



**Plate 1** Geology concept map for subsurface lithologies underlying SVRP aquifer sediments showing: 1) Underlying crystalline igneous and metamorphic rocks from highlands down to intersection with 1500' elevation mark within the SVRP basin; 2) Working summary segments of the Spokane River and areas near Coeur d'Alene Lake that share similar hydrogeological features; 3) Marginal SVRP aquifer Quaternary sediment features such as surficial embayments (e.g., Segments A and B) and subsurface location of Missoula Flood cut and filled erosional features (e.g., Area E and F); 4) Significant lower (older) Miocene rocks and sediments below relatively thin SVRP aquifer sediments in the Coeur d'Alene area, occurring between and partly overlapping Miocene or older faults (distribution of lower Miocene basalts and sediments may be part fault controlled); 5) Fault overlap and outcrops of younger Miocene basalts and sediments, and primarily erosional limit of Miocene rocks (supra-crystalline basement Miocene rocks that limit extend of SVRP aquifer become much less certain towards the basin center); 6) Direction of basin scouring Missoula flood vectors, which played a role in the selective removal of Miocene basalts and sediments from the SVRP paleovalley floor, ultimately also creating the accommodation space for deposition of Missoula Flood sands and gravels, and fine-grained sediments associated with glacial Lake Columbia (noted by Kahle and Bartolino, 2007).