Each year the Montana Section, American Water Resources Association (Montana AWRA) holds their annual meeting to encourage water managers, academics, students and others to come together to share experiences, research and concerns. If you work in the field of water resource management, protection, or are simply interested in “all things water” in Montana, please join us.


Joe Meek, President

This year the Montana AWRA meeting is at the Holiday Inn Downtown in Missoula, October 7-9, 2015. Please note that we are partnering with the Montana Watershed Coordination Council (MWCC) to offer a special combined session on the morning of October 7 along with a special block of presentations on October 8 to explore more closely the links between water science and water resource management. Register for the conference at http://state.awra.org/montana/conference/. The draft agenda can be viewed by clicking here.

Pre-conference activities start mid-morning Wednesday (Oct 7th) with a panel of agency and science representatives and a panel of local watershed coordinators to talk about the benefits, successes and challenges of connecting science and management for restoration/conservation efforts. The cost for this session is included in your registration. Panelists will talk about their perspective and the audience will be asked to reflect, fill in the gaps and ask questions of panel members. This session is intended to bring us to the point where the “rubber meets the road” but from a variety of different views. One view might be that of a researcher who wonders if what they do as a researcher supports actual changes on the ground; another view could be from a land manager who wants the work he or she does to be supported by science.

On Wednesday afternoon we embark on the optional field trip to the Bitterroot Valley. We leave the Holiday Inn at 1:30 pm. After the field trip, runners and walkers gather at the hotel at 6 PM for the Annual Hydrophile 3-mile event. Registration for this free event is on our website! More details on the field trip and run are provided later in the newsletter.

The registration desk will be open Wednesday from 8:00 am until 7:00 pm for early arrivals and will re-open at 7:30 am Thursday morning. We will be providing pre-conference coffee Wednesday-Friday. The main conference itself will start at 8:00 am Thursday, with opening announcements by Montana AWRA officers, the Water Center, and Montana Watershed Coordination Council.

Two keynote speakers will open the conference. Dr. Eloise Kendy with the Nature Conservancy will take us on trip down the Colorado River to the sea on a pulse flow in 2014 that transitioned into a pulse of life for the river delta. She’ll describe the
complexity of the negotiations needed to make this happen and the interesting biological and social outcomes.

The second keynote speaker, Dr. Douglas Jackson-Smith, follows with a discussion of how understanding and utilizing the social sciences is necessary to successfully support water resource management, especially in the arid west.

Following the keynote speakers will be Tim Davis, the Water Resources Division Administrator for the Montana Department of Natural Resources and Conservation. Tim will discuss contemporary water-related issues in Montana. Jason Mohr will close out the plenary session with an update on water policy activities and legislation. Jason is a research analyst with Legislative Services.

We'll break for lunch which is provided as part of your registration fees. After lunch, two concurrent technical sessions will begin and run all afternoon. The poster session and social, including with local craft beers and snacks, will be from 5 pm to 7 pm.

The annual banquet (ticket purchase required for all banquet-goers) begins at 7 PM and features a presentation by Phil Farnes, SCS Hydrologist: *Reminiscing 60 years as a Snow Hydrologist - Then and Now*. Retiring from the SCS – (now the Natural Resources Conservation Service – NRCS) in 1990, Phil established two businesses that keep him very active and he is also an active 'legend' in the Montana AWRA chapter, having helped arrange the first state meeting in 1984. The photo contest will wrap up the evening.

Friday technical sessions start at 8:00 AM and run until noon. Then we will wrap up the conference with a brief closing plenary which will include the student presentation awards and the announcement of the incoming AWRA Treasurer.

**2015 Field Trip: Bitterroot River - Dynamic River Systems: Development, Restoration and Geomorphology**

The 2015 conference field trip will take place on October 7. The tour bus will load outside the Holiday Inn conference location, leaving at 1:30 pm and returning at 5:30 pm. A sack lunch and a drink are included with your field trip registration. The tour will look at issues of geomorphology, floodplain regulation, floodplain development, restoration, and groundwater/surface water interaction along the Bitterroot River. The tour will conclude with a stop at Lolo Creek where channel movement is an accepted component of living on a stream.

**2015 Photo Contest**
*Todd Myse, V.P.*

Once again, it is the time of year where we ask you for your latest and greatest water resources photos! We are looking for any and all photos related to Montana’s water resources and water resource professionals. These can be scenic photos, technical photos, recreational photos, or humorous and embarrassing photos! There will be prizes for the winners of each photo category. **Please send your latest and greatest water**
resources photos to Todd Myse at TMyse@mtech.edu, or call me at 496-4838. If possible, please submit photos by September 15th, although late entries may be accepted!

