#### Objections to the Final Medicine Bow Landscape Vegetation Analysis Project, May 11, 2019

Comments to the Draft LaVA EIS were dated August 17, 2018

Thank you for considering these objections to the Final LaVA.

Duane Keown, Professor Emeritus, Science Education, University of Wyoming



The following objections progress through the LaVA FEIS that went to the public April 19, 2019 and they correspond to the August 17, 2018 LaVA DEIS Comments sent by Duane Keown to the Laramie office of the Medicine Bow National Forest

# Page 22 of the FEIS, Issue 5 – The scope and scale of the project is too large. Page 3 and 10 of Duane Keown Comments

The second most common comment submitted by the public regarding the LaVA Draft EIS was that the Treatment Area was too large. It is also an objection of this author. Who is to keep score of the treatment of the 360,000 acre area? The example below illustrates the recent non-observance of the Public Agreements by the Forest Service. Engelmann Spruce were to be left in accordance with the FS Decision Notice "Forest-wide Hazardous Tree Removal and Fuels Reduction Project", dated August 2008. Under Adjustments to the Proposed Action -Modifications are based on collaborative discussions between interested parties and the Forest Service during the 30-day objection period for the EA. They include: Hazardous Tree Definition A The following tree specific criteria will be used to determine hazardous trees along roads and trails: Dead trees of any species, with the exception of Engelmann spruce, Sound, dead Engelmann spruce will be retained as wildlife trees.



The felled Engelmann Spruce above were live and uninfected in the summer of 2017. They grew above the Lodgepole Pine zone on Highway 130. This caused the author to visit the District Ranger, Frank Romero. The FS broke the 2008 FS/public agreement. I told Frank Romero that the felled spruce were 150 feet from the road. That was 50 feet beyond the clearing right of way. I told him I worked for the Forest Service and I was trained to detect Engelmann spruce beetle (*Dendroconous engelmanni*) in that species. The next day Frank Romero with a forester checked out my report and then he told me by email I was right and the clearing of Highway 130 had gone awry. He then sent me the LaVA Scoping Plan. The NEPA Scoping meeting was in three days and we had not heard of it. For the public of Albany County it was essentially unannounced. We (my wife and I) attended and fewer than fifteen were present. LaVA is the largest operation ever planned for the Medicine Bow. There are 36,000 people in Albany County and with one newspaper, it did not announce the meeting. Frank Romero and Melissa Martin who is the coordinator of LaVA were aware of this prior to the Scoping Meeting.



And here we go again, a summer later (2018), on Highway 130, a year after the District ranger acknowledged the hazardous clearing had gone out of bounds. It was the last year of the 2008 Hazard Tree Elimination Decision, 2018. The spruce and fir had all been alive. This is a pile of Engelmann Spruce and Alpine Fir (mainly branches) prepared to burn. It contains no pine The pile was near Silver Lake. The largest spruce and alpine fir were hauled to the mill. All were above the pine zone. This example is given to illustrate the lack of public trust that the Forest Service may have in observing the stated bounds of the LaVA project.

#### To continue, observation of the Treatment Opportunity Area bounds by the Forest Service.

On page 2 of the LaVA FEIS, Chapter 1, under "Synopsis of the Modified Proposed Action, we read that the Treatment Opportunity Area is 360, 000 acres (refer to Duane Keown DEIS Comments, page 3). To manage such a huge project the Medicine Bow National Forest has the forest divided into 14 Accountability Units. Following is new FEIS information added to the August 20, 2018 DEIS. In the FEIS we learn that in each unit is a category of forest titled "Forest products, forest and rangeland resiliency." This category is open to the "Full Suite" of treatment tools, which includes mechanical elements such as roads, logging trucks, bulldozers, etc. Using figures provided by the Forest Service, the total acreage in the 14 units is 992,888 acres and 409,888 acres (41% of total area) are eligible for "Full Suite" treatment. Which is it? 360,000 total Treatment Opportunity Area acres or 409,888 for "Full Suite" of tools?

