

5th Annual Greater Yellowstone Agricultural Forum

(Three Forks) On February 6, approximately, 75 attendees participated in the Montana Land Reliance's *5th annual Greater Yellowstone Agricultural Forum* in Three Forks at the Lewis and Clark Sportsman conference room.

Kathryn Kelly of the Greater Yellowstone's Montana Land Reliance welcomed attendees and shared information on Montana conservation easements. Kelly noted that Montana's future is tied to the land and to the people who live on and manage it. Kelly recapped today's forum's educational offering of information on cloud seeding, drought and water management, along with topics of how agricultural producers can better navigate their lands and operations in both drier and warmer weather.

Speakers at the four-hour forum included Montana State University Professor Bruce Maxwell, co-director of the Montana Institute on Ecosystems [Agriculture Management Decisions Under Increasing Uncertainty], Jim Hagenbarth, rancher from Dillon [Weather Modification including Cloud Seeding, practices in Idaho and Montana], and Krista Lee Evans [Water Policy Update].

Montana State University Professor Bruce Maxwell provided a management overview of how agriculture producers must work smarter during these times of uncertainty. With drought and water fluctuations, it is critical that land owners conserve water. Maxwell highlighted the <https://climate.umt.edu/mtdrought/default.php> as a great informational resource for Montana's agriculture producers.

Professor Maxwell said, "Crop producers can do more to be more resilient! A half dozen recommendations he addressed included:

- Increase certainty with contracts (USDA Farm bill programs) to grow crops,
- Manage for sudden cost of drought with earlier Spring and Fall plantings,
- Realize that irrigation cannot continue to be expanded,
- Plant multi-species cover crops that provide livestock finishing forage
- Minimize nitrogen fertilizer use, weed and pest control using precision agriculture and
- Use decision aids that optimize field specific inputs based on monitoring data and in-field experiments."

Jim Hagenbarth, Beaverhead County land owner and rancher, presented on weather modification that helps society maintain our precious water resources. He noted that the best way we preserve our two sources of waters is through our water shields (ground water aquifers and our soils) and clouds. Hagenbarth advocated for healthy range lands to ensure that perennial grasses and forbs are abundant on our plains and watershed management for locals and collective watershed basins to meet healthy eco-systems. Hagenbarth devoted a majority of his presentation on the importance of cloud seeding to enhance snow pack. In the State of Idaho, the Idaho power companies have spent in excess of \$3 million in cloud seeding; 2018's investment was three-fold and additional waters have helped municipalities, ag production and

consumers with drinking and recreational resources. The Idaho Legislature has contributed funding to the cloud seeding effort. There is a growing movement to get Montana to further participate in funding cloud seeding; at present time there has not been successful legislation advanced even with a growing broad-based support among Montana agricultural organizations. To learn more about cloud seeding, log on to North American Weather Modification Council's website at <http://www.weathermodification.rorg> and <http://www.nawmc.org>.

Krista Lee Evans, executive director of Montana Agricultural Business Association, and Blake Creek Project Management, Inc., discussed water rights that are critical to agricultural production. Krista provided an update on the 2017 Montana Legislature and a dozen water bills discussed during the legislative session. HB 286 and HB 110. HB 286 covered the updating of Abstracts. The legislation further defined the state's procedure and provides ownership in private - state lands. HB 110 provides a means for land owners to protect rights by clarifying the opportunity to file a claim for any exempt in-stream stock or domestic rights that were put to use prior to 1973, and that have not been claimed in the adjudication process.

Krista said, "My advice is that if your property has any in-stream livestock water rights (meaning where stock drink directly from the source with no diversion), or domestic water rights (such as a home or stock well) that were put to use prior to 1973, and have not been claimed in the adjudication process, then you should seriously consider submitting a claim under the current process."

For more information on Montana water law, adjudication and/or water use applications, contact Montana DNRC at <http://wrqs.dnrc.mt.gov/default.aspx>.

Montana Land reliance envisions a future with enduring landscapes that keep Montana's agricultural lands and communities healthy and flourishing over the generations. For more information on the Montana Land Reliance and the 6th Annual Greater Yellowstone Agricultural Forum (2021 Forum), contact Kathryn at kathryn@mtlandreliance.org and / or (406) 579-5481.