The **Site Selection Requirements** for performing discharge measurements using a FlowTracker2 instrument are based on a number of measurement site and hydraulic requirements. The measurement site and hydraulic requirements are similar to what a Hydrologists or Hydrographer will use in the selection of monitoring site for either natural or artificial control. The site and hydraulic requirements that need to be taken in into account with every discharge measurement are summarized under the following points.

a) Uniform flow conditions throughout the measurement section,

b) Straight length of channel with uniform cross-section and slope (10 times section width).

c) Flow in the channel should be confined to a single well-defined channel with stable banks.

d) Avoid a site with wide shallow sections or secondary side channels.

e) Bends upstream of site should be avoided as this will result in angular flow towards tagline,

f) Steep slopes upstream should be avoided as this could result in high approach velocities at the measurement site causing turbulent flow conditions.

g) Avoid measurement sections with deep pools as the reduction in velocity normally diverge from uniform flow conditions,

h) Avoid prominent obstructions in a pool or excessive plant growth that can affect the flow pattern.

i) Turbulent flow conditions should be avoided if possible.

j) Negative and or back flow should be avoided at all times.

k) Flow conditions must be within the instrument and equipment specifications

**REQS:**

* Each panel < 10% total discharge
* No closer than 0.15 m
* Implies minimum stream width of 10\*0.15 = 1.5 m
* 4Water survey min spacing is 0.05 m

If the depth of vertical is less than 0.75 m, observations

are made at a 0.6 depth.

 If the depth is equal to or greater than 0.75 m, the two‐

point method with observations at 0.2 and 0.8 depth is

used to obtain the mean velocity.

 If a non‐standard velocity profile is suspected with the

two‐point method, a third observation is taken at 0.6

of the depth and the three‐point method is then

applied.