As pointed out in Duane Keown DEIS Comments, the DEIS states that 260,000 acres of the Bow will be up for commercial logging. This statistic is left out of the Final EIS. How is the public to know? 260,000 acres is many times more than any commercial timber sale ever in the Medicine Bow. The LaVA becomes suspect. As pointed out by many commenters, they ask, "Is the LaVA a thinly veiled timber sale?" And this is with good logic. Refer to Duane Keown Comments, page 3. Donald Trump's Secretary of Agriculture, Sonny Perdue, who heads the Forest Service, was asked in Boise in 2016 what the mission of the FS should be. He said, "Regarding the U.S. Forest Service and our public lands, I think it's time we started looking at forests as crops, as agriculture..." How much of the Medicine Bow will be up for commercial logging?

LaVA is too encompassing in terms of area of deforestation. The area of actual forest is small relative to other National Forests, yet more than one third of its total area is to be designated as Treatment Opportunity Areas (TOAs). 95,000 acres would be scheduled for clear-cutting (page 2 of the FEIS), 95,000 acres is one tenth of the forest. Currently, the primary use of the forest by the public is recreation and that use grows annually.

Page 23 of the LaVA FEIS and Page 2 of Duane Keown DEIS Comments. The most frequent criticism of the LaVA in the DEIS is that the LaVA has too many miles of temporary roads (up to 600), and we are not told in the FEIS or the DEIS where even one mile of the road will be located. The Final EIS has not lessened the miles of roads planned, yet we are asked to endorse this plan for the next 15–20 years. This violates the NEPA. The Medicine Bow National Forest already has the greatest total mileage of roads when compared among all of Wyoming National Forests—2,192 total miles. Because of the relatively small size of this particular forest, the road density is unacceptably high. Several studies show that more roads correspond with an increased number of human-caused forest fires. (Arienti, M. Cecillia; Cumming, Steven G. et al. 2009. Road network density correlated with increased lightning fire incidence in the Canadian western boreal forest. Journal of Wildland Fire 2009, 970-982)

Page 20 of Appendix B to the FEIS and Page 22 of the Scoping in the DEIS and Duane Keown Comments p. 5 and 6 The same deliberate error was not committed in the FEIS that went on in the DEIS. On page 22 of the Scoping, under Effects in the LaVA DEIS it is stated that the Scoping meeting of August 8, 2017 in Laramie was

announced in the *Laramie Boomerang* on August 1, 2018. The August 8 Scoping meeting would be held at the Washington Community Center in West Laramie. This was a deliberate cover up to be within NEPA laws. The meeting was not announced in the local newspaper and Melissa Martin and Frank Romero were informed of this prior to the Scoping meeting and following the meeting. Poor attendance at the Scoping Meetings is acknowledged in Appendix B, page 19 of the FEIS. It states there were less than 15 at each of the open Scoping Meetings. There are 36,000 people in Albany County and the LaVA is to be the largest operation ever planned on the Medicine Bow Forest.

Prior to the Scoping meeting in Laramie at the Lincoln Community Center, Joy and Duane Keown learned of the Scoping Meeting from Frank Romero in a personal email from Frank concerning another Medicine Bow matter — Engelmann spruce harvest on Highway 130. We learned of the Scoping meeting was to be held in three days. We became aware of the scale of the LaVA project so when the meeting was over we inquired about notification of the public. There were more presenters (Forest Service employees and their collaborators) than public attendees at the Scoping meetings. I read the Boomerang and the Casper Start Tribune (the state newspaper) thoroughly each day and was not aware of notification of the LaVA. The local newspaper publishes a whole page of public meetings notices daily, having all degrees of significance. Yet the FS failed to notify the public of the Scoping meeting though it is critical to compliance with NEPA. Do Medicine Bow foresters read the only local newspaper? Does this scale of project deserve a second try with the Boomerang? Or a third? The editor at the time was Peter Bauman and he said his newspaper was not notified. He called me to tell me this.

# Failure of the Forest Service to notify environmental and wildlife organizations about the Scoping Meeting.

From page 29 of the DEIS we read, "During adaptive implementation, Medicine Bow National Forest staff would cooperate with other agencies, local governments, interested stakeholders, and organizations to identify specific treatment units." What were the organizations? Not one organization, environmental or wildlife, was a cooperating organization in the LaVA development prior to the Scoping meeting. They were not even informed of the scoping meetings, in violation of 40 CFR §1501.7 Scoping.

