

# Study Reaches

Please see [Data Entry Tips](#) for help adding sites

## Definition

A **Study Reach** is a length of stream selected for sampling purposes; it is the principal sampling unit for collecting (and analyzing) physical, chemical, and biological data.

Typically the reach is selected to be representative of the stream's condition and the length sampled is usually proportional to the channel dimensions (i.e. channel width); however, for a particular sampling program the reach length may have a minimum or maximum value (domain range) or be a fixed length within a certain range of values

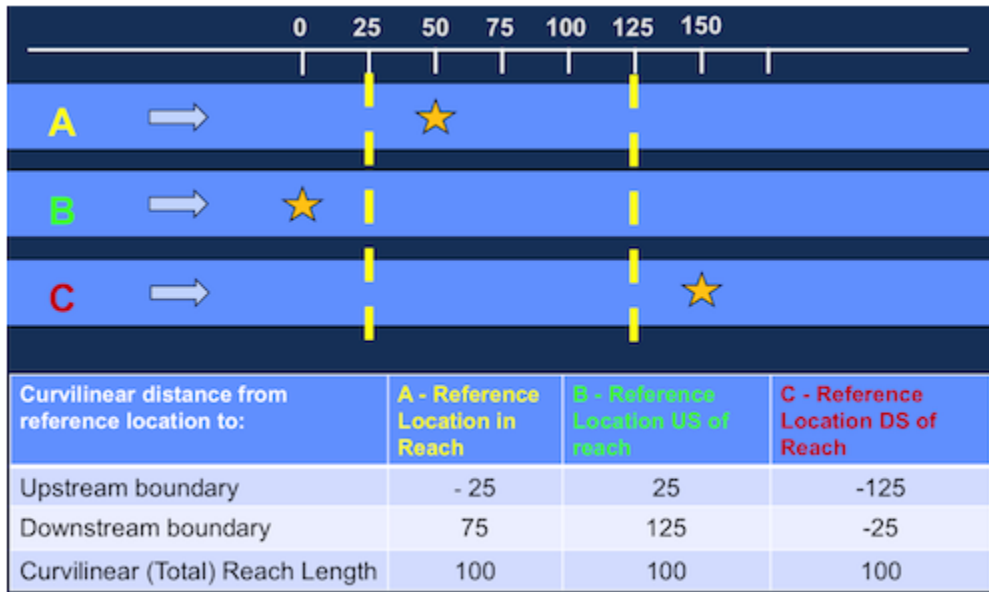
## Key Points

- Site and Reach Name are required.
- Delineation Date is highly recommended.
- Reaches are project and station-specific
- The full reach name is a combination of:
  - 1) SiteNumber
  - 2) ReachName, and
  - 3) Project
- For example, '43185411440912--visitor center-SilverTNC' is a reach near NWIS station 43185411440912 used by the SilverTNC project that they called "visitor center"
- BioData Study Reaches incorporate ideas from NAWQA, NRSA, and other ecological studies.
- Study reaches may delineated in several ways, including:
  - Narrative descriptions
  - In relation to a Reference Location
  - Upstream and downstream boundaries (Latitude/Longitude or Description)

## Conventions for recording reach boundaries

If either boundary is upstream from the reference location, the curvilinear distance (along the thalweg) is negative; otherwise, the distance is positive.

'Curvilinear reach length' = 'Curvilinear distance to downstream boundary' MINUS 'Curvilinear distance to upstream boundary'



The stars ★ represent reference locations in the 3 examples: A, B, and C