Supplemental material for

Declining suspended sediment in US rivers and streams: Linking sediment trends to changes in land use/cover, hydrology and climate
by Jennifer Murphy

Categorization scheme for determining predominate land use of each site's contributing watershed

Land-use category	Rules for classification
Undeveloped	Undeveloped: (lu_11 + lu_12 + lu_46 + lu_50 + lu_60) > 75%
Urban	Urban: lu_43 < 25% AND (lu_43 + lu_44) < 50%, plus satisfying at least one of the "high", "med" or "low" urbanization rules below
	High urbanization: (lu_21 + lu_22 + lu_23 + lu_24 + lu_25 + lu_26 + lu_27) > 50% OR lu_21 + lu_22 + lu_23 + lu_25) > 25%
	Medium urbanization: (lu_21 + lu_22 + lu_23 + lu_24 + lu_25 + lu_26 + lu_27) > 25%
	Low urbanization: (lu_21 + lu_22 + lu_23 + lu_24 + lu_25 + lu_26 + lu_27) > 12.5% AND (lu_21 + lu_22 + lu_23 + lu_24 + lu_25 + lu_26 + lu_27 + lu_31 + lu_32 + lu_33) > 25%
Ag	Agricultural: (lu_21 + lu_22 + lu_23 + lu_24 + lu_25 + lu_26 + lu_27) < 10%, plus satisfying at least one of the "high", "med" or "low" ag rules below.
	High ag: lu_43 > 50% OR (lu_43 + lu_44) > 75%
	Medium ag: lu_43 > 25% OR (lu_43 + lu_44) > 50%
	Low ag: lu_43 > 12.5% AND (lu_43 + lu_44) > 25%
Mixed High	Does not meet criteria for Undeveloped, Urban, or Ag

Land-use categorization is based on the scheme used in Falcone (2015). The specific land uses associated with the "lu_XX" codes can be found in the Falcone (2015) report and related dataset.
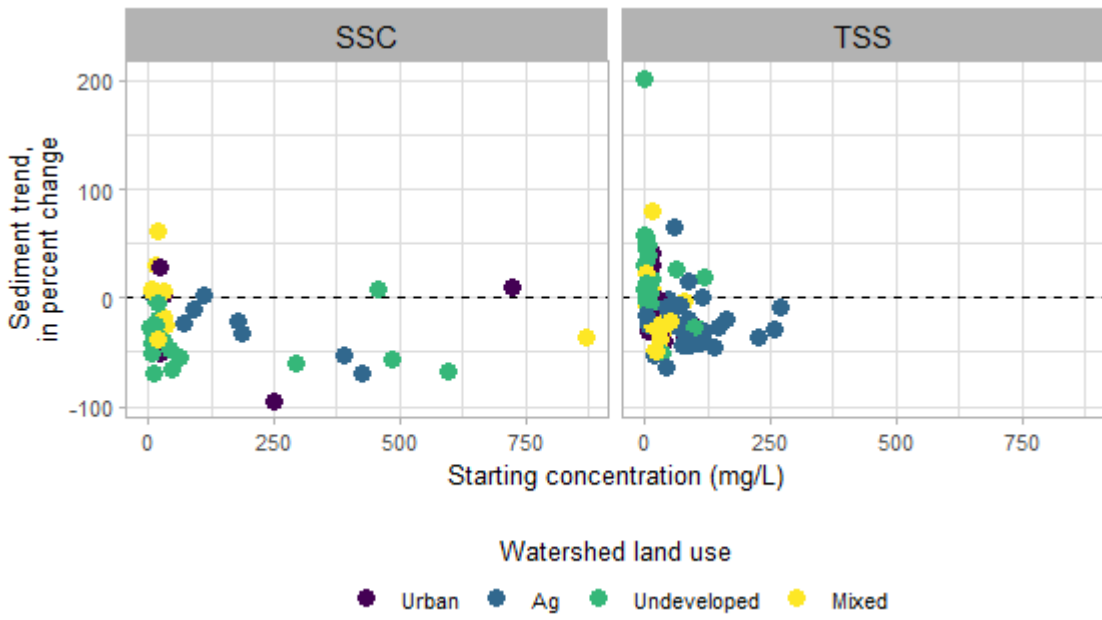
Figure SM-1. Sediment trend (1992-2012) in percent change versus starting concentration (1992), by sediment parameter and land-use category.