August 20, 2017 was the Public Lands Rally at the Lincoln Community Center in Laramie. The Forest Service was not a participant. Joy and I were there with a table, taking names on a petition to request the Medicine Bow (specifically, Medicine Bow Acting Supervisor, Melissa Martin and Frank Romero) to hold another well- announced Scoping Meeting and to extend the comment deadline. The petition had (we have it with the signees) nearly 100 signatures of Wyoming citizens. In three days we were turned down by the Medicine Bow officials. Frank Romero informed us. This was a critical mistake. Let me explain.

On page 21 of the FEIS it states that after the Scoping meeting the FS notified conservation and wildlife agencies. But this was after the official comment time, August 20, 2017. And of only 58 comments that came to the FS within the August 20<sup>th</sup> deadline, most were critical of the LaVA

I learned that the failure to notify many prospective attendees was in violation of NEPA, § 1501.7 Scoping. The CFR reads: (a) As part of the scoping process the lead agency shall:

(1) Invite the participation of affected Federal, State, and local agencies, any affected Indian tribe, the proponent of the action, and other interested persons (including those who might not be in accord with the action on environmental grounds), unless there is a limited exception under § 1507.3(c). An agency may give notice in accordance with § 1506.6.

Page 20 of the FEIS states that, "notice of the Scoping Meeting was mailed to organizations." Which ones? None of those below received notification before the Scoping Meeting. Following the Scoping Meeting I personally asked these organizations if they were informed by the Forest Service about the meeting. The answer was no. I immediately notified environmental and wildlife organizations in Wyoming about the LaVA and the failure by the Forest Service to notify them about the Scoping meeting. Joy and I belong to most of these organizations and I repeat, they were not notified or aware of the LaVA or the Scoping Meeting. Organizations I notified were: Sierra Club, Wyoming Outdoor Council, Powder River Basin Resources Council, Wyoming Wildlife Federation, Wyoming Wilderness Association, Trout Unlimited, and Rocky Mountain Elk Foundation. These are nearly all of the environmental and wildlife organization of Wyoming. Some of these organizations have thousands of Wyoming members and members have utmost concern about their public lands. The Wyoming Wildlife Federation has 8,000 members.

### Page 21 Appendix B of the FEIS and page 15 of Duane Keown Comments

Because of the failure to notify the public, and in particular environmental and wildlife organizations about the August 2017 Scoping Meeting, Medicine Bow officials say on page 21 of Appendix B of the FEIS they tried to rectify the shortcoming by holding information meetings in January of 2018. They tried to rectify the lack of information to the public by holding public meetings in Wyoming's January winter. But these did not replace the NEPA required Scoping Meeting and comments after the August 20, 2017 deadline were not official.

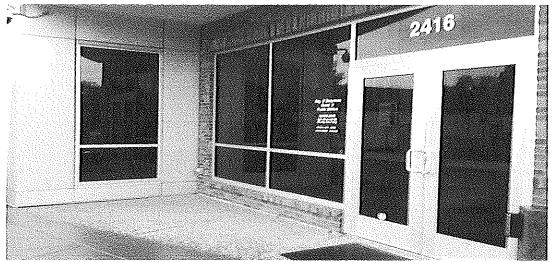
Joy and I are witnesses to the shortcomings of these rectification efforts by attending the meetings. We attended the first of two LaVA information meetings in Saratoga on January 23, 2018. It was our intention to ask questions, and provide comments on the actions being considered. We inquired about the format of the meeting and were told that at the Brush Creek/Hayden District office there would not be an open format where questions could be asked or comments made. It would be a program where Forest Service personnel and collaborators would explain the LaVA at stations around the room. We were told by the Law Enforcement Ranger on the Brush Creek/Hayden District we would be able to set up a table outside at the front door where the public entered — if we were out of the way and did not impede entrance to the building. My wife and I sat at the front door for three hours and handed out very little information about the LaVA. The temperature was 17 degrees Fahrenheit and as usual there was wind. No more than six citizens came to the meeting during the three hours the meeting as held. Comments given to the Forest Service at the January 23rd meeting, and after the August 20, 2017 Scoping Meeting deadline were not official NEPA comments.

