

MRB Trend Sites-updated

MRB Trend Site Criteria

1. Parameters of interest (do not all have to occur at a single site)
 - a. Nitrate
 - b. TN
 - c. Total Phosphorus
 - d. Dissolved Phosphorus
 - e. Turbidity
 - f. Sediment (If viable. Likely few sites available)
2. Site Criteria
 - a. Data / Measurements
 - i. Longest record available, at least including baseline of 1980-1996 or close to it.
 - ii. Monthly sampling first, then look at quarterly
 - iii. Discreet and Continuous sensor data should not be mixed unless an analysis is done to determine if data is comparable
 - iv. Event data, if available, can be used with certain cautions
 - v. If methods vary between sites, can still compare as long as an approved method used, and parameter reported is the same
 - vi. When using WRTDS, flux bias statistic should be in range of -0.1 to 0.1. Other model checks should be run as well
 - vii. Flow measurements(discharge) should be available either at the site, or close by on the waterway, to be used to calculate loads
 - viii. Data gaps should be relatively short, no more than one to two years- use as screening criteria to select sites with shortest data gaps
 - b. Geographic
 - i. Between approx. 1000 sq. mi to 20,000 sq. mi (no smaller than HUC 8, approximately size of HUC 6)
 1. HUCs not necessarily the size of the watershed.
 2. Drainage for site should be specifically calculated and mapped
 - ii. Watershed land use should be approximately representative of the state's land use
 - iii. Small watersheds (HUC 12 size) can be used to underlie the matrix of larger watersheds to help elucidate more local trends or help explain larger trends
 - iv. Sites experiencing backwater flow should generally be avoided
3. Methods - WRTDS
 - a. Loads
 - b. Flow-Normalized Loads & Trends

Additional Information from Lori Sprague

1. Some suggestions for WRTDS model checking can be found in [this report](#) on p. 68. I can provide more detail if it would be useful. The unfortunate thing is that some of these critical checks are manual.
2. Metadata issues with the pesky dissolved phosphorus parameters are described in that same report beginning on p. 31.
3. I've attached a census of data sources from our original data compilation back in 2011. Some of this is likely out of date, so Richard's suggestion to check in with Dwane Young is a great one. You'll see in this census -- which predates the water quality portal -- each of our data sources for the 12 HTF states, plus additional federal sources which may or may not have contained data for those states. For a given source, if the "Agency" columns (which represent data provided to us by an agency directly or that we retrieved from their own database) is greater than the respective "STORET" column, we got data from the source that was not in STORET at the time.

[USGS data census.xlsx](#)

Selected MRB Trend Sites

Each MRB Trend site will have a separate page. This section will summarize the sites.

Requirements	Sites	Notes
detail		
	Site 1	
	Site 2	