## **Sentinal Sites-Original Draft**

## Sentinel Site Criteria

This criteria is suggested by NGRREC/GLTG. It will be updated with revision and suggestions from partners.

- 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. Data going back to 1980-1996 or close to it, time series may be shortened slightly if list of sites too-
    - ii. At least monthly sampling, more frequent is better Monthly sampling first
    - iii. Discreet and Continuous sensor data should not be mixed unless an analysis is done to determine if data is comparable
    - iv. Gaps in data should be fairly short in duration
    - v. Event data, if available, can be used, though is not necessary\*
    - vi. If methods vary between sites, can still compare as long as an approved method used, and parameter reported is the same
    - vii. When using WRTDS, flux bias statistic should be in range of -0.1 to 0.1. Other model checks should be used as well
    - viii. Flow measurements(discharge) should be available either at the site, or close by on the waterway, to be used to calculate loads
    - ix. Data gaps should be relatively short, no more than one to two years- use as screening criteria to select sites with shortest data gaps
    - x. Baseline 1980-1996?
  - 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) are more relevant to a particular project, not necessarily state-level progress
    - iv. Sites experiencing backwater flow should generally be avoided
- 3. Methods
  - a. Loads
  - b. Flow-Normalized Loads & Trends
    - i. WRTDS
      - 1. If interested only in NPS, then remove point source discharges

## Selected Sentinel Sites

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

Requirements	Sites	Notes
detail		
	Site 1	
	Site 2	

<sup>\*</sup> Event data may not bias WRTDS, but make the trends calculated using the method less reliable. (need citation)