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LIVESTOCK GRAZING

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON FOREST AND FOREST HEALTH

OF THE

COMMITTEE ON RESOURCES
HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTH CONGRESS

FIRST SESSION

ON

LIVESTOCK GRAZING ON PUBLIC DOMAIN NATIONAL FORESTS

APRIL 8, 1997—WASHINGTON, DC

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LIVESTOCK GRAZING ON PUBLIC DOMAIN NATIONAL FORESTS

TUESDAY, APRIL 8, 1997

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FORESTS AND FOREST HEALTH, COMMITTEE ON RESOURCES, *Washington, DC.*

The Subcommittee met, pursuant to call, at 2:04 p.m., in room 1334, Longworth House Office Building, Washington, D.C., Hon. Helen Chenoweth (Chairwoman of the Subcommittee) presiding.

Mrs. CHENOWETH. Ladies and gentlemen, the Subcommittee on Forests and Forest Health will come to order. The Subcommittee is meeting today to hear testimony on livestock grazing on public domain national forests.

Under rule 4(g) of the committee rules, any oral opening statements at hearings are limited to the Chairman and the ranking minority member. Without objection, though, the Chairman will exercise the right to ask Mr. Crapo to give an opening statement also.

I welcome Mr. Crapo, my colleague from Idaho, and I want you to know that Mr. Gibbons from Nevada will also be joining the Subcommittee right away.

Although they are not members of the Subcommittee, again, without objection, I would like to invite them to join us in these proceedings.

STATEMENT OF HON. HELEN CHENOWETH, A U.S. REPRESENTATIVE FROM IDAHO; AND CHAIRWOMAN, SUBCOMMITTEE ON FOREST AND FOREST HEALTH

Mrs. CHENOWETH. Livestock grazing on public lands is an issue that has managed to be a topic of debate in one form or another in every Congress over the past several decades. When we separate the facts from the fiction, a very different picture emerges.

Much of the grazing heritage of the western United States is an outgrowth of the period when settlers migrated there to grow crops and raise animals on their homesteads. Those settlers established a way of life that continues today. Their descendants still attempt to make a living from ranching and livestock grazing, but under very different and sometimes very difficult circumstances.

Some of the challenges are the same as those of a century ago, adequate water supplies, disease, and predators. However, the government atmosphere regarding the availability of public land for livestock grazing and the attitude toward rangeland management has changed dramatically.

In the emotionally driven debate about livestock grazing on public lands, grazing has been continually viewed by opponents as hav-

ing a negative impact on the land; however, science shows a much different picture. When done correctly, grazing is a natural and essential part of the rangeland environment. Because of the varied nature of rangelands, proper care of the land as it pertains to livestock grazing can only be carried out by proper on-the-ground management.

This is why the Subcommittee will examine two specific cases of management of livestock grazing on the public domain national forest to determine if what has happened in the Sawtooth and the Humboldt-Toiyabe National Forests is indicative of the management of national forests throughout the west.

On March 3, 1997, William Levere, Forest Supervisor of the Sawtooth National Forest, sent a letter entitled "Sawtooth National Forest Rangeland Management" to all permittees in the Sawtooth. Contained in the letter was a "Direction for Uniform Action[s] Associated with Grazing Permit Violations." Although this UAG contains significant changes to livestock grazing on the Sawtooth, it was implemented without any public comment.

The new rules put forward in the UAG contain changes from previous grazing rules that include replacing five gradually escalating sets of penalties with two sets of penalties, both requiring ranchers to explain violations in writing. The minimum penalty when permittees are unable to work out a mutually acceptable solution with the Forest Service is suspension of 25 to 100 percent of the stock or grazing days for three years plus payment for any unauthorized foraging. The March 3 UAG's maximum penalty for a second offense is total permit revocation plus payment for damages.

By the Sawtooth supervisor's own admission, these were significant changes to the existing regulations, yet no public input was requested as mandated by the National Environmental Policy Act and the Administrative Procedures Act.

