC5, deployment was extended in an effort to better document hypoxic conditions.
- Naming conventions for some monitoring sites differ slightly compared to those presented in the project SAP. Final site descriptions and locations are included in Table 4.

The 2006 SAP and project QAPP serve as primary references for sampling methods and materials. The approved project QAPP and 2006 SAP is available by request to ERC.

**TABLE 4.** Monitoring Locations for AERDOR 2006 Study Period

Site ID (ID)	Site Description (narrative)	Stream (name)	Easting (m)	Northing (m)	County (name)	WBID (#)
CC1	Rt.Z Crossing	Cedar Creek	0419787	4170345	Cedar	1344
CC2	Rt B Crossing	Cedar Creek	0419475	4164046	Cedar	1357
CC3	Cty. Rd 1001 Crossing	Snag Br.	0421241	4170629	Cedar	1359
CC4	Cty Rd. 1674 Crossing	Teague Br.	0420613	4167987	Cedar	1358
CC5	Cty Rd. 1320 Crossing	Cedar Creek	0420934	4173749	Cedar	1344
HC1	Wanamaker Rd. Crossing	Heaths Creek	0484199	4306864	Pettis	0848
HC2	Major Rd. Crossing	Heaths Creek	0486449	4307033	Pettis	0848
HC3	Walk Rd. Crossing	Heaths Creek	0488470	4308749	Pettis	0848
HC4	Hwy BB Crossing	Greer Br.	0483362	4305680	Pettis	0850
HC5	Anderson Rd. Crossing	Long Grove Br.	0486278	4305837	Pettis	3531
HC6	Rains/Reines Rd. Crossing	Pointer Br.	0490845	4308710	Pettis	3486
HC7	Millers Chapel Rd. Crossing	Marlin Br.	0491555	4305177	Pettis	0852
HC8	Deer Park Rd. Crossing	Greer Br.	0482398	4303888	Pettis	0850
LDC1	Bushwacker Conservation Area approximately 0.20 miles Northwest from the eastmost parking lot off Cty. Rd. 718	Little Drywood Creek	0377693	4168144	Vernon	1326
LDC2	Bushwacker Conservation Area approximately 0.20 miles Southwest from parking lot off Cty. Rd. 711	Little Drywood Creek	0377004	4169298	Vernon	1326
LDC3	Route N Crossing	Little Drywood Creek	0377053	4173201	Vernon	1326
LDC4	Route F Crossing	Little Drywood Creek	0376797	4179792	Vernon	1325
LDC5	Cty. Rd. 530 Crossing	Little Drywood Creek	0377040	4181802	Vernon	1325
LDC6	Cty. Rd. 575 Crossing	Pleasant Creek	0378355	4174095	Vernon	1327
LDC7	Cty. Rd. 578 Crossing	Pleasant Creek	0379815	4173862	Vernon	1327