



Figure 36. Conceptual cross-section of wetted perimeter and habitat availability in the USR ecosystem [Layout provided by the SRWMD]

A simple conceptual model of the trophic relationships within the USR characterizes the roles of aquatic organisms and relevance as forage for consumers (Figure 37). At the lowest level, plants and algae are producers that photosynthesize using the dissolved nutrients (nitrogen, phosphorus, etc.) in the water. At the next level, mussels and insects appear as primary consumers that consume bacteria, algae, and plants and produce detritus, while carnivorous (predatory) fish appear at the next level, the secondary consumers. The tertiary consumers are the top-level predaceous fish and reptiles in the river. Organic matter produced by the decomposition of organisms at all four levels is recycled back to producers by detritivores and decomposers.