Provincial Hydrology Program

Ministry of Environment and Climate Change Strategy

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Provincial Hydrology Program

The **Provincial Hydrology Program** manages the collection of provincial **surface water quantity data**. The core parameters include:

- **stage - calibrated water level height**
- **discharge (Q) - volume of flow**

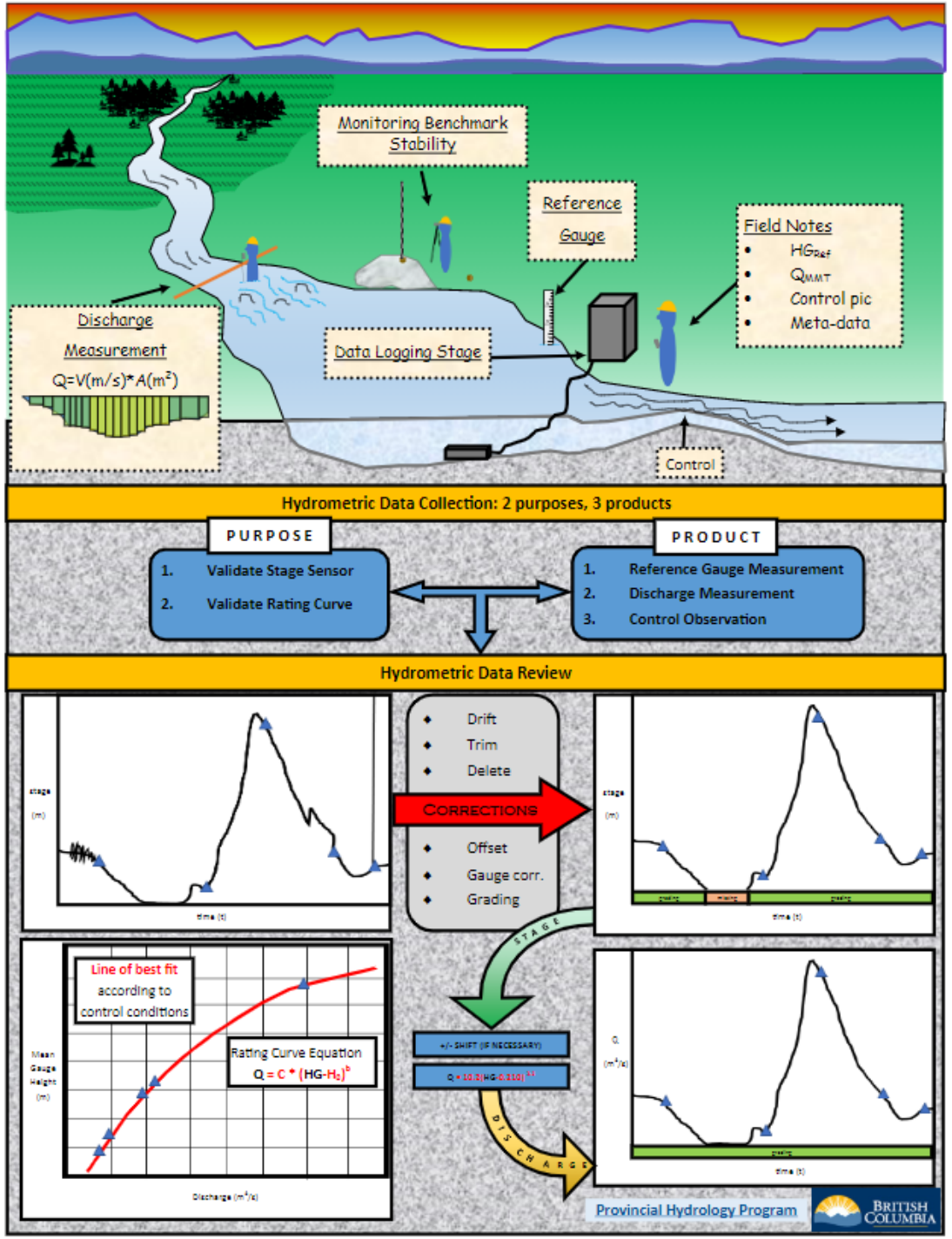
Additional parameters such as water temperature, turbidity, precipitation, conductivity, and others may be collected.

https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-science-data/water-data-tools/provincial-hydrology-program

The **Provincial Hydrology Program** functions to:

