SRBC Audit & Comparison Study Results

DIWG Meeting

March 19, 2019

Historical Perspective:

- Prior to 2004, an autosampler was used to collect samples from the bottom (may have been biased).
- Post-2004, a modified DH-48 sampler was used that may not have been ideal for all flow conditions (2016 audit).
- When non-ideal conditions prevailed, DH-48 sampler may not have reached the bottom biasing the samples.
- Samples were collected downstream when the DH-48 sampler was used.

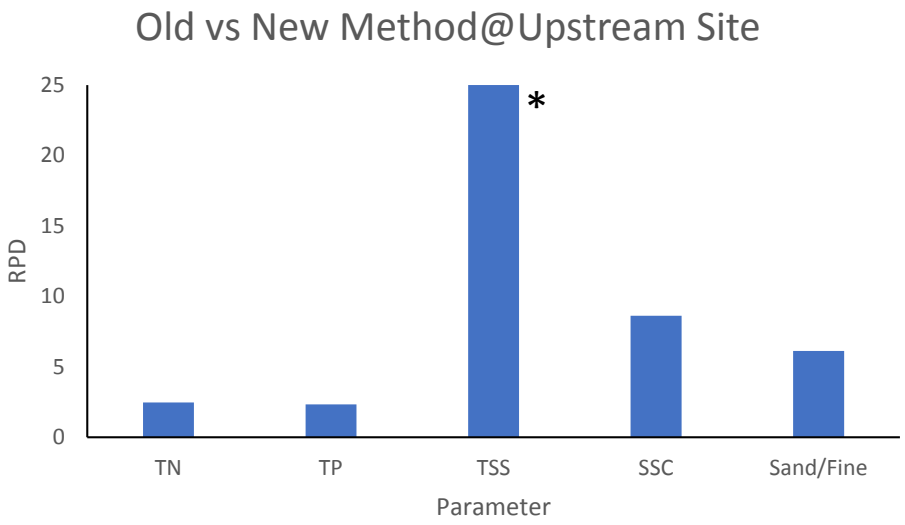
Side-by-side Study Highlights:

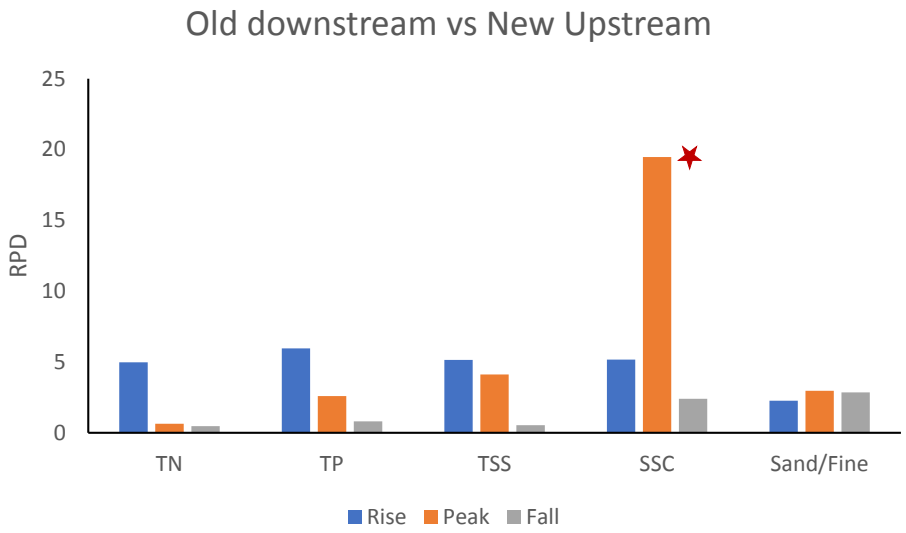
- Four samples collected over two storm events (8/4/18 and 8/22/18).
- Both the old DH-48 and new DH-95 sampler were used to collect samples.
- Duplicates were collected each time bringing the total number of samples to sixteen (fewer than projected).
- Storm one samples were collected as Split duplicates (FS1 and FS2).
- Storm two samples were collected as Concurrent duplicates (S1 and S2).
- Upstream samples were collected during storm one with DH-48 and DH-95.
- Upstream samples were collected with DH-95 and downstream samples with DH-48 during storm two.

Study Result 1:

