MINUTES

SENATE AGRICULTURAL AFFAIRS COMMITTEE

DATE:	Tuesday, February 25, 2025
TIME:	8:00 A.M.
PLACE:	Room WW53
MEMBERS PRESENT:	Chairman Nichols, Vice Chairman Zito, Senators Lakey, Lent, VanOrden, Blaylock, Kohl, Semmelroth, and Taylor
ABSENT/ EXCUSED:	None
NOTE:	The sign-in sheet, testimonies and other related materials will be retained with the minutes in the committee's office until the end of the session and will then be located on file with the minutes in the Legislative Services Library.
CONVENED:	**Chairman Nichols** called the meeting of the Senate Agricultural Affairs Committee (Committee) to order at 8:00 a.m.
MINUTES APPROVAL:	**Senator Blaylock** moved to approve the Minutes of February 4, 2025. **Senator Kohl** seconded the motion. The motion carried by **voice vote**.
S 1053	**FENCES - Amends existing law to provide for landowner responsibility for erecting and maintaining fences adjoining federal lands. Senator Harris** explained this legislation was essentially an addition to a current Idaho State statute. This legislation clarified that private landowners were responsible for building and maintaining fences that bordered federal land when the private landowners wanted to prevent livestock from entering their land from federal land. **Senator Harris** stated there had been confusion over this issue, so this legislation aimed to create clarification.
DISCUSSION:	**Vice Chair Zito** asked what happened if she hypothetically bordered the Bureau of Land Management (BLM) and her cattle wandered onto BLM land which didn't have a fence. **Senator Harris** stated that would be considered trespassing on federal property and the fence was the landowner's responsibility to keep. **Senator Blaylock** asked if this was already under law. **Senator Harris** confirmed her statement and stated as Idaho's population grew, there had been confusion in regards to this topic. **Senator Blaylock** asked if the term lawful fence was defined. **Senator Harris** explained the term was stipulated in Idaho State Code, Title 35. **Senator Blaylock** asked if there could still be personal agreements made between the federal government and a private landowner regarding fences. **Senator Harris** stated the federal government was not entitled to make any agreements, but they could still make personal agreements if they so choose. **Senator Lakey** asked if this legislation was essentially case law that was put into code. **Senator Harris** said yes and no, yes in the fact that courts had ruled based on statute. **Chairman Nichols** asked why there was still confusion in regards to this law and asked if it was due to out of state people moving into Idaho. **Senator Harris** agreed that with the growth in Idaho's population, this issue was becoming more prevalent. He stated Idaho had always been a fenced out state and people either didn't know that or hadn't learned about it. He added this bill had gotten confused with open range, which was in Title 25.

TESTIMONY: **Mr. Russ Hendricks,** represented the Idaho Farm Bureau Federation, stated his support for **S 1053.** He explained this bill would hopefully clear confusion and prevent unnecessary court cases regarding this manner in the future.

Mr. Patxi Larrocea-Phillips, represented the Idaho Cattle Association, supported the bill. He explained that usually cattle were coming off of public into private land, so this legislation set expectations to avoid tensions between landowners. He added this would create some certainty and understanding out on the landscape.

MOTION: **Senator Lent** motioned to send **S 1053** to the floor with a **do pass** recommendation. **Senator Lakey** seconded the motion. The motion carried by **voice vote.**

PRESENTATION: **Idaho Power Presentation. Kresta Davis,** Water Resources Senior Manager, Idaho Power, introduced herself and thanked the Committee for the opportunity to present. Their service area covered south eastern and southern Idaho all the way into eastern Oregon, serving over 650,000 customers (Attachment 1). They had four natural gas facilities and two jointly owned coal facilities, one of which would be converted to natural gas. Idaho Power operated a diesel facility in the Salmon River area. Their hydroelectric facilities were primarily located along the Snake River Basin. **Ms. Davis** stated their primary energy sources included hydroelectricity at 40%, natural gas at about 20%, as well as coal, market purchases, wind, solar, and geothermal. **Ms. Davis** stated the national hydroelectric usage was around 6%, so Idaho was unique in their use of hydroelectricity.

Ms. Davis explained the environment naturally had super cooled liquid water (SLW) during the winter and that SLW would adhere to dust particles in the atmosphere. Silver Iodide that was released into the atmosphere created additional ice nuclei, which allowed for the formation of ice and exited in the form of snow. Idaho specifically utilized cloud seeding for snowpack enhancement, but other types of cloud seeding could be used for fog suppression, hail suppression, and rainfall enhancement. **Ms. Davis** described the benefits of cloud seeding, including an increased water supply, increased recreational opportunities, improved water quality, an aid to aquifer management, and as a reliable water resource.

