UMOWA
Upper Missouri Watershed Alliance

FALL 2022

VOICE OF THE MISSOURI

Mission Statement

To understand, conserve, and enhance the unique ecological and recreational resources of the Upper Missouri River Watershed.

Board of Directors

UMOWA Updates

by Sherry Meador, UMOWA Board Chair

After a two year Covid hiatus, UMOWA held its annual Rendezvous this August at the new Craig Tap House. It was nice seeing so many folks join us, even in the heat, to celebrate our efforts on the Missouri River. Thank you to Montana Red's for the generous donation of delicious bar-b-que, and to the Tap House for its donation of beer sales. Local fly shops and businesses provided items for our auction. Thanks to Trxstle, Trout Montana, Cross Currents, Headhunters, Yeti and Orvis for their donations.

We announced the winner of the RO boat Raffle, Brad Williams, a long-time supporter. Thanks also to RO for their continued support of UMOWA. The boat raffle is a yearly highlight.

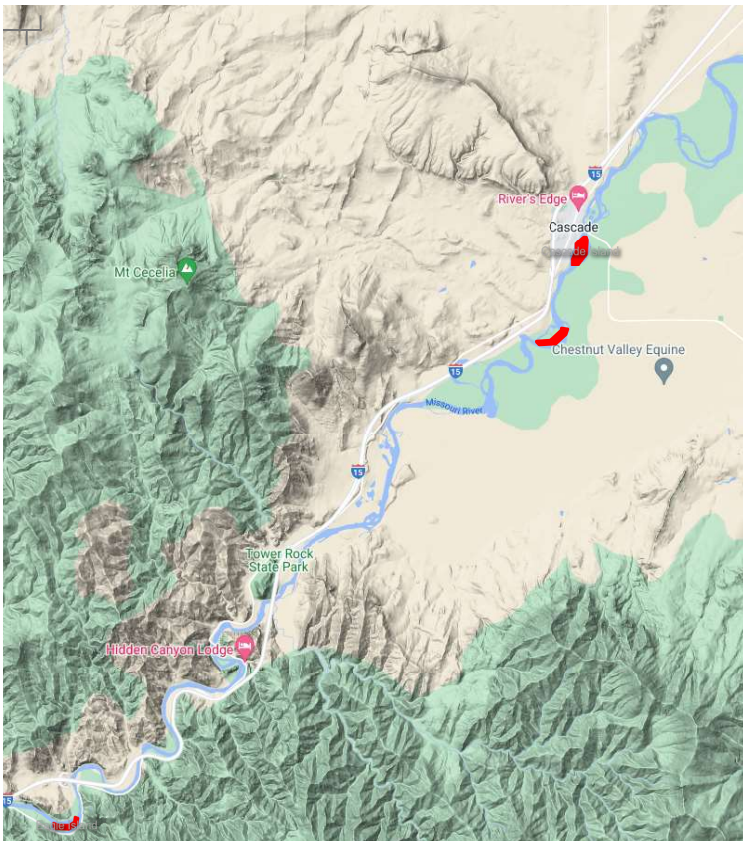
The Rendezvous followed the Bashin' Trash event where our group collected quite a few bags of trash by boat and by foot between Holter Dam and Craig. Thanks to all those who help to keep the river clean. The Bashin' Trash event was a collaboration with Sun River Watershed Group and Pat Barnes TU. We appreciate their hard work in making the yearly event a success.

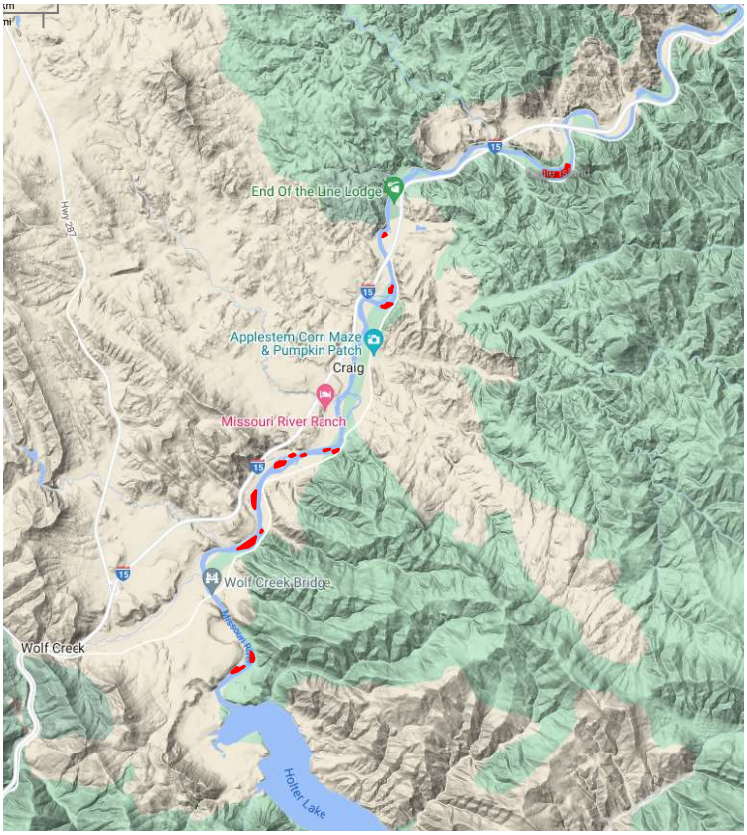
We expanded our Weed Project this year to river islands and additional landowners down river. The control of noxious weeds is a long-term project to improve wildlife habitat and rangeland. We welcome the addition of new participants and the continuing education and support from our partners.