In response to the uproar caused by the release of the UAG on March 3, the Forest Service said Friday, April 4, 1997, that they would issue a revised interim UAG and open it up to a 30-day public comment period. In my view, this is at the very least an admission that mistakes were made in the promulgation of the March 3 UAG.

By many appearances, the UAG is the culmination of a pattern by the Forest Service to try to eliminate livestock grazing dating back to 1986. Until 1986, the Forest Service personnel in the Sawtooth had generally been an effective partner in the development and improvement of grazing allotments. Unfortunately, this atmosphere changed in 1986 when new management was brought in to the Sawtooth.

Some have argued that the UAG comes as the result of a direct bias against livestock grazing by Forest Service personnel, which is what we are going to try to determine today.

What is distressing to me is the fact that the Forest Service has little, if any, scientific information to back up their punitive actions that will continue to lead to the elimination of many families' ability to provide for their own means. The argument that the permittees are not treating the land properly is not supported by science. The fact is, the permittees have the most at stake in assuring the

health of the land and have done an excellent job in maintaining their allotments.

It is particularly distressing to me that many of these draconian sanctions contained in the March 3 UAG were implemented unilaterally and without public input. As the administration knows very well, any and all regulations that have significant economic, social, or cultural impact must go through the NEPA and APA public comment process.

In his March 3 letter, Mr. Levere states that the new UAG will "have major impacts both internal to the Forest Service and external to our range permittees and forest visitors." This is by any measure a recognition of the importance of the new UAG, yet NEPA and the APA were not followed.

It is recognized by the Supreme Court and well grounded in the law that "the acts of public officers (which includes the Forest Service) must, in order to be binding, be within the limits of the power conferred (by Congress)."

Further, Supreme Court decisions have stated "when dealing with such public officers, one must inquire into their powers and authority to bind the government, and is held to a recognition of the fact that government agents are bound to fairness and good faith as between themselves and their principal." The Court went on to say, "These general principals as to public officers have been applied in the case of authority exercised by the Secretary of the Interior," and that is found in Volume 77 AmJur 2d, Section 89.

These hearings today are to actually inquire as the Supreme Court suggests whether the government agents, in this case the Forest Service, have acted within the authority conferred on them by Congress and have acted in good faith on the Sawtooth and the Humboldt-Toiyabe National Forests.

The Supreme Court has stated that it is the responsibility of the governed, not the government, to inquire as to the bounds of the Forest Service's authority. That is what the permittees have done, and that is precisely the reason that we are here today.

I look forward to receiving testimony from our witnesses and receiving the facts from all of you. Now, I would like to recognize my colleague from Idaho for an opening statement, Mike Crapo.

Mr. CRAPO. Thank you, Madame Chairman, I appreciate the opportunity you have given me to participate in this hearing this morning, and I would also like to welcome Scott Bedke, a citizen of Oakley, Idaho, who is a constituent of mine, to this hearing.

Scott is one of the 195 permittees who run livestock on one of the 153 grazing allotments on over 2,100,000-plus acres on the Sawtooth National Forest. He and his family have grazed livestock on public lands for many years.

I would also like to welcome Linn Kincannon, someone whom I have worked with for a long time on issues such as this, who is here representing the Idaho Conservation League and its point of view. She is a resident of Ketchum, Idaho, and also a constituent. I welcome her to this hearing, and I look forward to their testimony as well as the testimony of everyone else here.

I might also add, Madame Chairman, that it is a pleasure to get to call you Madame Chairman, I appreciate the fact that even

though I don't sit on this Subcommittee that you have allowed me to participate.

Mrs. CHENOWETH. Thank you, Mr. Crapo, and I also want to recognize the fact that I appreciate the fact that you are here at this hearing when there was a leadership meeting called by the Speaker that you have chosen to be here instead of attending those meetings, and those are very important meetings especially at this time.

