

DRAFT

Audience: Trail users, anglers and paddlers – people that access the river and will see the sign

Purpose:

1. Provide realtime flow measurements, year around.
2. Educate the audience on basic physical science, like where runoff comes from.
3. Introduce the term “June Rise”.
4. Separate environmental and human issues.
5. Provide direction to additional resources.

Text for River Gage Sign

Go Ahead, Gage the River

How much water is flowing down the Poudre River right now? Here’s a hint, look at the gage on the bridge. The gage is a large ruler that translates river depth (in feet) into flow measured in cubic feet per second (cfs). If the water level is up to the 100 cfs line, then 100 cubic feet of water is passing beneath the bridge every second. Estimating flows takes practice, how’d you do?

The Poudre Shrinks and Swells

Flows in the Poudre River are always changing and can even vary within a single day. During most of the year, a small amount of water flows down the Poudre. The Poudre swells in the spring and summer, when snow in the Rocky Mountains begins to melt. Peak flows normally occur in June and are often referred to as the "June Rise." These flows can be enormous; in 1901 the peak flow exceeded 12,000 cfs. After the peak has past, the Poudre begins to shrink back to low flow conditions and in some cases disappears. The cycle of the Poudre shrinking and swelling has occurred for millions of years and the health of the Poudre River is tied to it.

Flows for Plants and Animals

Plants and animals depend on the Poudre River annually shrinking and swelling. High flow events, like those during the “June Rise,” wash leaves and other woody material into the Poudre. This material provides food and shelter for aquatic insects - a major food source for the fish. High flows are also important for plants. During the “June Rise”, river water spreads throughout the floodplain and distributes cottonwood seeds. Without regular high flows, cottonwoods can not reproduce and the Poudre River corridor would be occupied by undesirable plants.

Flows for the Front Range

Mother Nature’s not the only source of flow in the river. The Poudre River delivers millions of gallons of water from local reservoirs to towns, farms and businesses. Diversions also redirect water from the Poudre into irrigation ditches and reservoirs downstream. Colorado’s Front Range, as we know it, would not exist without the Poudre delivering water for municipal, agricultural and manufacturing purposes.

For More Information

This gage was designed for educational purposes and could be used to determine when the “June Rise” occurs or when the river has receded and it’s safe to fish or tube the river. The United States Geological Survey (USGS), a federal agency, operates automated gauging stations throughout the Poudre watershed. Real time flow data for the Poudre River can be found at www.usgs.gov.

Image Possibilities

- 1. Typical monthly hydrograph for nearest USGS gauging station.**
- 2. Illustration of a flooded riparian corridor.**
- 3. Illustration of the same corridor after the flood recedes and forms new bars/riffles.**
- 4. Photo of a snowy mountain peak.**
- 5. Photo of an irrigated agriculture field.**