Comparison of two alternative methods to track changes at the strata scale in measured parameters through time



In this hypothetical example using water velocity, connectivity of many backwaters increases in Year 4 (e.g., flood event eroded natural levees), thus more backwater area has flowing water (channel-like) and the mean velocity in the backwater stratum increases. A new aquatic areas GIS map is completed in Year 8. If the connectivity changes are captured when remapping the strata using the Year 8 map, backwater area is reduced and the mean velocity in backwaters is reduced in Year 8. In comparison, using a constant strata map results in an obviously easier way to track changes through time. Note that either method results in the same pool-wide estimates through time.