STATEMENT OF HON. MICHAEL D. CRAPO, A U.S. REPRESENTATIVE FROM IDAHO

Mr. CRAPO. Thank you very much and I appreciate that opportunity. The reason I am here is because of the importance of this issue to Idaho and to my district and to the West. In February, I was briefed by Bill Levere, the forest supervisor of the Sawtooth National Forest, on his proposed uniform grazing permit violations action guide. This was several days before the proposed guidelines were released.

At this meeting, I stated my opposition to the implementation of these guidelines and relayed to him my deep concern with the approach that the Forest Service appeared to be taking with regard to rangeland management in the Sawtooth National Forest.

Instead of fostering a cooperative approach to addressing rangeland management concerns, these new guidelines impose a rigid and what I consider to be a confrontational style of management. While every permittee should be required to adhere to the rules and regulations of their permit and while we must assure that we protect and preserve the resources of the United States, the magnitude of the penalties in these proposals and the rigidity of the manner in which they are implemented do not fit the violations and the circumstances, in my opinion.

These guidelines are another example of an approach to public land management in a way which seemingly appears to many to be an attempt to abolish grazing and other multiple uses for public lands through the use of excessive and costly regulations.

In defense of these actions, the Forest Service states that the Sawtooth National Forest rangers and permittees spend 90 percent of their time dealing with ten percent of the permittees. However, instead of identifying and dealing with this small percentage of permittees who consciously fail to adhere to conditions of their permits, the Forest Service imposes a one-size-fits-all approach which has not worked in the past.

Instead of dealing with problems in an effort to eliminate them, the Forest Service has chosen to place all permittees in the same situation. This will only increase problems and increase staff time spent.

For example, these proposed guidelines force rangers to reduce a permittee's forage by 25 to 100 percent for an accidental violation without consideration of past performance or circumstance. The guidelines fail to make a distinction between a good permittee who fails to close a gate and one who is a habitual offender. As this occurs, more and more pressure will be placed on the Forest Service resources to deal with an increasingly hostile and difficult permittee public.

Originally, uniform action guidelines were only recommendations, and rangers had the authority to vary action based on individual circumstances. They could take extenuating circumstances into account and give consideration for accidental and nonwillful events. These new proposed guidelines, however, show absolutely no flexibility.

It is now mandatory that the direction of the new guidelines be followed. The only discretion left to the ranger is in determining whether or not the violation has occurred, and in my opinion, this is not reasonable nor right.

I am additionally concerned with the lack of communication. For example, Cassia County and the Forest Service have recently entered into a memorandum of understanding which is less than one year old. This MOU was created to foster a better working relationship between the Forest Service, elected officials, and residents of the area.

I am aware of the disagreement between the Forest Service and the Cassia County commissioners on exactly what sort of communication is required by the MOU and by FLPMA on these guidelines. But notwithstanding this disagreement, the Forest Service must work closer with the county commissioners and other involved on these issues.

This lack of communication extends to the guidelines we are here to discuss today. Instead of receiving a warning letter or a notification of a violation as is currently prescribed, the new guidelines dictate a show-cause letter for canceling a percentage of the permittee's forage for all violations, no matter the severity.

This is not communication. This is intimidation. The Forest Service in this case is acting as the police, the judge, and the executioner. Ranchers under these new guidelines have far less opportunity to communicate with the Forest Service and are placed in a position of potential real economic loss with very little recourse and no access to a jury of their peers.

In raising these concerns, it has been explained to me that all that the ranchers have to do is to communicate and bring their concerns to the attention of the forest rangers, and that there will be an effort to work things out with them.

The problem with that point of view, however, that approach is that, first of all, the guidelines are still rigid and do not allow for the flexibility necessary to deal with circumstances as they properly should be. Secondly, with such extensive potential penalties in place and with the person that the ranchers are dealing with being the one who has the discretion to implement the penalties, all the rancher can do is plead for mercy rather than to deal with the Forest Service in an effort to try to avoid the extenuating and extreme penalties.

