

GREATER YELLOWSTONE HYDROLOGIST TEAM

Introduction

The Greater Yellowstone Area (GYA) is the headwaters to several of America's most prominent rivers, including the Missouri, Yellowstone, Snake and Green. GYA headwaters are important to fish, wildlife and recreation, while downstream communities depend on these waters for domestic, agricultural and industrial use. Population increase, drought and climate change may all increase demand on a finite freshwater supply in the West.

Greater Yellowstone Hydrologists

The Greater Yellowstone Hydrologists (GYH) formed in 1990 as an ad hoc group of National Forest and National Park hydrologists. Montana BLM also participates. The GYH meets annually to:

- Coordinate stream channel monitoring techniques, riparian management, TMDLs (Total Maximum Daily Loads), Burned Area Emergency Response (BAER) projects and technical resources between GYA Forests and Parks.
- Coordinate and manage GYA watershed datasets, such as reference stream reach data.
- Coordinate Inland West Water Inventory (IWWI) assessment and Watershed Condition Reports for the GYA.
- Serve as peer group in review of monitoring, management activities, watershed problems, and rehabilitation proposals.

- Provide a forum for discussion of water activities and concerns.
- Serve as a technical advisory group to the Greater Yellowstone Coordinating Committee.

Committee Representation

- Beaverhead-Deerlodge NF
- Bridger-Teton NF
- Caribou-Targhee NF
- Custer NF
- Gallatin NF
- Shoshone NF
- Grand Teton National Park
- Yellowstone National Park
- Montana BLM

Past Accomplishments

1. Completed IWWI assessment.
2. Developed the *Watershed Management Strategy for the Greater Yellowstone Area (2002)*. This document describes a coordinated strategy for watershed management and restoration, and identifies GYA priority watershed work, including compliance with the Clean Water Act.
3. Updated the *Watershed Management Strategy for the Greater Yellowstone Area* in 2006.
4. Developed the GYA water database.
5. Developed reference stream reach profiles for major GYA stream

types. Includes site profiles, stream characterization and databases for use in stream restoration projects and evaluation of management activities.

6. Developed computer tools, inventory and monitoring procedures for watershed analysis.
7. Developed watershed cumulative effects methodology for consistent effects analysis in the GYA.
8. Created GYA fire suppression rehabilitation guidelines.

**Primary GYA Hydrology Issues:
Identified in the 2006 GYA Watershed
Management Strategy:**

1. Interagency cooperation at the watershed scale.
2. Watershed, riparian area and geomorphic integrity.
3. Water quality protection and enhancement.
4. Water supply and water rights.

2007 Accomplishments

The GYH met at Grand Teton NP in February 2007 on a variety of hydrology subjects with particular focus on GTNP.

The GYH held a field trip in October 2007 to review the New World mine reclamation project and in-stream flow issues on the Clarks Fork River.

Current Committee Focus

- Complete analysis of reference reach data for use in stream

restoration, determination of desired future conditions and for assessment of management activities.

- Coordinate BAER work and resources in the GYA.
- TMDLs protocol coordination between Forests
- Hold a technical hydrology conference, a "Headwaters Conference" in 2010
- Focus efforts on the four issues identified in the 2006 GYA *Watershed Management Strategy*:
- The winter 2008 meeting is scheduled for February 6, 7 in Bozeman.

For additional information contact

Mark Story, Forest Hydrologist
Gallatin NF, Bozeman, MT
406 -587-6735
mtstory@fs.fed.us

Greg Bevenger, Forest Hydrologist,
Shoshone NF, Cody, WY
(307) 578-5163
gbevenger@fs.fed.us