Tertiary Consumers

Largemouth bass, Suwannee bass, alligator snapping turtle

Secondary Consumers

Crayfish, sunfish, other fish species

Detritivores & Decomposers (EPT larvae)

Primary Consumers

EPT's, chironomids, mussels

Producers

Periphyton, bacteria, algae, coontail, pennywort

Figure 37. Conceptual trophic model for the USR riverine ecosystem
[EPT designates the insect orders Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies)]

General fish assemblages can be categorized using a four-way matrix of water velocity and water depth to encompass groups of fish in ecological guilds; i.e., species that exploit similar habitat (Table 7). The species guild identifiers are designated using a 4-letter sequence that denotes water velocity and water depth best suited for the species. For example, the identifier "VSDS" designates a preference for slow velocity, shallow depth environment. The guilds VSDS, VFDS, and VSDD are spatially dominant within the study area.

Table 7. Generalized ecological guilds and identifiers for fishes in the USR

Water Depth (D)	Water Velocity (V)	
	Slow (S)	Fast (F)
Shallow (S)	Species Guild VSDS	Species Guild VFDS
Deep (D)	Species Guild VSDD	Species Guild VFDD

3.2 Riverine Ecoregions and Flow Regimes

The USR represents the two most upstream of five ecological reaches in the Suwannee River as characterized by water quality within the reach (Hornsby, Mattson, & Mirti, 2000) and unpublished SRWMD data (Figure 38). For a general description of the regional ecology see WRA (2005) and HSW (2010). The approximately 79 river-mile study area is divided into an upstream reach (Reach 1), which extends from the state line south about 56 river-miles to Suwannee Springs and is referred to as the Upper River Blackwater. The next ecological downstream reach (Reach 2) extends about 37 river-miles from Suwannee Springs south to Dowling Park, about 14 river-miles downstream of Ellaville, and is