This type of concentration of power can only lead to an increased difficulty in communication and more time spent by Forest Service personnel in dealing with the public.

I do want to applaud Mr. Levere for his recent decision to revise the guidelines and open them up now for public comment and review. A decision of this magnitude should not be made in a vacuum, but with input from affected communities and individuals. I

want to suggest to the Forest Service that, during this comment period, it looks closely at alternatives for these guidelines.

As indicated in all of the letters that have been signed back and forth on this, it is clear that the Forest Service has now recognized that it must look to and receive public input to evaluate this new proposal.

Madame Chairman, I again want to thank you for allowing me to participate in this hearing, and I look forward to hearing from the witnesses today.

Mrs. CHENOWETH. Thank you, Mr. Crapo, and now I would like to welcome Jim Gibbons to the committee. Mr. Gibbons' district includes the Toiyabe National Forest in Nevada, and it is a joy to have you here.

I would be very pleased if you would like to submit a written statement to the record.

Mr. GIBBONS. We will submit our opening statement for the record.

[Statement of Mr. Hinchey follows:]

STATEMENT OF HON. MAURICE D. HINCHEY, A U.S. REPRESENTATIVE FROM NEW YORK

Madame Chairman, this has been billed as an oversight hearing on livestock grazing policies on public domain National Forests. I suspect however from the witness list that this is really a hearing on livestock grazing on the Sawtooth, Toiybe (Toyob-e) and Humboldt National Forests, especially Sawtooth.

It seems that Sawtooth National Forest Supervisor Bill LeVere has stepped on a few toes in moving to implement a uniform policy on grazing permit violations, noting that the Forest Service has got to change the way it has been doing business. I congratulate Supervisor LeVere and the other forest supervisors who are changing the way the Forest Service has been doing business. If there ever was a program in need of reform, it is the grazing program. The misguided legislative attempts that took place in the last Congress highlighted again the serious shortcomings of the grazing program. The fatally flawed efforts of proponents last Congress to enshrine grazing at the expense of other multiple uses of our public lands and National Forests would have cut off useful and necessary reforms in grazing management.

Secretary Babbitt has proceeded to implement grazing management reforms on public lands and contrary to the dire predictions, the sky has not fallen in. I suspect the same would happen with the Forest Service. In fact, we should be going further to eliminate grazing subsidies for corporations and large operators. Something is wrong when we hear all this talk about the small rancher and come to find out that just 12 percent of the permittees control 63 percent of the forage on National Forests.

I support the Forest Service objectives to protect and restore the health of the land, to manage grazing in the broader context of multiple use-sustained yield, and provide for grazing only in areas where it is suitable and appropriate. If we are looking at grazing policies on National Forests, these are the policies the Forest Service should be following.

Mrs. CHENOWETH. Thank you, Mr. Gibbons. Now, I would like to call on the first panel. Dave Unger, Associate Chief of the United States Forest Service from Washington, D.C.; and with him is William LeVere, Forest Supervisor, Sawtooth National Forest, East Twin Falls, Idaho; and Mr. Jim Nelson, Forest Supervisor, Toiyabe Humboldt National Forest, Sparks, Nevada. Gentlemen, welcome.

It is the intention of the Chairman to place all outside witnesses under oath. This is something that we do with everyone, and this is a formality of the committee that is meant to assure open and honest discussion and should not affect the testimony given by the witnesses.

I believe all of the witnesses were informed of this before appearing here today, and they have each been provided a copy of the committee rules.

If you will please stand with me and raise your right hand, I will administer the oath.

Do you solemnly swear and affirm that you will, under the penalty of perjury, tell the truth, the whole truth, and nothing but the truth so help you God?

Let me remind the witnesses that under our committee rules, they must limit their oral statements to five minutes, but that their entire statement will appear in the record and we will also allow the entire panel to testify before questioning a witness.

The Chairman now recognizes Mr. Dave Unger, Associate Chief, U.S. Forest Service, to testify. Mr. Unger.

