**Appendix 4: Coding modifications to digital hydrologic network attributes**

The following coding modifications were made to MRB\_E2RF1 digital hydrologic network attributes during development of the SPARROW model of dissolved-solids transport. Changes to HUC2 and TERMFLAG were made to correct for errors, whereas changes to FRAC were made to account for water and contaminant losses that occur along the network largely due to diversions.

**Attribute: HUC2**

HUC2 was changed from ‘80’ to ‘08’ for reaches with MRB\_ID equal to 527206 and 527206.

**Attribute: TERMFLAG**

TERMFLAG was changed from ‘1’ to ‘0’ for reaches with MRB\_ID equal to 38346, 38347, 92256, 92253, 92251, 92239, 92332, 92247, 92245, 92261, 92260, 92252, 657960, 661550, 661570, 658060, 661770, 661660, 661560, 661910, and 661920.

TERMFLAG was changed from ‘0’ to ‘1’ for reaches with MRB\_ID equal to 54245, 54246, 8148, 10754, and 10755.

**Attribute: FRAC**

FRAC was changed to equal values of Q\_LOSS\_PCT (decrease in the reach’s annual discharge, as a percent) for reaches on the Colorado, Gila and Salt Rivers in Arizona, and on the Rio Grande between the San Luis Valley of Colorado and El Paso, Texas. FRAC was also changed to the following new values for reaches with these MRB\_IDs:

22775 = 0.37

22783 = 0.63

55915 = 0.70

55917 = 0.30

45563 = 0.80

44786 = 0.80

44848 = 0.20