



**Blue Water Task Force**

# **West Fork of Gallatin Aquarod Monitoring Project**

**November 8, 2006**

**BWTF Annual Meeting**

**Big Sky, Montana**





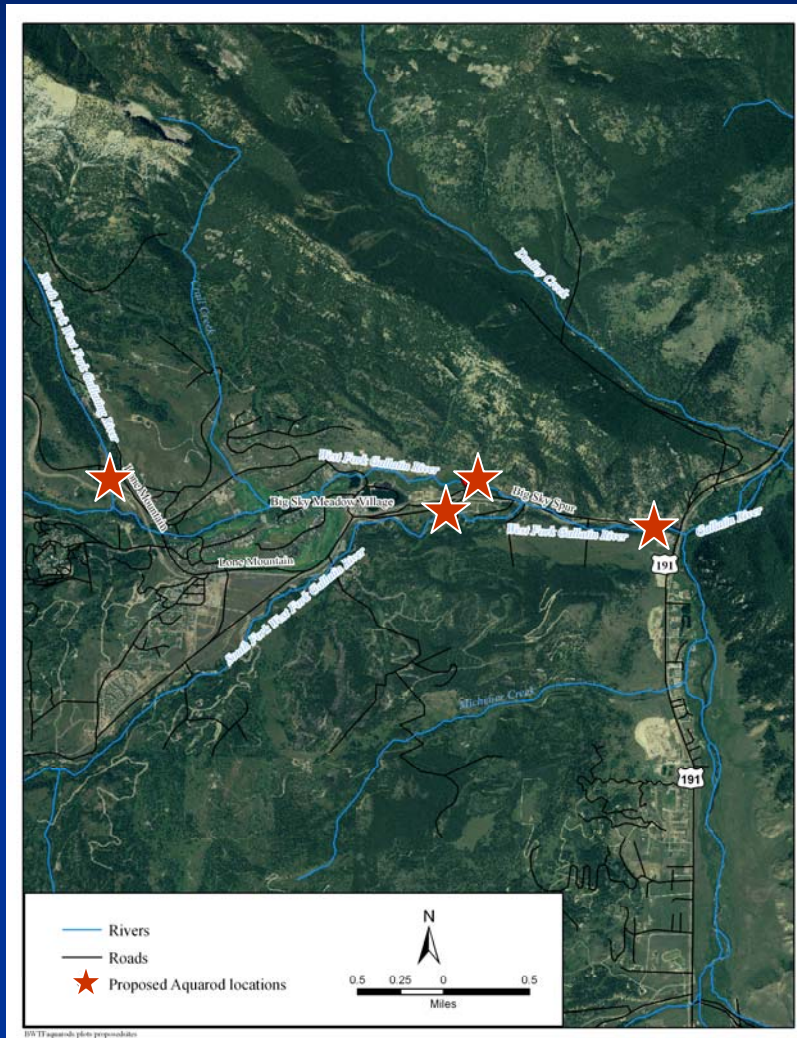
## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

- Purpose of Project
  - Measure discharge in tributaries of West Fork of Gallatin 2006 and 2007 (April-October)
  - Measure flows over range of hydrograph
  - Create rating curve for aquarod data
  - Provide data for use in watershed planning