STATEMENT OF DAVE UNGER, ASSOCIATE CHIEF, U.S. FOREST SERVICE, WASHINGTON, DC; ACCOMPANIED BY WILLIAM LEVERE, FOREST SUPERVISOR, SAWTOOTH NATIONAL FOREST, EAST TWIN FALLS, IDAHO; AND R.M. (JIM) NELSON, FOREST SUPERVISOR, TOIYABE-HUMBOLDT NATIONAL FOREST, SPARKS, NEVADA

Mr. UNGER. Thank you, Madame Chairman, and we appreciate the opportunity to participate in this overview of the Forest Service range management program.

I will summarize my statement briefly. As everybody on the committee knows, the Forest Service has been involved in managing rangelands for nearly 100 years and has a long history of partnership with the livestock producers and others who rely on National Forest System lands.

It is interesting that at the turn of the century when there was a debate about whether livestock grazing should be allowed on the forest reserves as they were called at that time, the person who was to become the first Chief of the Forest Service, Gifford Pinchot, argued that grazing should not be prohibited as some were calling for, but instead should be regulated, and that view was based on scientific range research, and we think that those early range scientists, by developing concepts such as carrying capacity and grazing systems that involved deferral and rotation, laid the foundation for sustainable resource use.

Nearly half of all National Forest System lands lie within the boundaries of grazing allotments, about 95,000,000 acres of land in 33 States. The Forest Service administers approximately 9,000 paid permits which provide for about 9,900,000 head months of grazing by cattle, horses, sheep, and goats, and of course, nearly all of this permitted grazing is located in the western States.

Authorized grazing use on National Forest System lands has been declining over the past ten years, from about 11,000,000 head months in 1986 to about 9,000,000 head months for each of the past three years. The reasons for the decline in authorized use over this period include continued efforts to improve range in poor or fair condition, more emphasis on restoring degraded riparian areas, adjustments for effects on threatened and endangered species, and other reasons including economic factors that affect permittee decisions.

Despite improvements in rangeland conditions since the turn of the century, we have work to do. Currently, about 72,000,000 acres of rangeland have management objectives that are identified in forest plans. About 71 percent of those acres meet or are moving toward the specified objectives, and that is good.

Another 11 percent do not meet those objectives or do not show signs of improving, and another 18 percent are in an indeterminate status due to the lack of current data which we think that we can get up to date in the years immediately ahead so that we can remove those acres from that undetermined status.

Permittees, as the committee has recognized here in its statements, using the public land have made an agreement with the Forest Service to use it in a certain way, and Forest Service officers have discretion in administering permits to achieve the resource utilization and protection purposes they are designed to serve.

In some cases, managers have chosen to use these uniform action guides which are the subject of this hearing as a tool to obtain more consistent and fairer actions by the Forest Service when permit violations occur. These guides are in use on the Sawtooth, the Humboldt, and Toiyabe National Forests as well as many other units in the western States.

I might mention that downsizing of the agency has required the Forest Service to streamline its processes and cut costs. Examples of specific actions to stretch our dollars include forging collaborative monitoring programs with some of our partners including rangeland permittees and others, and we have formed other partnerships which have other similar opportunities, such as "Seeking Common Ground" which is an effort in eight western States to develop demonstration projects to manage big game and livestock grazing interactions and common habitats.

A new program, "Pulling Together Partnerships" is a program that has the primary objective of managing noxious weeds on a landscape basis across jurisdictional boundaries.

We are also working with other Federal agencies to try to streamline consultation and analysis processes so we can be more responsive to the permittees, the public, and local community needs.

I will just conclude by saying managing rangeland resources is an important task for the Forest Service. We appreciate the committee's interest in this subject.

[Statement of Dave Unger may be found at end of hearing.]

Mrs. CHENOWETH. Thank you for your testimony, and I would like to open with questions from Mr. Crapo.

