

# WEATHER POLICY INTERIM COMMITTEE

## HJ 40 WEATHER MODIFICATION

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As a presenter at your September meeting in Dillon I am excited that the Legislature through WPIC is considering legislation that would accommodate weather modification as a tool used to enhance weather events for the benefit of the state's water resource and its users.

Since the mid 1990's this technology has been studied, refined and used successfully in 10 states and Canada to augment winter and summer precipitation and suppress hail events. Laws enacted by the Legislature governing the licensing and permitting of atmospheric weather modification activities are found in **Title 85, chapter 3, parts 1-4 Montana Code Annotated (MCA)**. Administrative Rules adopted by DNRC for implementing the weather modification statutes found in Title 85, chapter 3 are under **Title 36, chapter 20, subchapters 1-4 Administrative rules of Montana (ARM)**. The original licensing regulations began in 1967 to ensure weather modification activities were performed by qualified, competent individuals or organizations. Due to concerns of Eastern Montanans' regarding North Dakota's cloud seeding, significant changes in process and regulations were made in 1993 that were so onerous that weather modification in the state was not practical. Attempts to change this situation have all failed.

This has limited the use of weather modification in the state to the point that nobody is familiar or even interested in using the science and technology that has developed over the last 30 years. The downside is that Montana's laws and regulations need to change and funding sources be developed to accommodate this valuable tool. The upside is the science has been refined through millions of dollars of research, monitoring, and implementation that Montana entities can use in developing weather modification practices. It only makes sense to change our laws and regulations to accommodate this proven technology. Hopefully this study committee will be enlightened so as to support reasonable legislation making this tool available to interested entities in site specific areas of the state that would benefit.

The initial legislation passed in 1967 provides a good starting point to move forward in providing a framework and guidance for responsible and productive use of weather modification technology in Montana. Using the knowledge, experiences, research, and monitoring of past, present and future weather modification projects in surrounding states will simplify our task. Several issues need to be addressed in future legislation and rules to facilitate well managed projects. It should be required that a Weather Modification Association Certified Operator be involved in the operation of cloud seeding programs. Only proven and accepted methods should be allowed requiring new technologies to be adequately tested before acceptance. With the multitude of work done in the last 30 years requiring an EIS is overkill and a simple EA or similar document should be adequate. Simplification of the state permitting process is needed. Entities that choose to use weather modification will incur direct expenses while providing benefits to all water users and the state, consequently permitting process

should not be used to generate funds through administrative fees and such. It is prudent to provide public notification of weather modification projects, but important to have state licensing and regulations to prevail over local interference from individuals or activist opposed to any activity. Cloud seeding can be used to influence weather activity (snow, rain, hail) throughout the year so it should not be limited to specific time periods. Project specific sensitivity guidelines need to be developed limiting liability and damage from too much precipitation. State regulations should be broad enough to allow collaborative projects with other states or Canada to facilitate the use of cloud seeding or hail abatement that is beneficial across jurisdictional lines. For example, it may be necessary to cloud seed from the Idaho side of the Centennial Mountains to increase snow pack on the Montana side to augment precipitation at the head of the Missouri River Basin. Permitted water users in Montana that are properly licensed could compensate an established cloud seeding entity in Idaho to use their weather monitoring stations and equipment to identify and seed clouds that would increase snowpack in Montana. With scientifically trained meteorologists using accepted methods and guidelines, the levels of risk have decreased making insurance requirements more reasonable from a regulation viewpoint. Other issues may need to be addressed as current laws and regulations are changed so entities in Montana can utilize weather modification as the positive tool it is in site specific applications.

I have provided additional information to the Committee that will help you understand the issue. A couple articles cover the technology, its benefits, and the use of silver iodide in the atmosphere. I have provided some information on other state programs and statutes along with a legal analysis on the subject as it relates to the seven Colorado River Basin States. As a resident of Montana, a water user, and a landowner in Idaho that has personally witnessed the undeniable benefits of cloud seeding, I ask the committee to seriously consider supporting reasonable weather modification legislation.