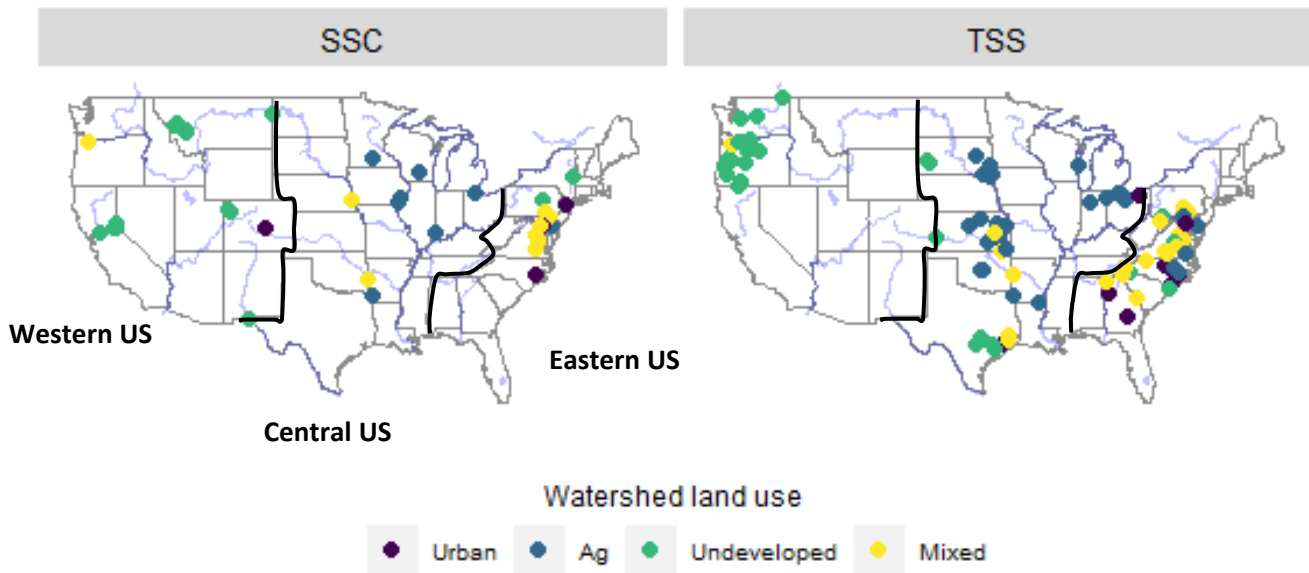
Figure SM-2. Land-use categorization of each site in 2012, shown by parameter.
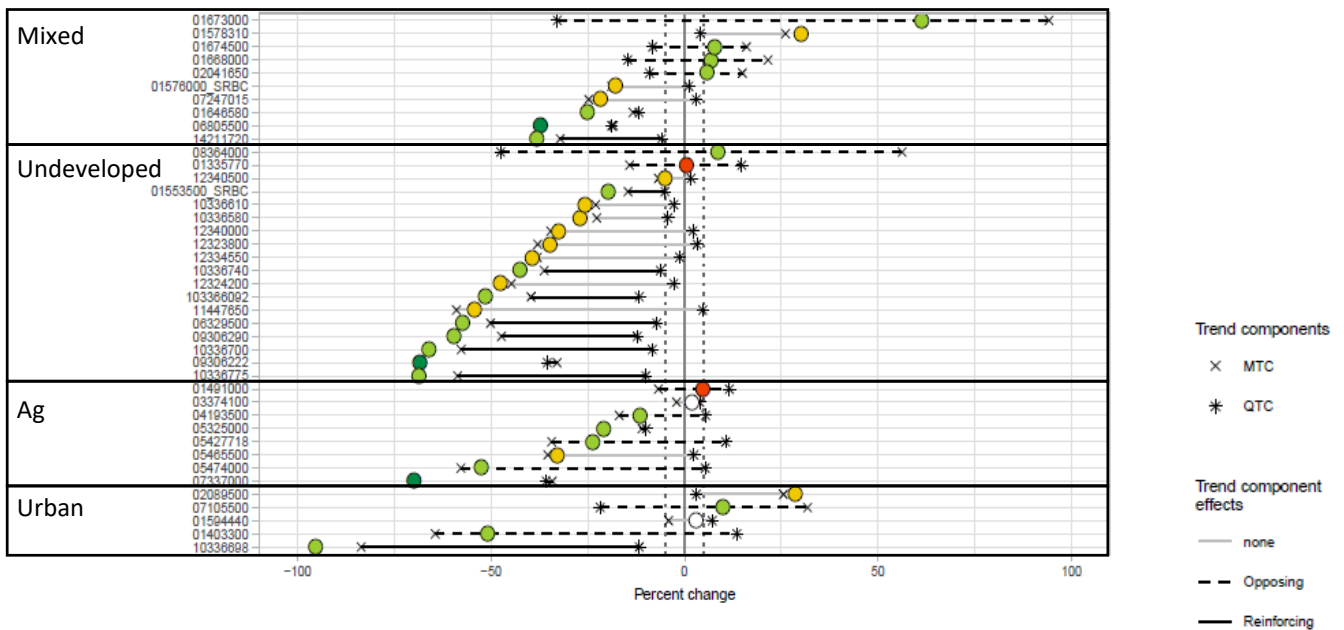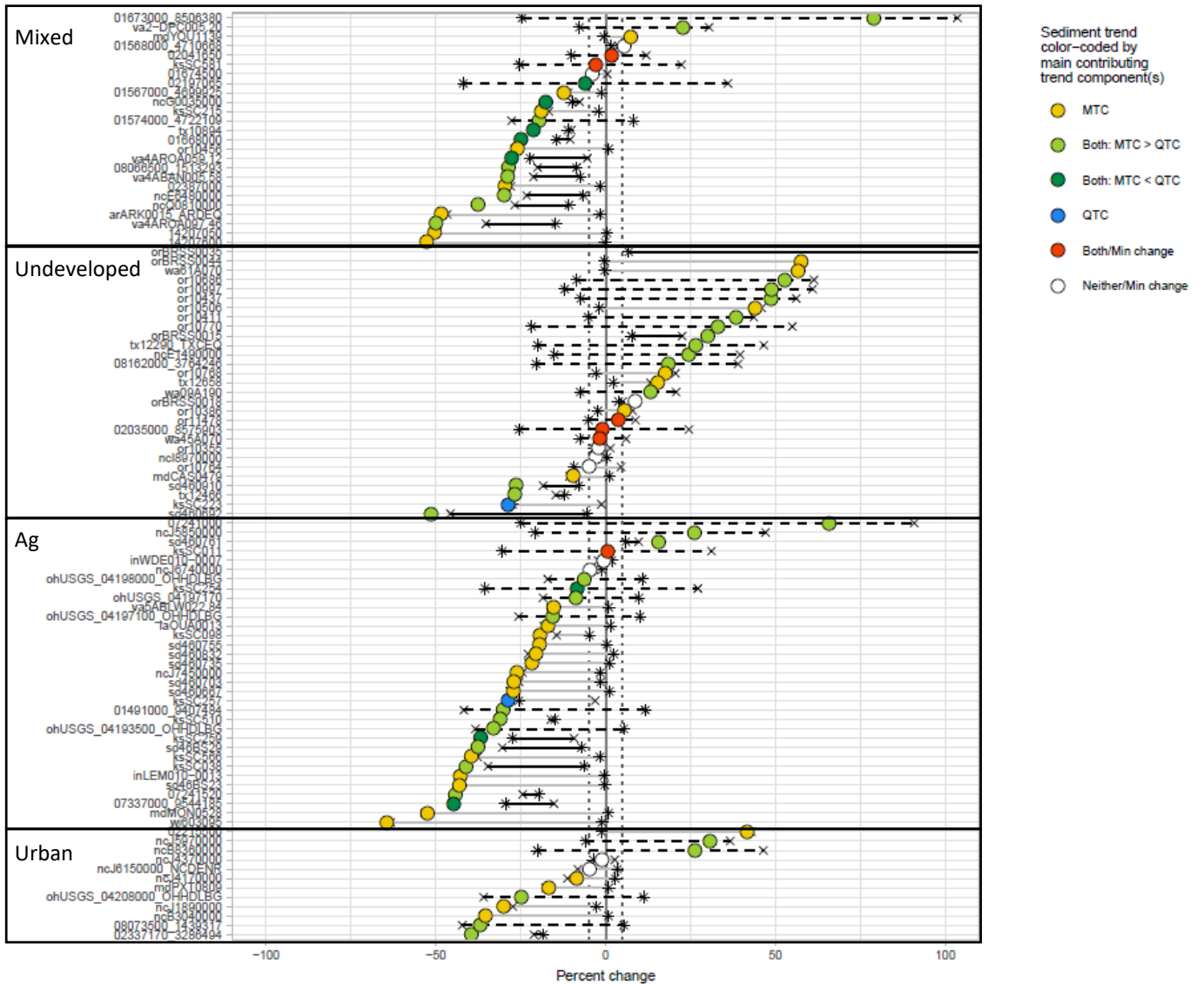
Figure SM-3. Percent change in 1992-2012 sediment trends and trend components (MTC and QTC), grouped by 2012 land-use category and ordered by increasing magnitudes of change within each category. Dashed