**Supplementary information.**

**Table S1.** Geographic location, water quality parameters and proportion of components of microhabitats in Arroyo Colorado sub-basin.

**Table S2.** Principal component analyses (PCA) for water quality variables in the streams.

**Table S3 and S5.** SIMPER analyses: Average and accumulated contribution, and mean abundance of the microhabitat types (S3) and fish assemblages (S5) for urban and agricultural streams.

**Table S4.** Relative abundance of fish assemblage in Arroyo Colorado sub-basin.

**Figure S1.** Study area, to the left: the geographic location of the country and the Arroyo Colorado basin; to the right: the main land-use covers: Urb: urban, PL: quarries, Agr: agriculture, NCA: non-cultivated area.

**Figure S2.** Microhabitat types reported in the Arroyo Colorado sub-basin. Each letter of each microhabitat type represents the category of each component (Substrate particle size, water movement, presence of macrophytes, and water depth).

**Figure S3 and S4.** Multivariate dispersion (variance) of samples for each land-use based on the composition of microhabitat types (S3) and fish assemblage (S4). **a**: Principal coordinates (PCoA) plot that shows the average distance of land-use members to the centroid. **b**: Boxplot of the dispersion of land-use members.