We sat up sat our table in Laramie at the Lincoln Community Center information meeting on January 30, 2018 and encountered the same protocol. The Albany County Sheriff's Office told us we could be at the front door if we did not impede flow of folks through the door to the meeting. We were not invited by the Medicine Bow officials to be part of the meeting. The outdoor site was protected from the wind on that January 30<sup>th</sup> evening but the whole NEPA purpose was violated by the Forest Service with their format. We were outside the meeting hall and not "in" the meeting. The format was information stations about LaVA set up by the Forest Service and their collaborators. The meeting was only to sell the

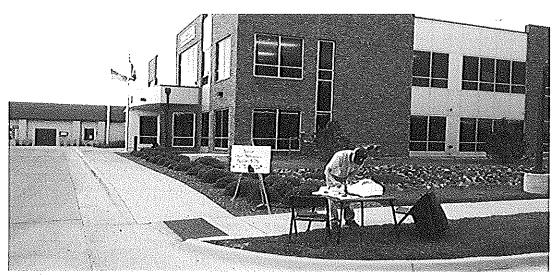
<u>LaVA</u> project to the public and was not for public comment or discussion of the LaVA.

### Draft Environmental Impact Statement Meetings in Laramie and at Cheyenne

As pointed out on page 15 of Duane Keown Comments on the DEIS, with the actions of the Medicine Bow National Forest officials, the NEPA process in the DEIS public meetings was not a partnership with the public for public comments and discussion, but a process to be skirted around with the least NEPA interference. Such was the case in July with the Draft EIS meetings in Laramie July 30, 2018 and in Cheyenne in early August. I will give specifics about the Cheyenne meeting held at the Cheyenne Board of Public Utilities Building. The Board is a collaborator with Medicine Bow, the administrator agency. By phone we informed the Board of our intentions to attend the DEIS meeting. Through the Boomerang we were aware of the Cheyenne DEIS meeting that was held in the basement of the Board building. So we began to set up our card table with two handouts about LaVA in a protected area on the south side of the front door on the east side of the building, completely clear of traffic into the building and the DEIS meeting (see the photo below). Soon we met the lady who said she was in charge of the building and was a hydrologist. She told us that we must move to the public sidewalk north of the entrance about 150 feet. We could not be on the BPU property, she said. I told her I had cleared our demonstration with information through the Cheyenne Police and were given directions to not impede flow into the building. She said if we had objections we should call their attorney. We could see there would not be visits to our table away from the building, and the DEIS meeting, perhaps by anyone. Not one individual came to the table. And finally, a thunderstorm, that we would have avoided at a site by the front door, put us back into our car. The BPU building is a taxpayer owned public building.



The BPU front door with ample space for our small table.



Where we were required to set up. The purpose of the NEPA DEIS meeting was denied. The Cheyenne DEIS meeting was only to sell the LaVA

From the Medicine Bow U.S Forest Service web page: "Formal public involvement opportunities include the scoping meeting and review period, the Draft EIS review and public meeting..." But not for public comment or discussion.

# Air Quality and Climate Change (Section 3 of the FEIS) and page 14 of Duane Keown Comments

Even though the Final EIS has improved coverage of climate change, more than did the Draft EIS, it remains rudimentary. Effects of climate change are not well known. Nevertheless, we do know that forests will become warmer and drier, and thus regeneration will be slower. A major study at Colorado State University and the University of Idaho of several years and carried out

in five states — Colorado, Wyoming, Washington, Idaho and Montana found a link between Earth's changing climate and significant decreases in post-fire tree regeneration. It was a Colorado State University press release. Researchers measured more than 63,000 seedlings in a region where 52 wildfires have burned during the past 30 years. They found decreases in regeneration after early 21st century wildfires, when conditions were hotter and drier than in previous years. "We often talk about climate change and how it will affect us in the future, but the truth is we are already seeing those changes," said Camille Stevens-Rumann, assistant professor in the Department of Forest and Rangeland Stewardship at CSU. In the press release she said, "Disturbances like wildfires are a catalyst for change. In many places, forests are not coming back after fires." The study is titled, "Evidence for declining forest resilience to wildfire under climate change." The article is in *Ecology Letters*, (*Ecology Letters*, (2018) 21: 243–252). The article has eight authors. Three lead authors are Camille S. Stevens-Rumann, Kerry B. Kemp and Philip E. Higuera.