Ms. Davis explained that cloud seeding was first considered in Idaho in 1993 by a shareholder. After 1993, Idaho Power operated several pilot programs throughout the next ten years. Their first operational program was established in 2003 in the Payette River Basin. In 2008, Idaho Power began to collaborate with High Country Resource Conservation and Development (HC RC&D) and Eastern Idaho counties to enhance their program. In 2015, they expanded into the Big Wood River Basin and the Payette Basin. The Water Resource Board and local water users began to contribute to the program in 2015. In 2016, the Idaho Water Resource Board began to fund annual program operations and maintenance. In 2024, Idaho Power expanded by adding liquid propane generators in the Payette Basin. The Cloud Seeding Program currently had three aircraft, and sixty-three remote ground generators that stretched from Western Wyoming to the Payette Basin. **Ms. Davis** stated they collaborated with the State and local water users in strategic, technical, and financial related topics.

Ms. Davis explained the average annual natural flow benefits were broken down by basin. The Cloud Seeding Program provided additional water supply of approximately 240,000 acre-feet in the Boise Basin, over 100,000 acre-feet in the Wood River Basin, nearly 200,000 acre-feet in the Payette Basin, and over 600,000 acre-feet in the Upper Snake Basin (Attachment 1). These numbers

equated to about $4 per acre foot, which was a significantly low cost investment compared to the rate of basin rental water. The benefits of cloud seeding were calculated using a target control method, comparing snow accumulation in seeded areas to non-seeded areas and attributing any divergence to the effects of cloud seeding.

Ms. Davis addressed some concerns regarding cloud seeding. The first concern was the possibility that cloud seeding reduced downrange water supplies, referred to as downwind/down-range effects. Research instead showed neutral or positive effects, in the form of precipitation, from a well-run program. One study concluded positive benefits up to 200 kilometers down range of the target area in central and southern Utah (Attachment 1). **Ms. Davis** described cloud seeding enhanced natural precipitation by increasing a winter storm's efficiency by 15%, which resulted in 0.9% of total atmospheric moisture being converted into precipitation. This left ample water in the atmosphere to prevent downrange depletion. **Ms. Davis** covered the environmental concerns associated with cloud seeding. She stated over 20 different sources concluded there were no harmful environmental or health effects from cloud seeding, including the use of silver iodide. These sources came from federal, state, and private agencies (Attachment 1).

To prevent flood risks, **Ms. Davis** stated Idaho Power applied strict suspension criteria, developed with state and federal agencies, to halt operations if snowpack accumulation or reservoir levels exceeded set thresholds. **Ms. Davis** concluded as Idaho's energy demand grew, Idaho Power continued to support cloud seeding as a cost-effective method to enhance hydropower reliability and affordability.

DISCUSSION: **Senator Taylor** referred to the 2024 expansion when Idaho Power had installed liquid propane generators and wanted clarification if the liquid propane expelled the liquid iodide and if the propane was also going into the atmosphere. **Ms. Davis** said the propane was used for cooling rather than adding to or augmenting particles in nature. **Senator Taylor** asked what the propane was cooling. **Ms. Davis** stated the propane cooled the air itself.

Chairman Nichols asked how many other states had a snowpack enhancement cloud seeding program. **Ms. Davis** said she knew Wyoming, Utah, and North Dakota partook in cloud seeding programs. **Chairman Nichols** asked how they estimated a baseline precipitation rate so they knew how much they were benefitting from the program. **Ms. Davis** explained they looked at trends prior to and following cloud seeding within a targeted area, and identified and attributed the divergence in accumulation to cloud seeding. **Chairman Nichols** asked how often they conducted an analysis to estimate the additional precipitation received from the program. **Ms. Davis** said these analyses were annual. **Chairman Nichols** asked what the application process was in regards to drones. **Ms. Davis** didn't have information to share.

Senator Lakey asked how long cloud seeding had been around for in general. **Ms. Davis** stated cloud seeding began around the 1950s. **Senator Lakey** asked if silver iodide was the typical method for cloud seeding programs. **Ms. Davis** confirmed his statement. **Senator Lakey** asked why they used silver iodide. **Ms. Davis** explained silver iodide had a hexagonal shape that provided a large surface area for supercooled liquid water to adhere to, making it highly effective for cloud seeding. Once formed, the silver iodide compound would not break apart in nature, remaining inert and unable to be absorbed by living organisms, which contributed to environmental safety. **Senator Lakey** asked if they had seen a measurable increase of silver iodide in the environment due to this program. **Ms. Davis** stated the amount of silver iodide was such a small amount used over a large area that it wasn't detectable when comparing levels in the background.

Senator Lakey asked if the cloud seeding applications were visible after they were applied. **Ms. Davis** stated there were no visible effects from cloud seeding. **Senator Lakey** asked what rental water was. **Ms. Davis** explained that a rental pool program allowed storage water holders to either rent out their stored water or use it for personal use.

Senator Blaylock asked for clarification on concerns about the new cloud seeding method with generators, particularly regarding claims they created aluminum, which may then be released into the atmosphere. **Ms. Davis** stated there had been water samples that were concerning, but the elements detected in these samples were not used in cloud seeding. She said Idaho Power was not using aluminum in their cloud seeding operations.

Senator Kohl asked if there were other weather modification programs occurring in Idaho. **Ms. Davis** stated the HC RC&D had a program in eastern Idaho.

ADJOURNED: There being no further business at this time, **Chairman Nichols** adjourned the meeting at 8:45 a.m.

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Senator Nichols
Chair

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Rachel Verrette
Secretary