

Discharge or Stream Flow

Why do we measure this?

Stream flow or discharge is the volume of water moving past a point in a unit of time. Velocity and volume make up the discharge of a stream. Velocity is the speed at which a river flows and the volume is the amount of water in a stream. The physical and chemical parameters of a stream can be affected by its discharge. A stream with higher velocity can mix more atmospheric oxygen into stream water than a slower moving stream. Higher velocity also increases the amount of sediment that can be carried in a stream. Slower moving water also tends to heat up faster than a more swiftly moving stream. The kinds of plant and animal communities that live in a stream are affected by these and other parameters. Stream discharge can be seasonal in nature with higher discharge readings during snowmelt and during fall rain events. The surrounding landscape can also affect discharge, the more impervious surfaces the greater the discharge during rain events.



Equipment Needed:

- Tape Measure
- Yard Stick
- Float (orange or other object that will float partially submerged)
- Stopwatch or wrist watch with second hand
- Chest waders
- Discharge Data Sheet

Definition of Terms

Impervious Surface: A surface that does not allow water (e.g. rain) to pass through (infiltrate).