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project



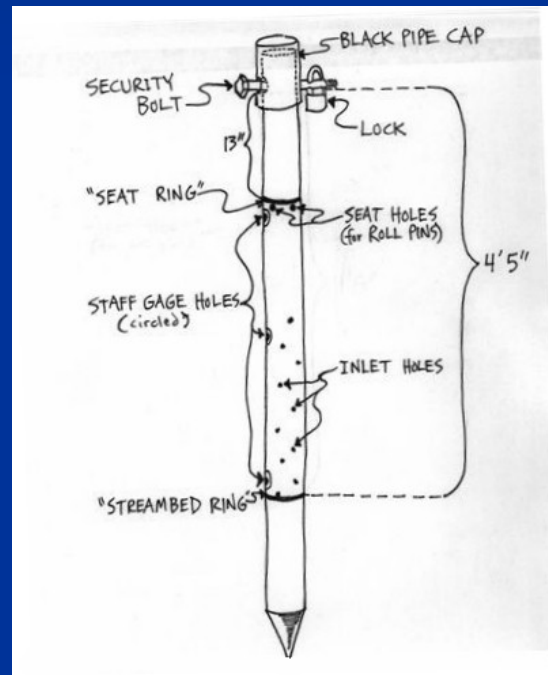
### ■ Sites

- North Fork below LMR
- South Fork at Knaubs
- West Fork below WWT
- West Fork below spur road bridge



## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

### ■ Aquarod 101





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

- Aquarod Download
  - Download monthly
  - Connect to Laptop
  - Retrieve Output Files

```
DAT
Data Records: 2837
Serial Number: 3404
Model: 100
Date Time WT AT WL

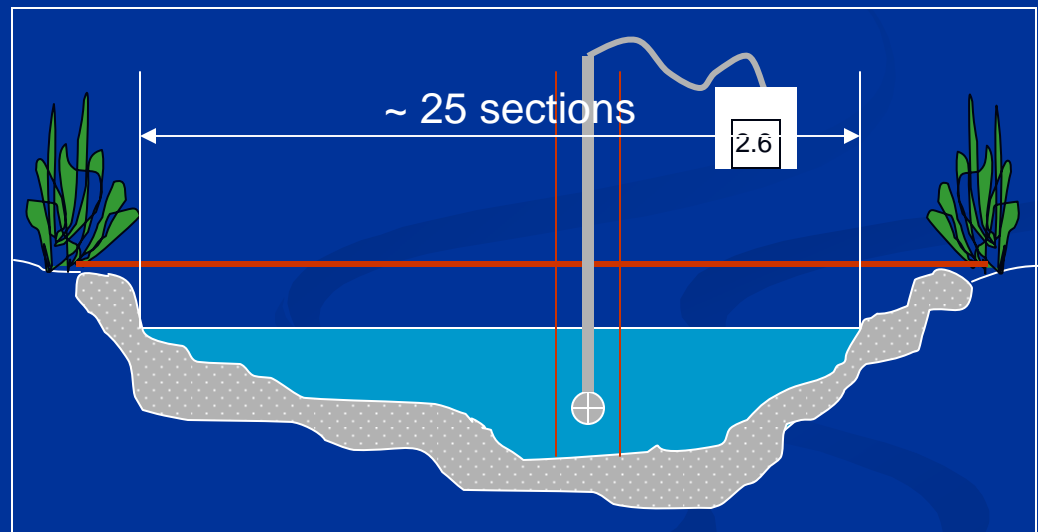
04/25 12:30 3 16 362
04/25 13:00 4 12 364
04/25 13:30 5 11 362
04/25 14:00 5 13 366
04/25 14:30 5 11 367
04/25 15:00 5 16 368
04/25 15:30 5 18 368
04/25 16:00 5 20 370
04/25 16:30 6 18 372
04/25 17:00 6 19 374
04/25 17:30 7 14 374
```





