

# AQUATIC ECOLOGY

## 2005-2007

IWG Meeting  
May 9-10  
Buffalo, Wyoming

# OBJECTIVES

- Assess condition of algal, invertebrate, and fish communities and habitat conditions
- Compare invertebrate and algal communities to historical data
- Publish results for use by agencies, industry, and public

# FUNDING AGENCIES

- BLM
- WDEQ
- USGS
- WGFD (in kind services)
- USEPA
- MDEQ
- MFWP

# OVERVIEW

- Sampling
  - Completed in 2005 and 2006
  - Planned for 2007
- Reports
  - Completed
  - In progress



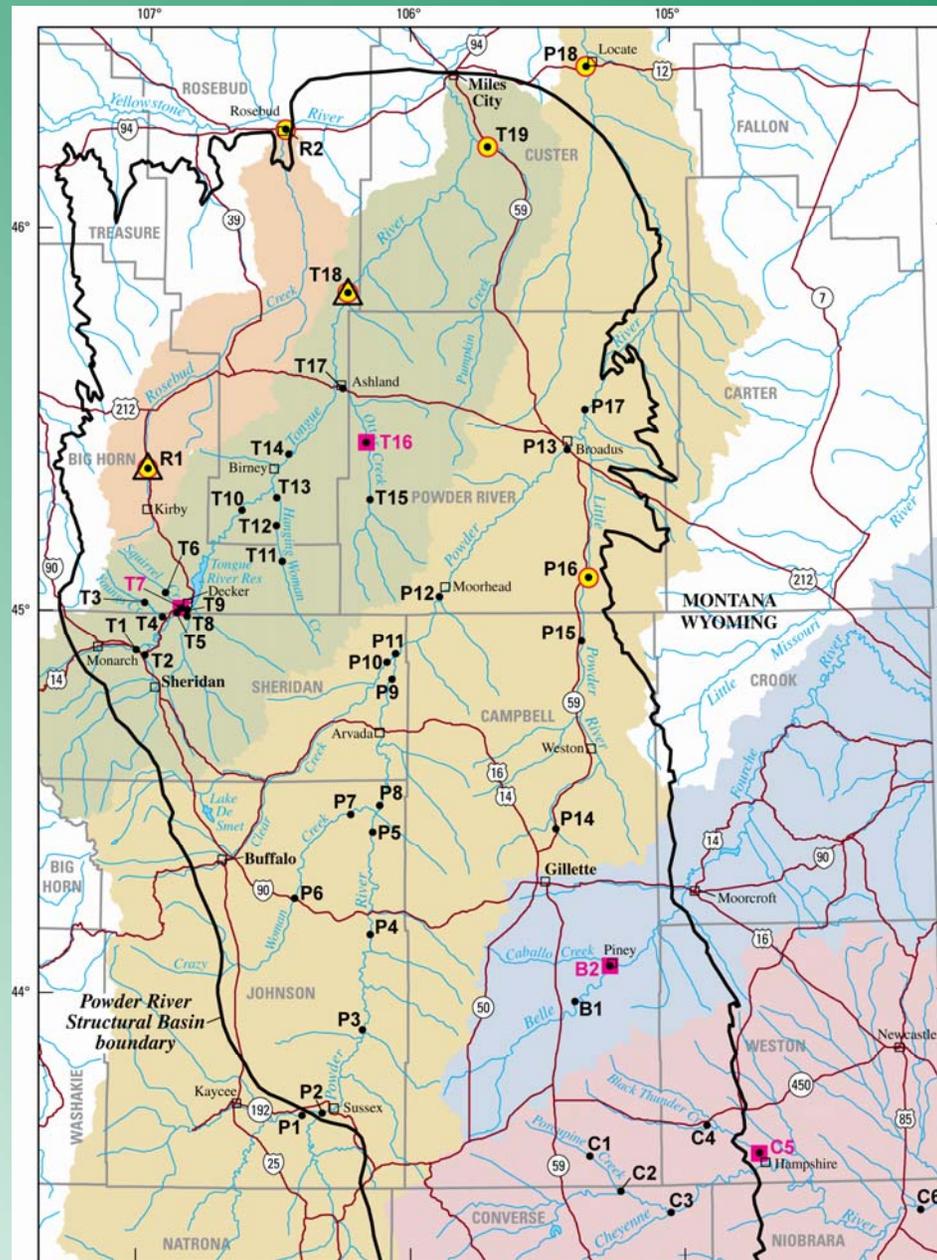
# FIELD SAMPLING

- Total of 47 sites
  - Selected from longer list prioritized by ATG
- Protocols
  - NAWQA
  - EMAP
  - WSA

# 2005 SAMPLING

- Fish communities
- Macroinvertebrates
- Algae (at Wyoming sites)
- Habitat
- Additional work on main-stem Powder R, in cooperation with WGFD
- Water quality
  - Major ions at non-network sites
  - Field parameters at all sites

