Figure 5-3. Sequence in time of transformations in soil after flooding, beginning with oxygen depletion and followed by nitrate and then sulfate reduction. Increases are seen in reduced manganese, reduced iron, hydrogen sulfide, and methane. Note the gradual decrease in organic substrate (electron donor) and increases in available ammonium and phosphate ions. Graph can also be interpreted as relative concentrations with depth in wetland soils. (By K. R. Reddy, University of Florida, Gainesville; reprinted with permission)