

## **CHAPTER 4**

### **POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE UPPER CUMBERLAND RIVER WATERSHED**

#### **4.1 Background.**

#### **4.2. Characterization of HUC-10 Subwatersheds**

##### **4.2.A. 0513010305 (Otter Creek)**

##### **4.2.B. 0513010307 (Cumberland River)**

**4.1. BACKGROUND.** This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:

- i. General description of the subwatershed
- ii. Description of point source contributions
  - ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
- iii. Description of nonpoint source contributions

The Tennessee portion of the Upper Cumberland River Watershed (HUC 05130103) has been delineated into two HUC 10 (10-digit) subwatersheds, each of which is composed of one or more HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.



*Figure 4-1. The Tennessee Portion of the Upper Cumberland River Watershed is Composed of Two USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Celina and Moss are shown for reference.*

**4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS.** The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Tennessee portion of the Upper Cumberland River Watershed.

HUC-10	HUC-12
0513010305	051301030501 (Otter Creek)
0513010307	051301030708 (Kettle Creek)
	051301030709 (McFarland Creek)
	051301030710 (Cumberland River)

**Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages.** NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.