No great variability was observed between the two methods, except TSS* and SSC

DH-48 sampling at historic downstream site was comparable to upstream sampling

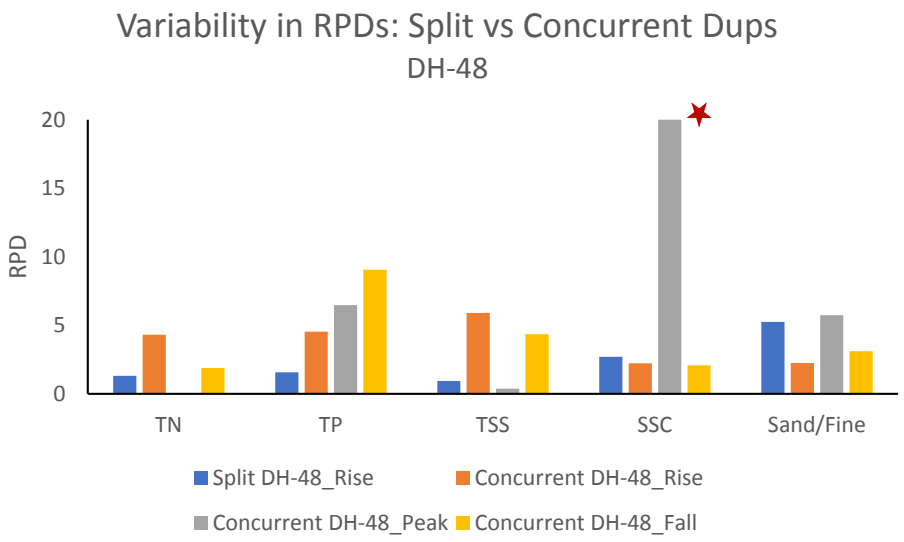


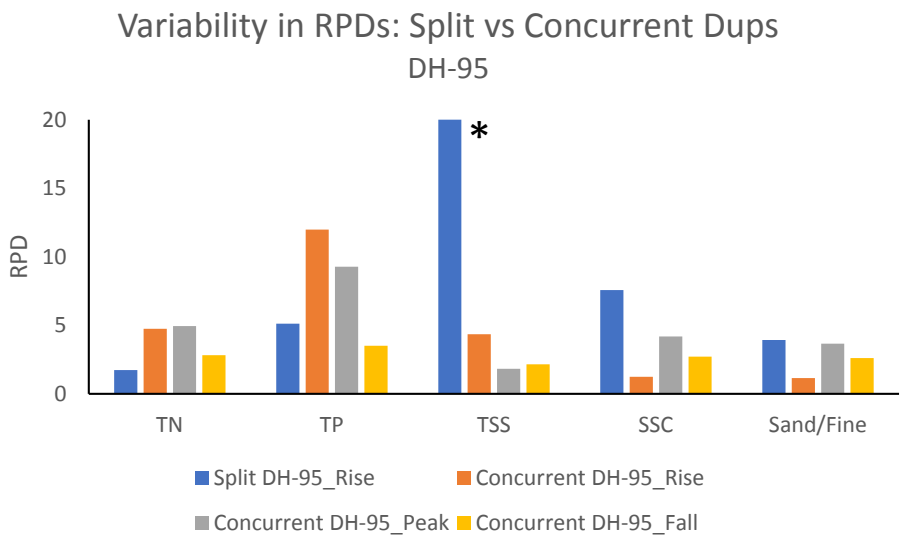


Study Result 2

Split and or concurrent duplicate results were comparable, in both cases variability is well within limits

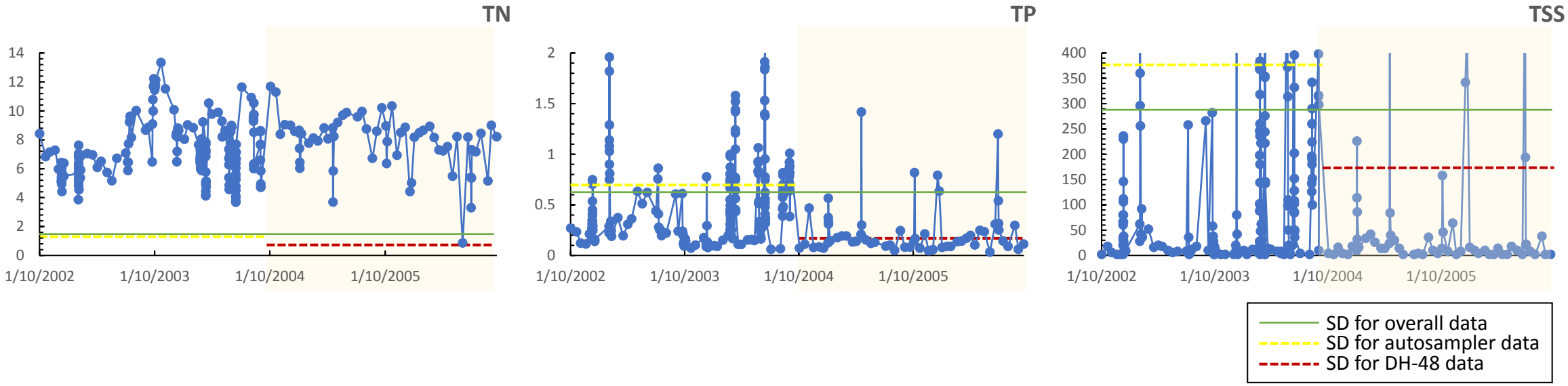
Storm two SSC data under Peak flow conditions was an exception*





Historic Data Review

Large variability in data was observed for TP and TSS when collected using an autosampler (before 2004), although TN data was comparable



Summary:

The side-by-side study results provided reasonable information for comparing data.

Based on the input from the study plan, and given the limited resources we may have to move on.

The additional bias in pre-2004 data may have to addressed by adding a qualifier line (other exhaustive options may not be feasible)