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

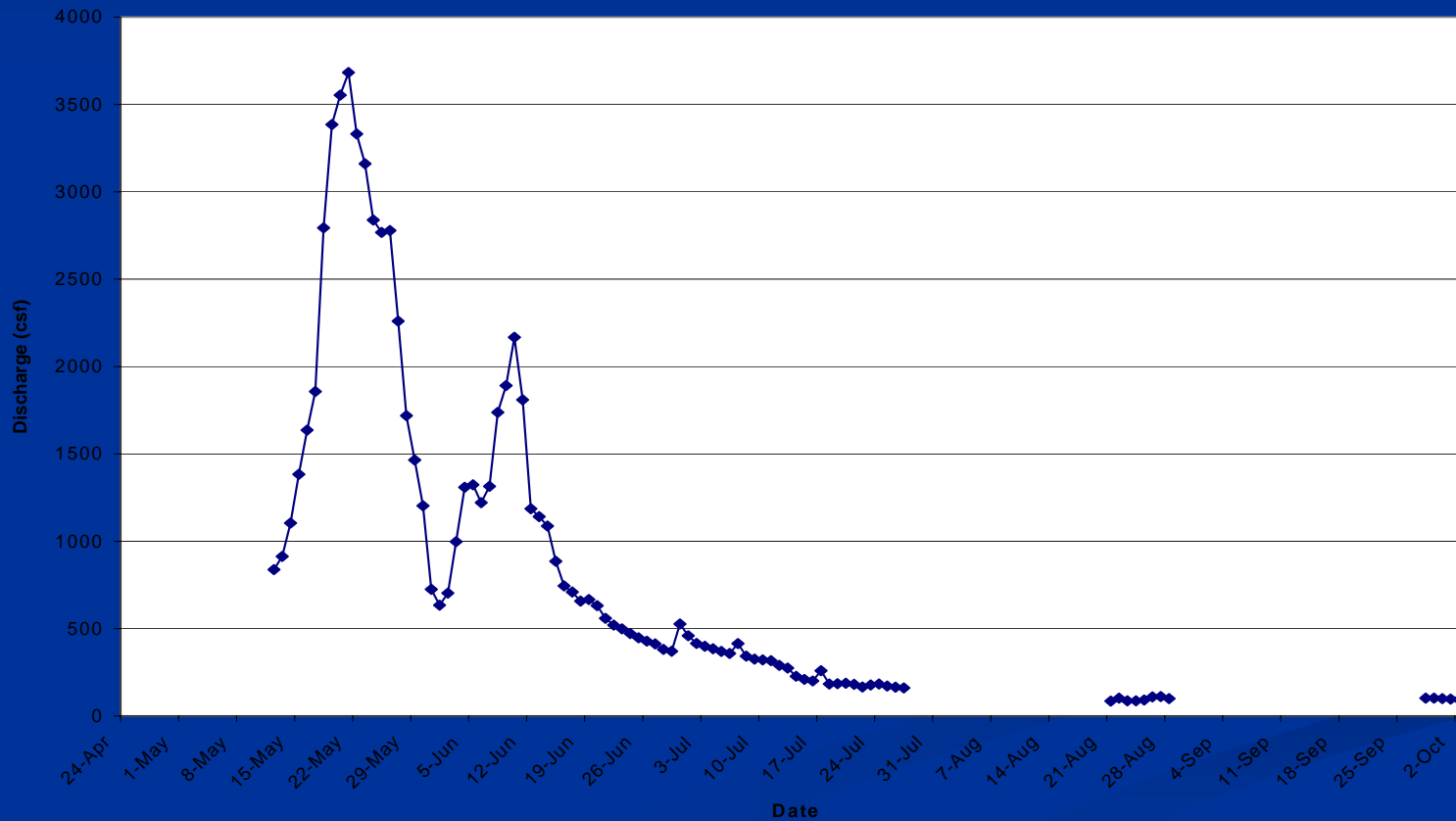
### ■ Measuring velocity





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

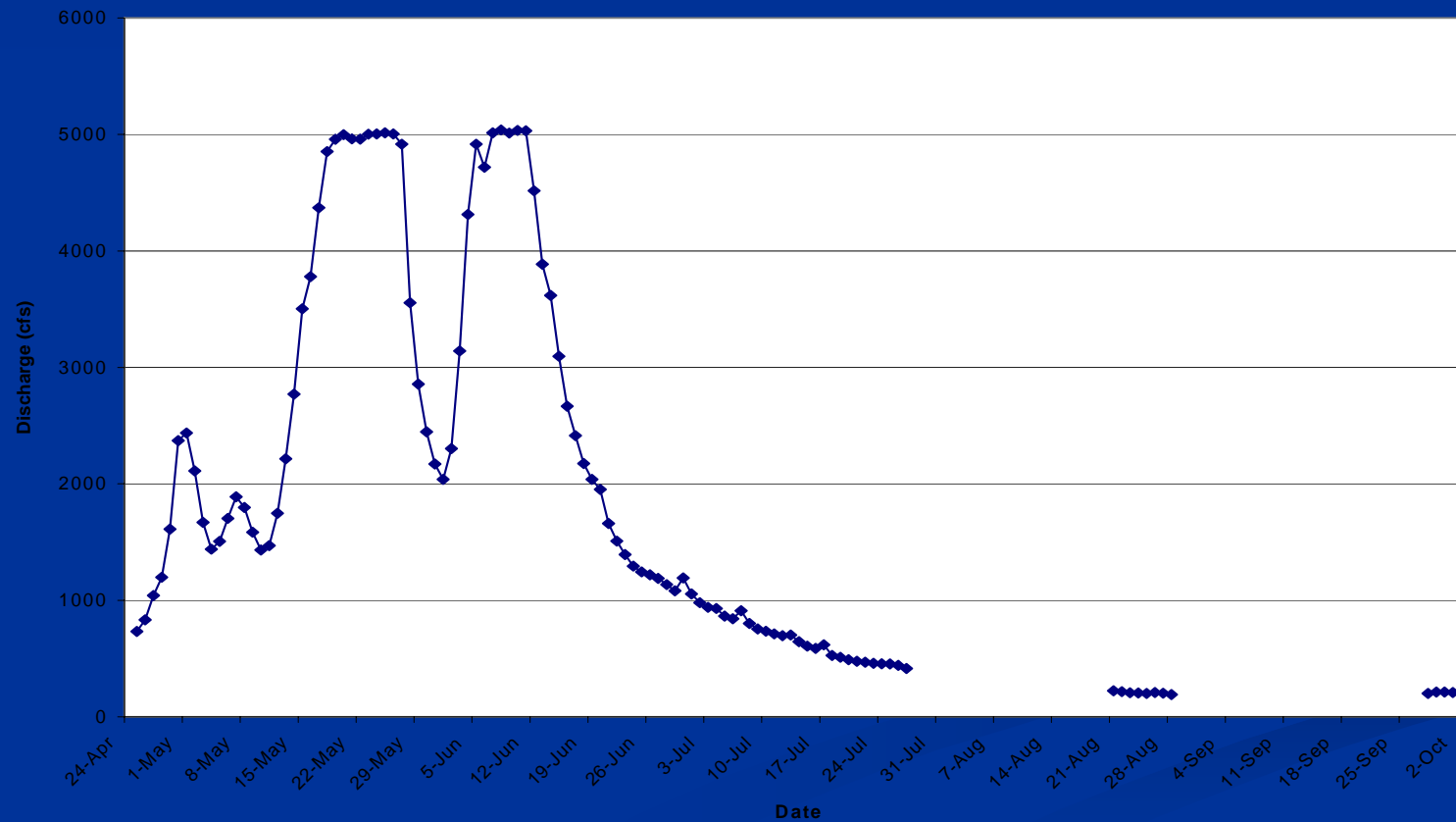