I heard Camille Stevens- Rumann speak at the University of Wyoming following conclusion of the study in 2018. She said in many instances sampled following recent fires, there was no regeneration at all.

From the study we should ask if it really is the time to substantially reduce the forest, like the LaVA plan calls for, knowing that live forests are some of nature's primary sequestering agents of CO<sub>2</sub>. Region 2 of the Forest Service must look seriously at this major study of climate change and its affect on Rocky Mountain forest regeneration and decide in time to halt operations that would be severely affected by climate change and regeneration of forests.

#### Paying for LaVA

In the FEIS there isn't, but there should be, a section that addresses how LaVA will be paid for (page 14 of Duane Keown Comments). We are presented the LaVA without explanation of how this largest-project ever planned on the Medicine Bow is to be paid for. Not even in the big-lumber forests of the Pacific Northwest do forest-timber sales cover the actual costs to the Forest Service (Google: National Forest System Timber Financials). It would be virtually impossible for the Medicine Bow National Forest's budget to pay for the services we customarily expect them to carry out (e.g., patrol of greatly expanded closed roads, campground maintenance, road maintenance, etc.) and add this massive project, even if it is over 15 years.

### New information since the DEIS and not given to the public in the DEIS or the FEIS.

The public first learned that LaVA is an experiment on Dec. 10, 2018 from the Washington Post out of Washington D.C. It is called an experiment for the Rocky Mountain States. This was new information, after the DEIS deadline, August 20, 2018 and was never called an experiment in the FEIS. It was not called an experiment by the Forest Service prior to the Washington Post media release. Are similar experiments like LaVA underway throughout the pine beetle infected area that is in some places nearly eight hundred miles wide and three thousand miles in length? Why did the Medicine Bow deserve such and experiment? Why have we not been told this is an experiment? It is not a major forest products forest. By far its main use is recreation and on weekends there are as many Colorado cars in the forest as Wyoming cars. LaVA was recognized as an experiment by Dr. Dan Tinker (Forest Ecologist) in his "Thoughts about the LaVA" submitted by Tinker (DEIS Comment #39), and repeated by Duane Keown, DEIS Comment #119, and Jason Lillegraven in Comment # 120 to the LaVA Draft EIS. With this experiment on our forest, like most experiments, the results will probably not be known until completion of the experiment. Is that 15 or is it 20 years? It is stated both ways in the FEIS. And climate change is a variable in the experiment that is just now being figured in.

The study of regeneration after fires and climate change by Camille S. Stevens-Rumann, Kerry B. Kemp and Philip E. Higuera and others at Colorado State University says it is no time to experiment with the <u>forests</u> we <u>have</u> and their importance in carbon dioxide sequestration and possible lack of regeneration due to climate change.

The Forest Service should <u>reread</u> the Draft EIS comments by the public. The dissection and categorization of comments by the Forest Service is an effort to make the comments supportive of the LaVA, which <u>they are not</u>. I have read them thoroughly twice and conversed with many of the commenters and at least seventy percent of the comments oppose the LaVA. The FS only looks at the comments that say outright "No Action" and ones that support the project. There is important and major public opposition to the LaVA. The Forest Service has read the comments with blinder. They fail to take the pulse of the people.