- establish a provincial hydrometric monitoring network
- oversee Canada-British Columbia Hydrometric Agreement (Water Survey of Canada)
- publish standards for hydrometric operations (RISC) (link)
- **provide training, guidance, capacity building, mentoring and equipment support** for hydrometric data collection and review to First Nations, stewardship groups, industry, consultants, municipalities and others

Hydrometric Monitoring Process



Part 1 - Data Collection

- Establish gauge (collect stage)
- Validate Stage, collect Q at regular intervals during field visits

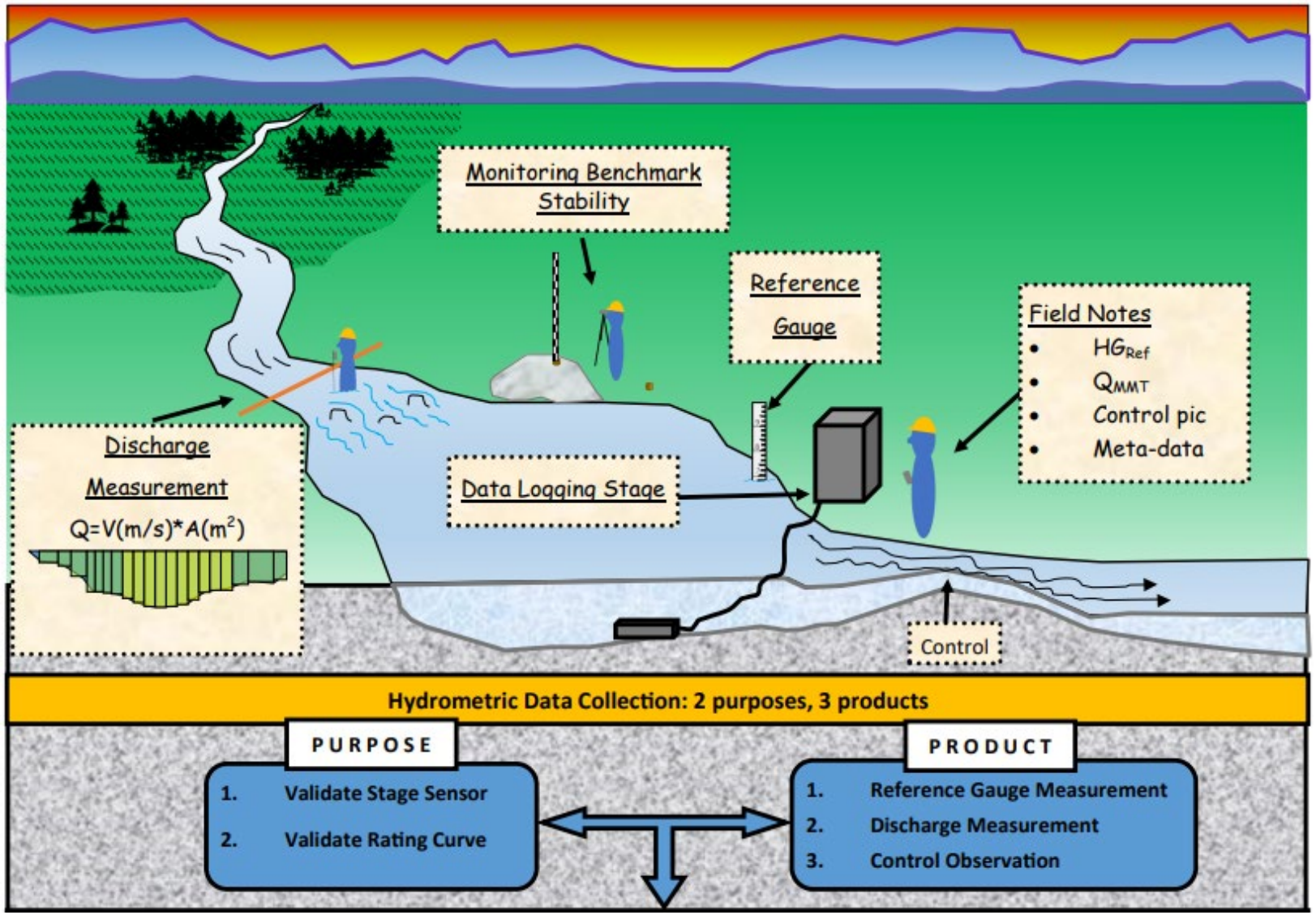
25%

Part 2 - Data Review

- Review, grade, and/or correct your stage dataset
- Develop stage-discharge curve
- Review, grade, and/or correct your discharge dataset
- Document and distribute

