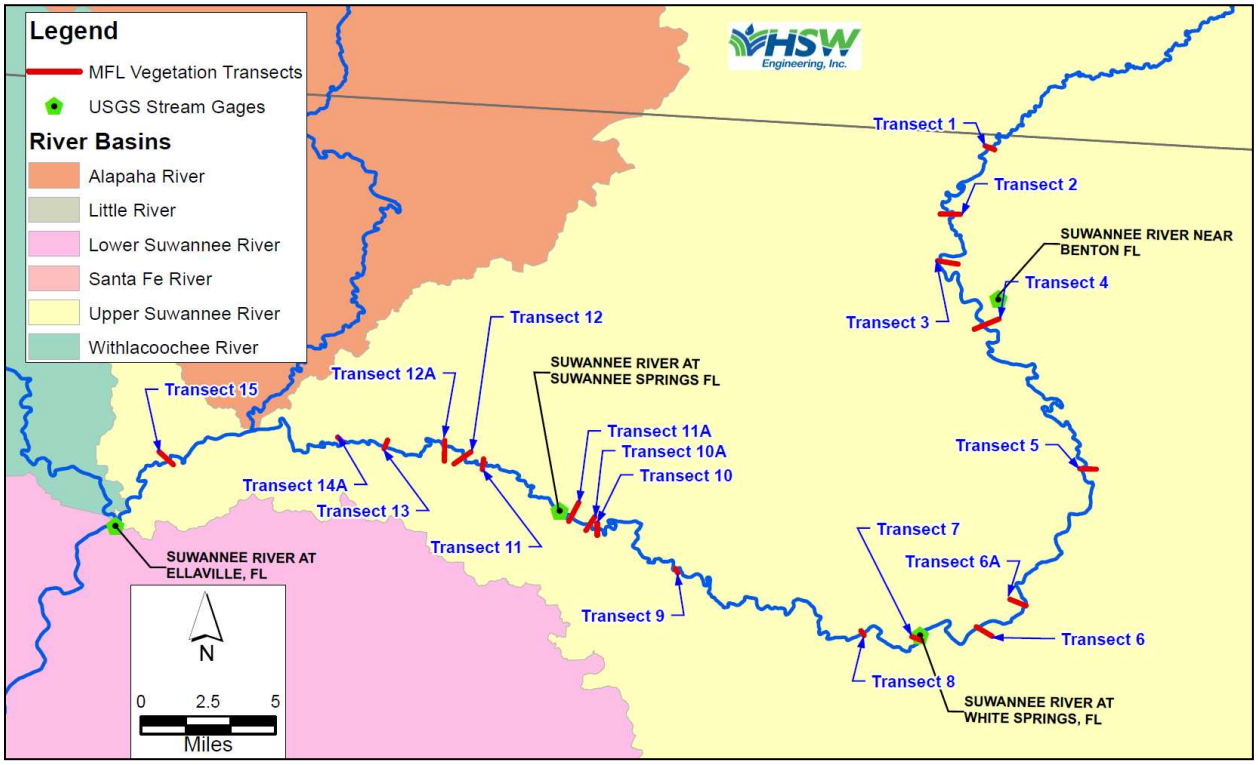

Figure 49. Vegetation transect locations of surveyed transects
[Transect 1 is farthest upstream, near the State line, and 15 is closest to the USGS gage near Ellaville]

Soils underlying these communities are flooded generally about one in ten years for 30 days or longer in March – April (NRCS, 2010). Thus, most of the wetlands on the floodplain are inundated infrequently by river flows; instead, they are sustained by precipitation and surficial drainage from the watershed. However, even infrequently-occurring high flows contribute to maintaining the ecological integrity of the entire ecosystem by supporting the extent and integrity of floodplain vegetation and the soils necessary to support these communities (Allan, 2007) (Hynes, 1970). Periodic river flooding benefits the floodplain ecosystem, recharges groundwater, helps to maintain hydric soils, and limits community degradation. When they occur, floods introduce additional nutrients and sediments and trigger episodic biological productivity.

Hydric soils were identified on all 15 inspected floodplain vegetation transects (HSW, 2012c). Both mineral and organic hydric soils were encountered on six of the transects, while only mineral hydric soils were encountered on nine transects.

Floodplain hydric soils in swales nearest the channel are inundated regularly; however, the inundation frequency diminishes quickly farther from the river. Depressional wetlands in the broad floodplain are flooded rarely by the river; instead, these areas appear to be maintained generally by precipitation and drainage from the surrounding watershed. In the lower part of the study area around transects 12, 13, 14, and 15, depressed karst solution features became increasingly abundant in the landscape. These features are observable on the LIDAR topography but are not mapped individually within the NWI, SSURGO, and FLUCCS coverages.