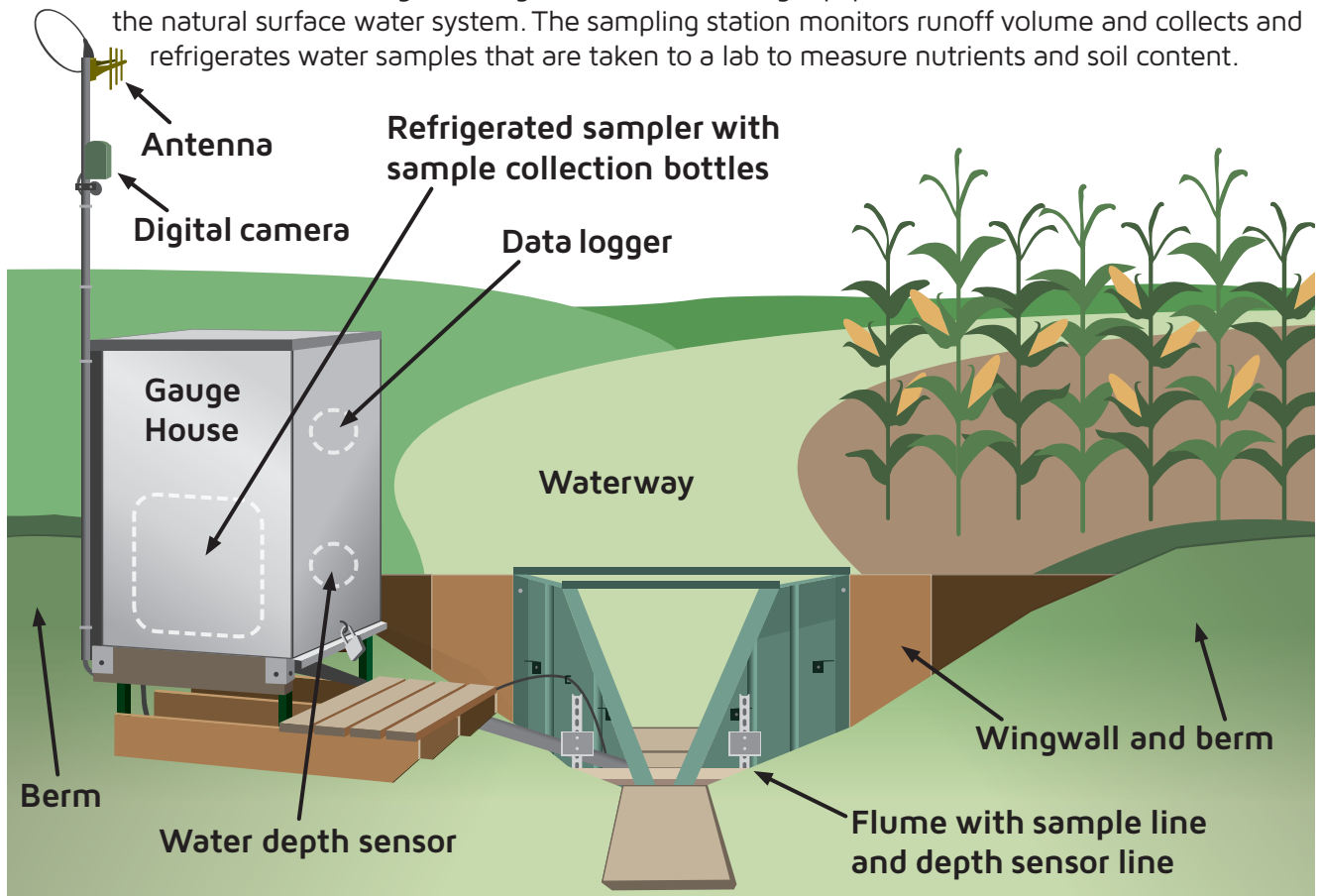


Sampling station for surface runoff monitoring

Runoff is channeled through the edge-of-field monitoring equipment before it continues to flow to the natural surface water system. The sampling station monitors runoff volume and collects and refrigerates water samples that are taken to a lab to measure nutrients and soil content.



Antenna: Two-way communication provides data collection and control of the monitoring equipment.

Digital camera: Captures site conditions and records depth readings to verify flow data.

Gauge house: Contains monitoring equipment.

Waterway: Flow path for water to reach the flume.

Flume: Runoff is directed through this control structure to determine flow rate.

Wingwall and berm: Plywood or sheet piling combined with earth to direct runoff into the flume.

Depth sensor and sampler line: Records water levels and transports water samples into the gauge house.

INSIDE THE GAUGE HOUSE:

Refrigerated sampler: Collects and stores water samples during runoff events until they are retrieved.

Sample collection bottles: Contain water samples to be analyzed.

Data logger: Computer system that operates monitoring equipment and collects and stores data.

Water depth sensor: Senses pressure to determine water depth in the flume. Flow rate is then calculated from the water depth and flume rating equations.