### ■ Results for Upper West Fork





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

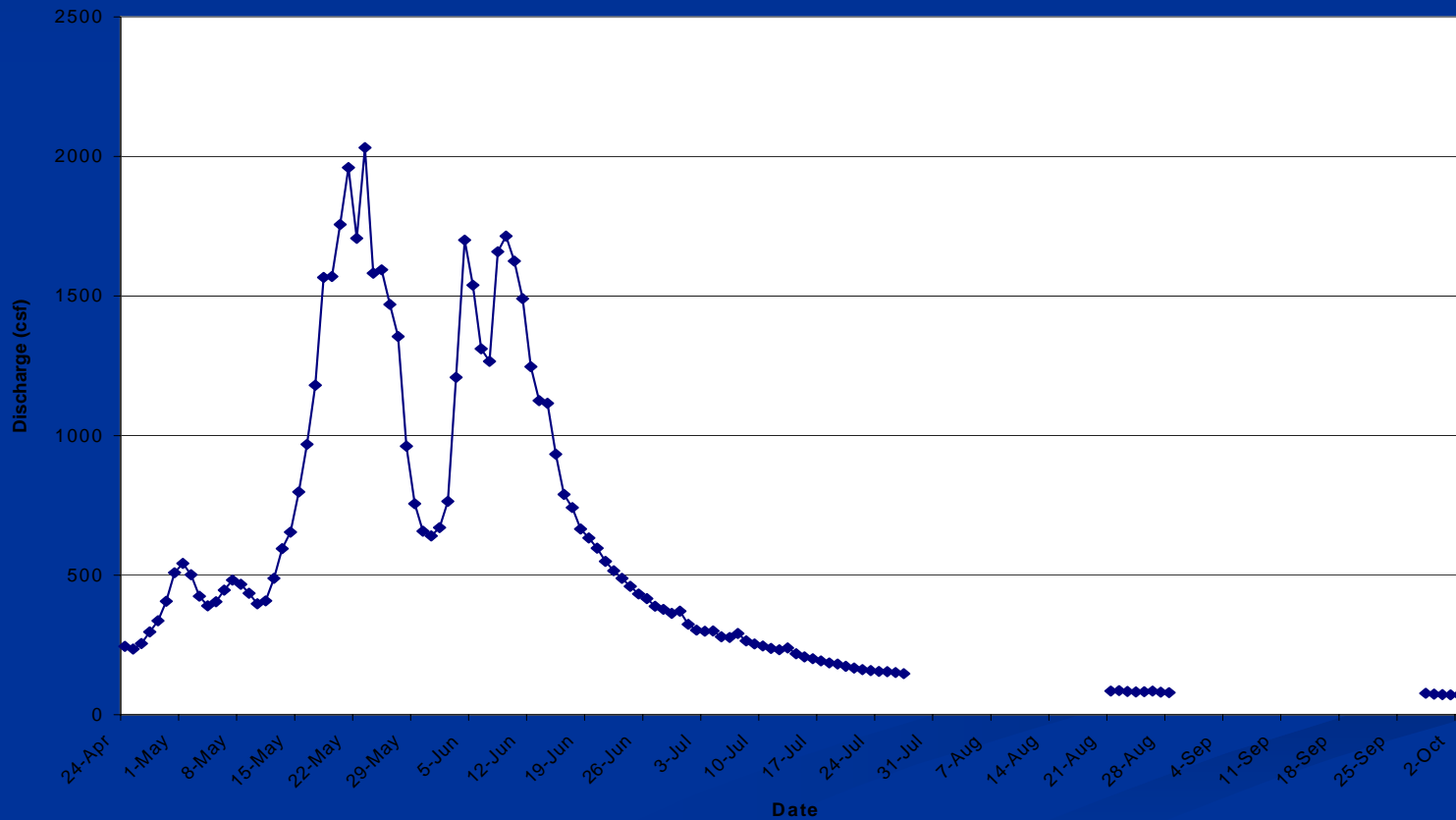
### ■ Results for Lower West Fork





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