We're continuing to develop the River Health Summary Report on-line dashboard to collect and analyze data within the watershed to establish a baseline and identify trends over time. We look forward to posting this information early next year. With the dashboard, we can easily share the data we've collected, and develop and prioritize projects that mitigate negative impacts to river health. Thank you to Dave Stagliano and Ecos Consulting for your help with this project.

Missouri River Island Weed Project

The islands on the Missouri River between Holter Dam and Cascade have provided fertile ground for noxious weeds in this corridor. With a generous donation from the E.L. Wiegand Foundation, matching funds from FWP, and a grant from the Noxious Weed Trust Fund, UMOWA contracted with West River Land Management (WRLM) to begin treatment of weeds on these islands. This year, WRLM spent 7 days surveying weed populations and treating weeds using a jet boat and 300 feet of hose to spray state-approved herbicides labeled for use up to water's edge. The hose allowed the applicators to pick through the willows to treat a variety of noxious weeds.

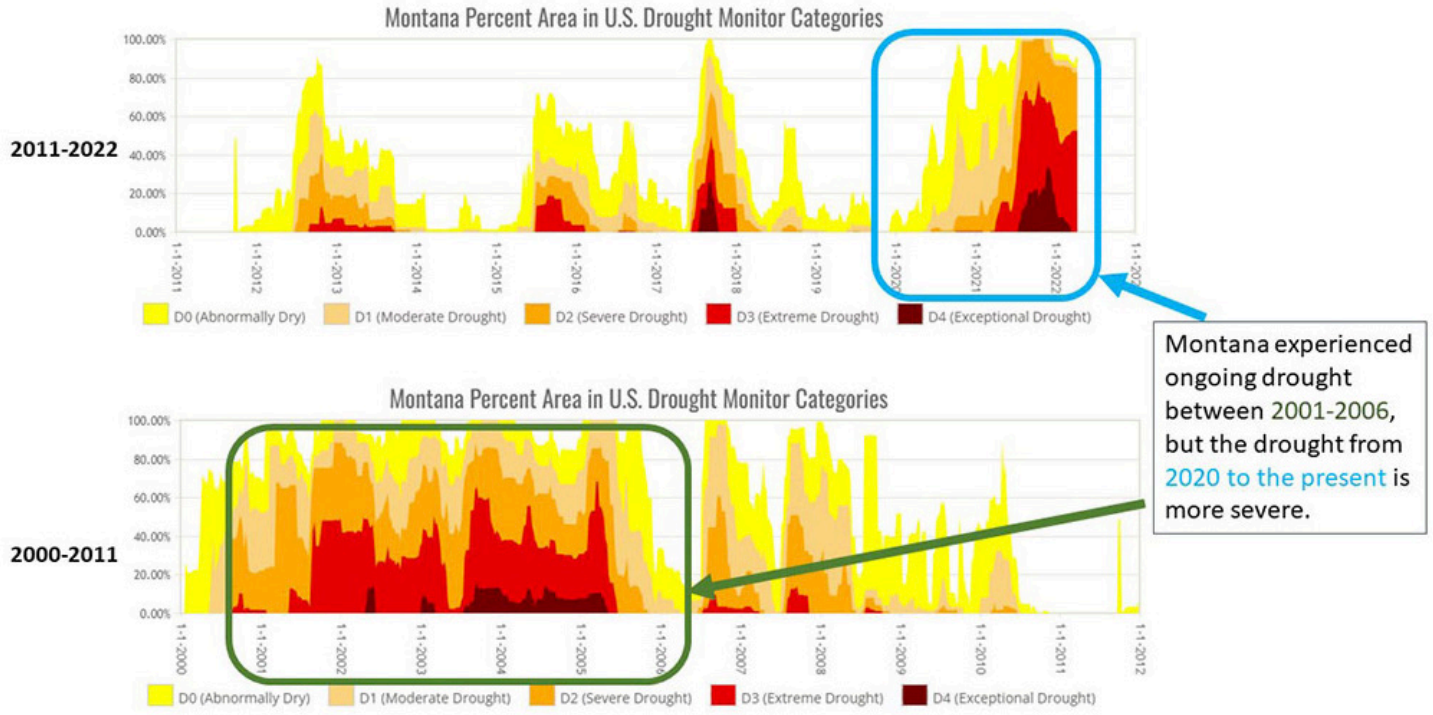




The islands were populated with Spotted Knapweed, Houndstounge, Leafy Spurge, Canada Thistle, White Top, and Toad Flax. With the low water, the boat was able to get around most of the islands although some areas were too shallow to access. UMOWA seeks to follow up in 2023 with additional weed treatments and the introduction of biocontrol agents in island centers.

If you'd like to help with this project, please donate through UMOWA.org, and feel free to contact us for additional information. ■

Drought in Montana and Risk Assessments



Though a familiar term, drought can be a confusing concept because it is often defined by on-the-ground impacts such as reduced streamflow or agricultural crop losses. The broad range of drought impacts across water uses and geographies makes it difficult to pinpoint when a drought begins and ends.

To help with drought classification and monitoring, scientists have defined several types of droughts. Meteorological drought is a result of below normal precipitation for an extended time – ranging from a season to several years. This impacts groundwater and streamflow. Hydrological drought is a lack of water in the hydraulic system due to precipitation shortfalls. Often, hydrological drought and its impacts lag meteorological drought by months or even years. Terrestrial drought results in soil water deficits. This can be exacerbated by high air temperature, low humidity, and wind.

While drought is a natural and recurring feature of Montana's semiarid climate, according to the Montana Climate Assessment, future droughts in Montana are likely to be more frequent and intense due to warming air temperatures and decreasing snowpack.