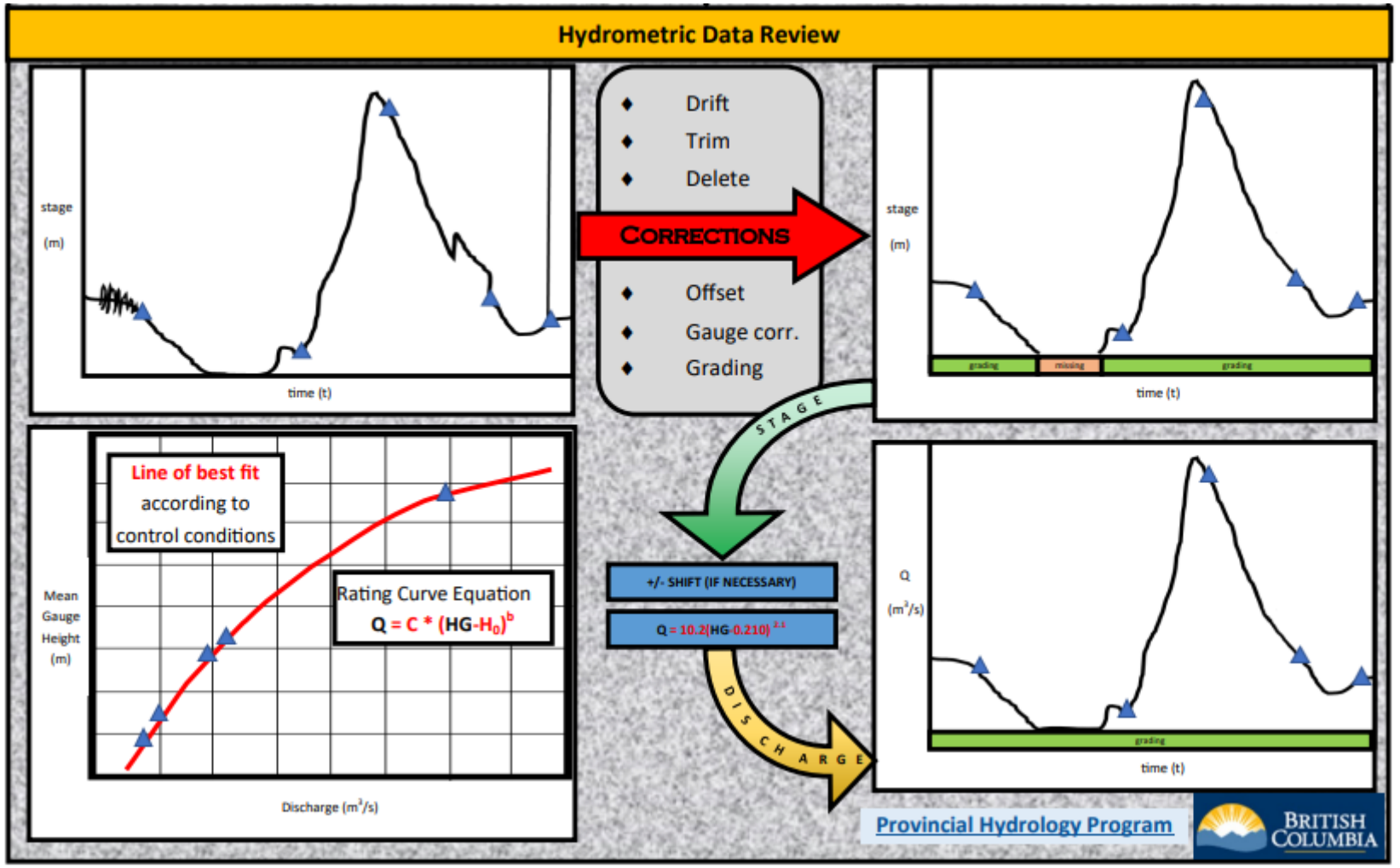
75%

Hydrometric Data Collection



1. Select your site
2. Find your gauge pool
3. Install a stage sensor
4. Install reference benchmarks to validate river height
5. Visit periodically to measure stage and discharge

Hydrometric Data Review



1. Plot each stage and discharge point and fit a line to create stage-discharge equation
2. Review the input dataset (**stage**) for errors
3. Review measurements for validity or major changes to the channel that changes the stage-discharge equation
4. Grade the output dataset (**discharge**)
5. Publish or distribute