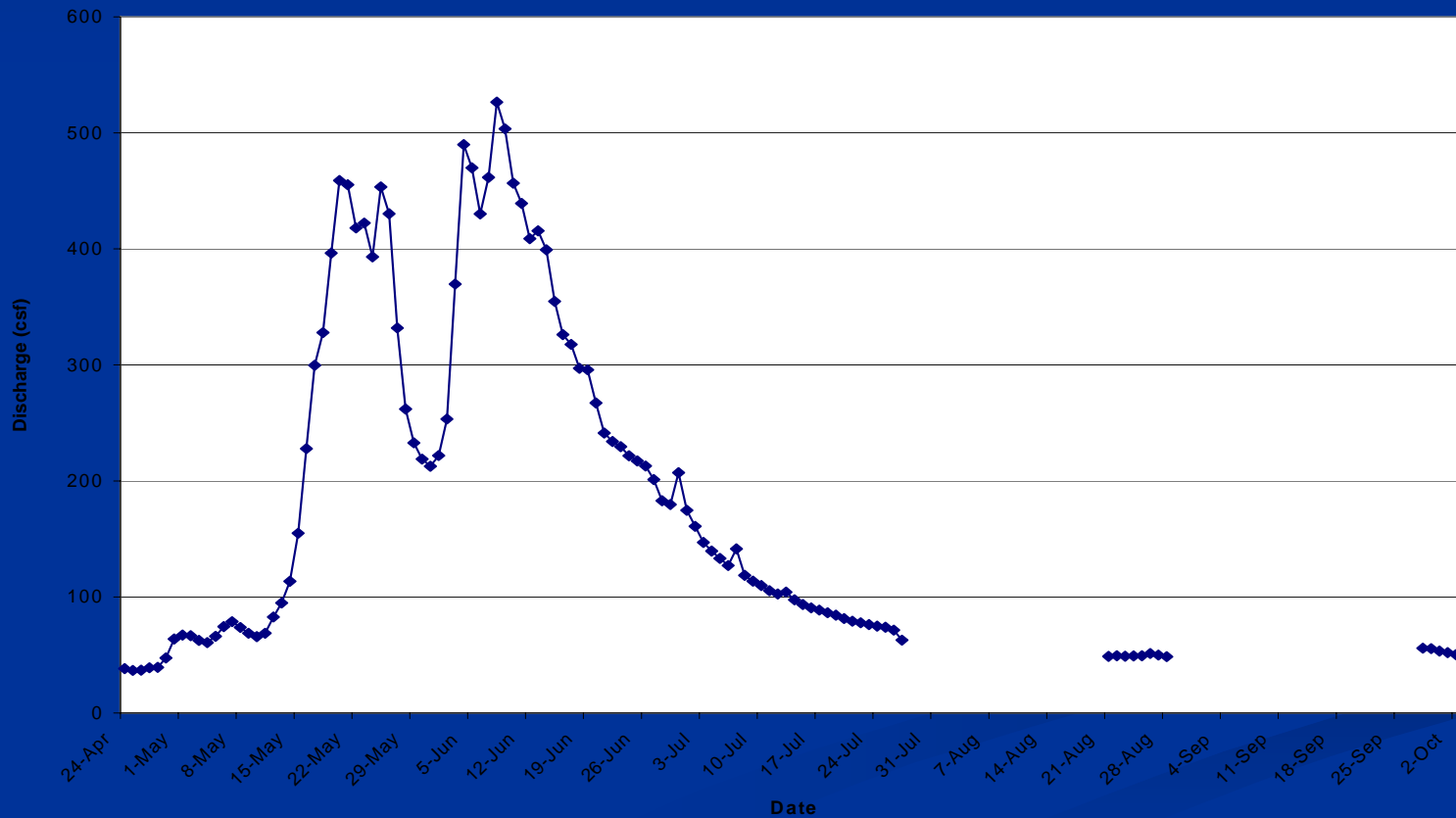
### ■ Results for South Fork





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

### ■ Results for North Fork





## Blue Water Task Force West Fork of Gallatin Aquarod Monitoring Project

- Why is this study important?
  - Appropriate alternative to installation of gaging station
  - Data from flow can be used for water use studies
  - Data from flow can be paired with data collected from other studies to calculate loads



Questions?