To understand how drought conditions are evolving, the Montana Climate Office is leading the development of a cooperative statewide soil moisture and meteorological information system (Mesonet). It is designed to support decision-making in agriculture, range and forest watershed contents. The Mesonet stations measure temperature, relative humidity, wind speed and direction, incoming solar radiation as well as rain, snow, and soil moisture measurements. This data will be used, not just to study drought, but to make flood predictions and monitor fire conditions.

When this project is complete it will be one of densest meteorological networks in the world. With this data, it's becoming much easier to characterize these conditions and also have lead time so that policy makers and water resource managers are not just responding to what has happened but getting insight as to how conditions are going to develop as the year progresses.

Check out the Mesonet Data Dashboard at https://mesonet.climate.umt.edu/dash/.

Information provided from the Montana Climate Office, MT DNRC, Drought.gov, and the Montana Climate Assessment. ■

Upper Missouri Watershed Alliance

PO Box 377
Helena, MT 59624

www.umowa.org

<Smart Addressee>
<Address Line 1>
<Address Line 2>
<City>, <State>, <Postal Code>

Enjoying the Birds of Upper Missouri River: Spring 2022

by Joe Kerkvliet, UMOWA Board Member

Last April, UMOWA volunteers spent four days on the Missouri banks near Craig. We drilled holes to groundwater and inserted thumb-sized willow stems, leaving 3-4 inches exposed. With luck, the branches will sprout roots and leaves and grow to stabilize and cool the riverbank, and improve habitat for trout, bugs, and birds.

Each morning, we heard the rattling calls of sandhill cranes flying to their prairie nesting sites. All day, we enjoyed the symphony of the river birds: seagulls, pelicans, geese, and trumpeter swans going about their complicated lives, feeding, conversing, and mating. Each day we saw only two swans, making up-and-down circuits on the river-right channel. We first thought the swans were nesting but trumpeters mostly nest in ponds and lakes and the greyish bird on the left is less than one year old and will not mate for another 3-4 years.

Most years, I see trumpeters on the Missouri. One winter, I was awed as three trumpeters flew by at eye-level as I hiked 300 feet above the river near Dearborn. Their LOUD calls and seven foot wing spans identity unmistakable.

These sightings are good news. Common before Europeans arrived, tens of thousands were killed to supply feathers to early 1900's fashion markets. By 1930 a few dozen swans survived in the U.S, mostly in Southwestern Montana. Red Rocks National Wildlife Refuge was established in 1935 to protect trumpeters. Today, about 600 swans live in Montana, Idaho, and Wyoming.

Trumpeters weigh 20 to 40 pounds and eat mostly aquatic plants. They nest on beaver dams and muskrat dens. Males are called cobs, females pens, and the young-of-the-year cygnets. Their scientific name, Cygnus buccinator, means swan with a trumpet in Latin. While you enjoy the Upper Missouri, keep your eye out for trumpeters and listen for their baritone call. ■