# 2006 Sampling Invertebrates and Fish



- EXPLANATION**
- Dropped due to funding
  - Dry
  - ▲ Re-added

# 2006 Sampling

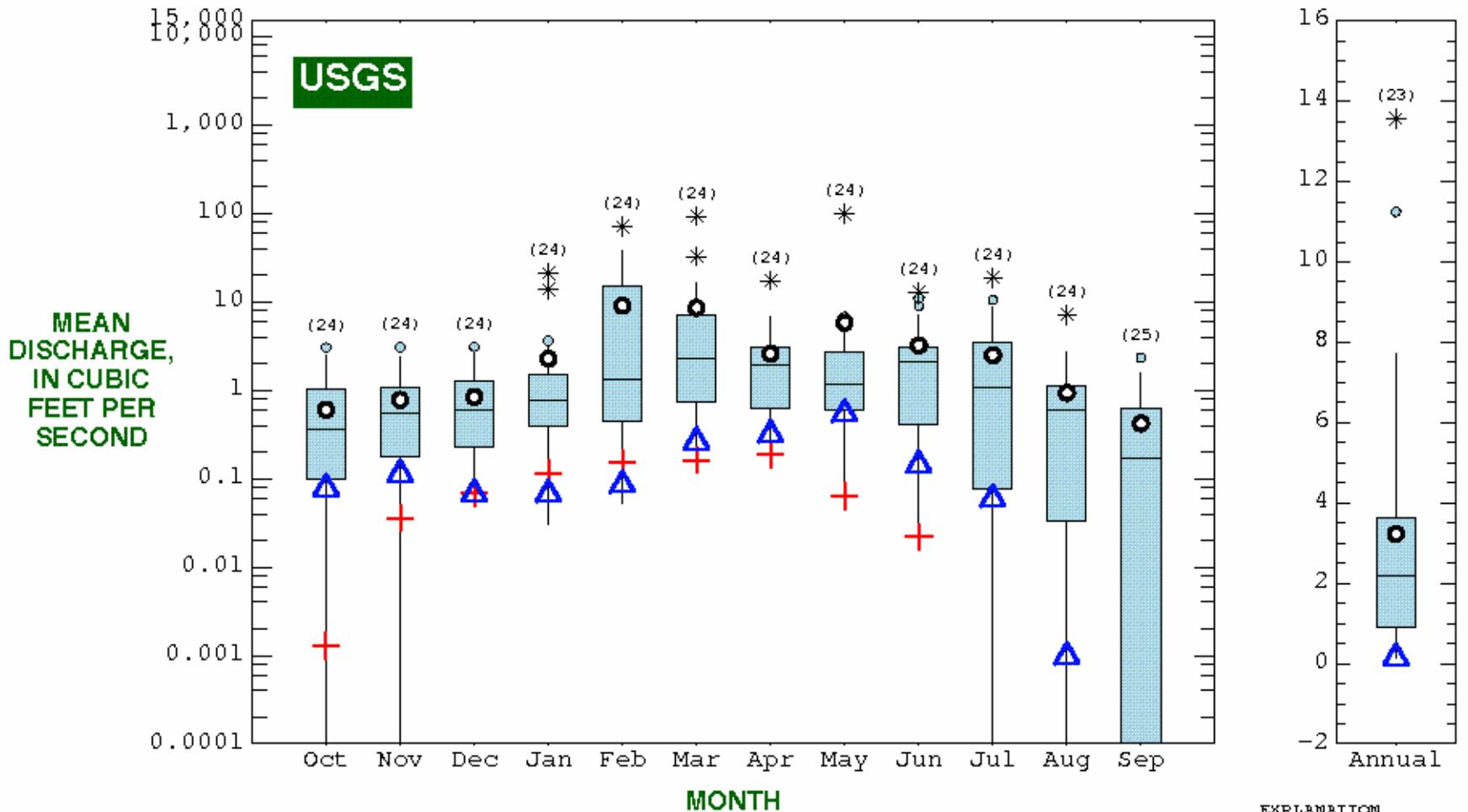
- Scope of sampling reduced due to budget limitations and dry sites
  - Fish community
  - Macroinvertebrates
  - Major ions at non-network sites

# Hanging Woman C Nr Birney

2005

2006





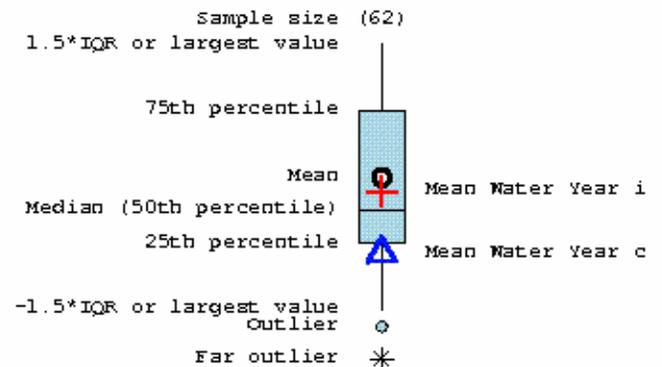
**06307600**

**Hanging Woman Creek near Birney MT**

Period of Record  
illustrated  
(complete WY's)

Rank (lowest = 1) of  
interest (i) and  
comparison (c) WY's

Begin	1974	WY <sub>i</sub> and rank	----	--
End	2005	WY <sub>c</sub> and rank	2005	1
Years	23	Lowest WY	2005	



# 2007 Sampling

- Scheduled
  - Macroinvertebrate samples at all sites
  - Major ions at non-network sites
- Assist with ground truthing or other work as needed

# Results 2005

- USGS website and NWIS database
  - Major ions
  - Field parameters
  - Chlorophyll and AFDM
- <http://wy.water.usgs.gov/projects/atg/index.htm>

# REPORTS

- Fact sheet
  - Describes 2005 sampling
  - Paper copies and online version (pdf)
- Interpretive report
  - Algae and habitat data analysis in progress
  - Macroinvertebrate and fish voucher data from 2006 not complete yet
  - Report planned for release in 2008

# QUESTIONS AND COMMENTS

