

# WATER RIGHTS/IRRIGATION FLUMES



Irrigation flumes can be categorized into two groups:

- Those used for water rights
- Those used for in-field / between-field flows

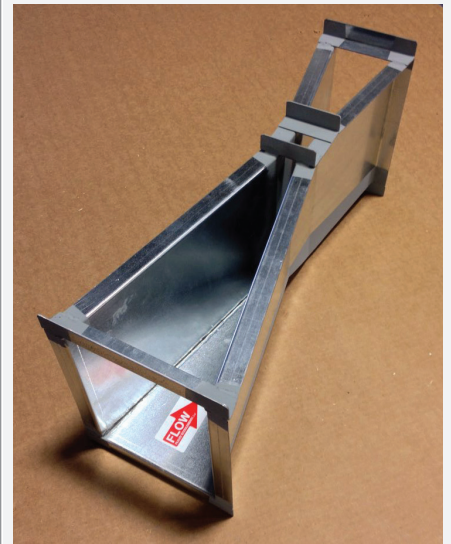
Water rights flumes are concerned with the overall apportionment of water from a surface water source. Here a specific right to a set amount of water has been assigned to a user. Users are limited by allotment and correct measurement of their allotment use is critical.

For **water rights** applications, Parshall and Cutthroat flumes are commonly used. These flumes are available in a range of sizes / flow capacities and were specifically designed for irrigation flows. Their shapes can be adapted to the common shape of irrigation canal and channels with little difficulty and both flumes exhibit good usable flow ranges.

**Field flow** applications tend to have lower flows and require the flume to conform to a natural channel, earthen ditch, or furrow. Here Trapezoidal, Montana, or Portable USGS Parshall flumes are more common due to their ease of installation. Fiberglass tends to be the material of choice due to its lightweight nature and its ability to produce flumes is tight dimensional tolerances - which is particularly important in smaller size flumes.

## COMMON STYLES

- *Parshall*
- *Cutthroat*
- *Rectangular*
- *Trapezoidal*
- *Montana*
- *HS / H / HL*



While Parshall flumes are most common, for sites where the grade is shallow or the channel floor is stony and excavation is difficult, other flumes types (or weirs) may be a better solution.