Revisiting the 2014 MT AWRA Conference
The 2014 Annual Meeting of the Montana Section of AWRA was held at the Hilton Garden in Kalispell October 9-10, 2014. Around 160 people registered for the conference. Forty one speakers and twenty three poster presenters highlighted current water research being conducted throughout Montana. The conference also had the usual good turnout of student presenters, representing the Salish and Kootenai College, University of Montana, Montana Tech and Montana State University. For the pre-conference field trip, Bureau of Mines and Geology hydrogeologists John Wheaton and James Rose showed us the complex geohydrology of the Flathead Valley and Peter McCarthy spoke about the 1964 floods. After the field trip, runners and walkers raced and strolled through historic Kalispell during the annual Hydrophile 3-mile event. Also, on the Wednesday morning before the conference, the Montana Natural Heritage Program offered a two-hour training: Montana Wetland and Riparian Maps: Where to Find Them and How to Use Them.

Thursday morning began with conference introductions followed by an update on the CKST Water Rights Settlement and on legislative issues by Jason Mohr. Then, the first of two keynote addresses was provided by C. Mark Dunning, President of National AWRA and senior planner and project manager for CDM Smith in Fairfax, VA. Mark spoke about National AWRA efforts to better connect with and serve state sections and members.

After the morning break, Lawrence E. Band presented the 2014 Birdsall-Dreiss Lecture; *Critical zone processes at the watershed scale: Hydroclimate and groundwater flowpath mediated evolution of forest canopy patterns*. He spoke about research linking surface/subsurface flowpath dynamics with ecosystem development in forested and urban sites. Then, Chuck Parrett and his son Aaron Parrett wrapped up the plenary session with a presentation on the 1964 floods in northwestern Montana. Chuck spoke about the technical challenges related to estimating frequencies of large floods, given the massive scale of the 1964 event. Aaron spoke about the floods’ devastating effects on the Blackfeet Reservation (documented in his Montana History article *Montana’s Worst Natural Disaster-the 1964 Flood on the Blackfeet Indian Reservation*).

During lunch, Antony Berthelote spoke about creating and developing the Salish Kootenai College Science Hydrology Program, which he directs. The SKC Science Hydrology Program helps students prepare for solving water resources and climate problems using both Western and Tribal scientific knowledge and values.

After the concurrent technical sessions, attendees enjoyed refreshments and excellent posters, to the lively music of Aaron and Nan Parrett. At the annual banquet we were treated to a presentation by Gina Loss, NOAA Hydrologist: *Voices on the Past - Weather Forecaster Recounts the Conditions Leading to and Impacts of the Montana Flood Of 1964*. Gina interviewed Warren Harding, retired U.S. Weather Bureau forecaster, who was on duty in Great Falls as the floods swept northwestern Montana. We listened to Warren’s moving recollections of the 1964 weather and river events,
along with many interesting observations contrasting weather forecasts then and now, while we viewed photos of the 1964 floods. The banquet ended after we viewed breathtaking images submitted by MT AWRA photographers for the annual photo contest; the lucky winner walked away with a stuffed mountain goat (polyester and cotton).

Student Awards - Oral Presentations

- First prize – Anna Bergstrom
- Second prize – Nate Looker
- Third prize – Loga Fixico

Poster Presentations - Bachelor’s level

- First prize – Bob West
- Second prize – Harvey Sansaver
- Third prize – Travis Beauvais

Poster Presentations - post graduate level

- First prize – April Sawyer
- Second prize – Zach Hoylman
- Third prize – Justin Martin

Thank you to all the attendees, presenters, field trip leaders, speakers, and sponsors who helped make the 2014 Montana Section American Water Resources Association conference a success!

**Montana AWRA 2014-2015 Treasurer Nominations**

Time for nominating our next treasurer! The elected treasurer serves for one year as Treasurer, one year as Vice President, and one year as President. Serving as a MT AWRA officer is a great way to get more involved in the community of water professionals in Montana and the U.S. Please note that self-nominations are encouraged; what a great way to give back to your community of professionals. Other benefits include membership in the National AWRA, and paid MT AWRA conference expenses. Nominations can be entered on the conference registration form or emailed to the Montana AWRA Executive Secretary Nancy Hystad at nancy.hystad@exchange.montana.edu.

**Montana AWRA membership**

Montana AWRA membership is included in conference registration. For those unable to attend the conference, membership dues are $15 for students and $35 for professionals. Membership dues support our Montana AWRA, student discounts and scholarships, and communication among water professionals.