



Figure 5. Water Quality, Biological, and Habitat Categories in Ecoregion 62 (small and medium drainage) Sample Sites in the Middle Susquehanna Subbasin.

Results/Discussion

The Middle Susquehanna Subbasin was divided into an “Upper Half” and a “Lower Half” based on USGS Hydrologic Unit Code (HUC) 8 (Seaber and others, 1987) in order to differentiate between the major land uses in the Middle Susquehanna Subbasin. Figure 3 shows that abandoned mine lands and urban development had a greater influence on the “Lower Half” of the subbasin. Table 2 lists sites that have extreme values in parameters that are characteristic of AMD or agriculture/wastewater treatment plants. Only values that exceeded limits based on values from Hem (1970), The Commonwealth of Pennsylvania (2002), Gagen and Sharpe (1987), and Baker and Schofield (1982) are listed. Most of the sites in Table 2 were located within the “Lower Half” of the Subbasin. Table 3 lists the same parameters that are characteristic of AMD or agriculture/wastewater

treatment plants; however, it contains values for sites that have been designated as Exceptional Value (EV) and High Quality-Cold Water Fishes (HQ-CWF) for comparison to the values in Table 2.

Figures 4 - 7 show the larger watersheds in the subbasin and their relative locations. These figures also show the ratings for water quality, biological condition, and habitat condition relative to the corresponding reference category. Figure 8 (A, B, and C) shows a summary of the ratings for water quality, biological condition, and habitat condition in each reference category. Ecoregion 62 contained most of the severely impaired streams (Figure 8 B), and all of the streams rated nonsupporting in habitat (Figure 8 C). Figures 9 – 12 show the relationships of biological and habitat condition scores at sample sites in each reference category.