According to the Wyoming Department of Transportation's recent count, an average of 1,000 vehicles per day pass by the FS Information Station just west of Centennial on Highway 130. The Medicine Bow for recreation grows annually. It is southwestern Wyoming's Rocky Mountain National Park and just as scenic. The LaVA will severely affect the good rapport the Forest Service has with the forests guests. And what does building 600 miles of road do for wildlife security? The FS knows well that the 600 miles of road are not "temporary" for ATVs and snowmobiles. They are access roads that will violate USDA Forest Service Plan of 2003a, pages 1-40. I am a frequent visitor to the Bow and know the Forest Service cannot patrol the roads, especially the closed roads, that they have now. (Pages 289 and 290 of the FEIS and page 4 of Duane Keown Comments)

I will conclude with the thoughts of Dr. Dan Tinker about LaVA. He is a Forest Ecologist and retired from the University of Wyoming in the spring of 2018 after more than 20 years. He probably knows as much about the Medicine Bow as any other scientist and his voice should ring loud and clear.

THOUGHTS RELATED TO THE LANDSCAPE VEGETATION ANALYSIS ON THE MEDICINE BOW NATIONAL FOREST, WYOMING

My name is Dr. Dan Tinker and I am a forest and fire ecologist, employed as an Associate Professor at the University of Wyoming. I was a member of the Governor's Forest Task Force two years ago and have worked and conducted research in the MBNF for over two decades. I would like to provide my perspective on the proposed LaVA project, as outlined in the scoping document. My opinions and thoughts are my own, and do not reflect any official position of the University of Wyoming.

While the bark beetle epidemic that has occurred over the past decade or so is unprecedented in geographic extent, at least in recent recorded history, the impacts to forests at the stand and watershed level have been documented numerous times throughout the Intermountain West's montane forests. Overstory mortality has been considerably less than predicted across the landscape, although some stands have experienced high levels of tree death. Studies of forest recovery from Wyoming and other states in the region have suggested that recovery of forest structure and function – largely through surviving overstory trees and "advance regeneration" of smaller understory trees – is already occurring, much of it in the absence of any active forest management treatments. Below, I will address a few specific areas that I think are important to consider more fully.

1. Health and human safety are the most important issues in all of this. Removal of hazard trees and dangerous areas of forest around human settlements, trails, roads,

campgrounds, etc. is absolutely appropriate and necessary. I believe this has been the focus of tree removal to date, and I applaud those involved with this process.

- 2. The goal of "restoring resilience" to the forests is commendable, but concepts of resilience are complex, at best. Resilience, by definition, refers to a forest returning to the pre-disturbance condition after some period of recovery, whether natural or assisted by humans. Recent evidence shows that these forests are inherently resilient to these types of disturbances, which, along with high-intensity fires, they have evolved with for thousands of years.
- 3. The promotion of "age class, structural, and vegetative diversity" across the landscape, as outlined in the Purpose portion of the LaVA document, is already occurring in the absence of any treatments. The advance regeneration mentioned above, along with the survival of all understory vegetation and many mature canopy trees, is creating a new forest stand that will be composed of a broad range of tree ages and sizes, and in some cases, the dominant tree species in some stands may change from primarily lodgepole pine, to other species such as subalpine fir or even aspen.
- 4. Understory vegetation is relatively untouched by the bark beetle epidemic, and in some cases, graminoid species may increase in abundance, provided improved wildlife habitat, again in the absence of any treatments.
- 5. Using harvest and burning to "accelerate recovery and regeneration" is not accurate. In fact, removing living canopy and understory trees by either method will actually delay these processes, which are already occurring. Understory tree growth has increased three-fold (based on recent data from MBNF forests) in the absence of treatment.
- 6. Recovery of usable forest products from the stands is limited, at best. Many of the woody resources that were killed by the bark beetles have since fallen to the ground and begun to decompose, crack, and fragment. Removal of these woody resources requires removal of living, healthy trees.
- 7. Removing woody fuels in an attempt to reduce the likelihood of large, high-intensity fires is appropriate only in areas around human settlement or adjacent to other non-federal lands. These types of fires have occurred for thousands of years, and even young, regenerating stands may reburn after only a few years if weather conditions are suitable.

I provide these comments respectfully, and would be interested in joining in future discussions related to this, and other similar projects.

Daniel B. Tinker, PhD

Especially, following the new and significant information cited in these objections, and not acknowledged in the LaVA DEIS or the FEIS, there is cause that the project be rethought and at this time discontinued.