horizontal lines are +/- 5%, an arbitrary threshold for differentiating between negligible and nonnegligible influences from the MTC and QTC, equates to rough 0.25% change per year. Recall sediment trend = MTC + QTC. Also, TSS trend and MTC estimate for site orBRSS0035 are 202% and 195%, respectively, and not shown on plot. Red and white symbols indicate sites where the sediment trend is < 5% and the MTC and QTC are also > 5% ("Both/Min change") or < 5% ("Neither/Min change")
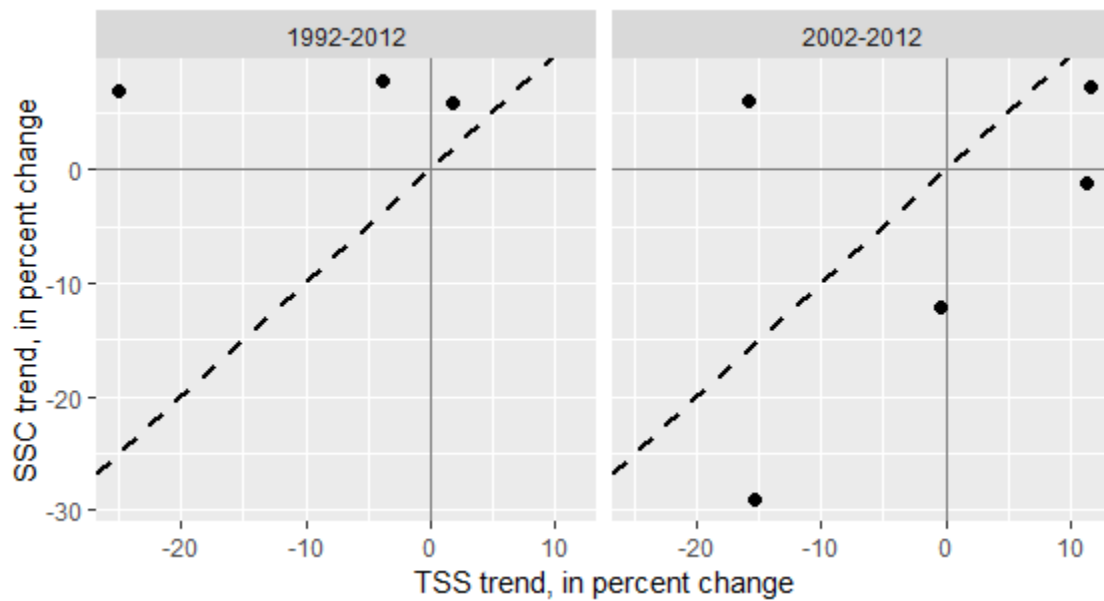
Figure SM-4. SSC trends versus TSS trends at sites where both sediment parameters were collected (3 sites for 1992-2012 trends and 2002-2012 trends). Dashed line is a 1:1 line (SSC trend = TSS trend) and solid, gray vertical and horizontal lines are x=0 and y=0, respectively.