Mr. CRAPO. Thank you very much, Madame Chairman. I appreciate the opportunity to question this panel.

As I have read the material that was put out by the Forest Service on this matter, it was pointed out that this was intended to be a system in which there was a voluntary working relationship created between the permittees and the Forest Service. But, as I indicated in my opening statement, it is hard for me to see how that will work.

I would like to encourage any of you to answer this question. It seems to me that the notion that implementing a very heavy penalty and then requesting the rancher or permittee to come in and

basically work out the solution with the understanding that if they don't agree with whatever the solution that is being imposed is, then the heavy penalty is going to be imposed, is hardly a voluntary working relationship. The final few sentences in the letter that was sent out say that to those who aren't willing to work on this arrangement, we can either work together or we can work against one another. The route you choose is yours. The consequences of each route are yours to accept or reject.

How is it an open, voluntary working relationship when the agency has already proposed a very extensive penalty and is then telling the permittee that they must either agree to whatever the terms are as they negotiate with the ranger or suffer this extensive penalty?

Mr. UNGER. Let me ask Mr. Levere to respond to that, but my understanding of these kinds of guidelines which are in effect in a number of forests in the west is to try to have a more consistent basis for treating people fairly and equitably where they are found to have violated the grazing permit provisions, but I will let Mr. Levere respond directly to your question.

Mr. LEVERE. Yes, I feel the need to respond to that, and that those are my words. I wrote them.

What we are after, and it may be a misinterpretation, and hopefully, the April 4 direction clarified that it is—that the permittee has to voluntarily accept the penalty as proposed in the show-cause letter, that the purpose is to promote that the permittee and the local ranger at that level sit around a table, look at options, identify what the problem truly is, and then develop solutions to that problem, and if they can come up with those solutions at that local level where the ranger agrees that it is a solution to the problem that he or she was concerned with, and it is a solution that the permittee can agree with, and again, this could be a solution that is different from the penalty as proposed in the show-cause letter, then essentially the problem is resolved at that level. Nothing further is taken on the show-cause letter. In fact, the April 4 direction notes that we would actually stamp that letter and denote that, that letter cannot be held against them for future penalties, and that if they come to agreement at the local level, that, that won't be counted as what we have termed a first offense.

Mr. CRAPO. The point I am raising though is—and I will use some of your other words from the letter—you state alternatively, if those same range permittees are not willing to work these problems out on a voluntary basis, then my only conclusion is that they are willing to accept the status quo and will have to live with the consequences of operating under their current annual operating plan and this new direction for uniform action.

The point I make is that if you cock the gun and put it to the head of the permittee and say now, come to the table and talk with me, and you lay out whatever options you discuss around the table, the permittee knows that the cocked gun is still there.

I am wondering how it is going to result in a voluntary exchange of discussion of options when the person whose finger is on the trigger is also one of those negotiating in the room with regard to what the options are going to be.

Mr. LEVERE. I don't necessarily view it as a cocked gun to their head that—what I view it is as them following up on the terms and conditions of their permit which they signed and agreed to follow, and we are imposing these penalties when they have violated those terms and conditions, something that they have already agreed to.

Mr. CRAPO. That they have already agreed that they have violated the terms and conditions of the permit?

Mr. LEVERE. No, that they would follow the terms and conditions of the permit.

Mr. CRAPO. But what if there is a disagreement? What if there is a disagreement over whether there has been a violation?

Mr. LEVERE. If there is a disagreement over the violation, then the ultimate call is the ranger out there to follow up——

Mr. CRAPO. But that is my point. The ultimate call of the ranger is the ranger's, and when the ranger says, no, I don't agree with you, there is a violation here, or it was intentional not accidental, or whatever the ranger concludes—the ranger is the judge, the jury, the investigator, and the executioner.

Mr. LEVERE. The ranger is the initiator, then there are other steps that are taken after that. There are appeal rights under 36 C.F.R. 251 which the permittee has available. They can appeal that ranger's decision to my level. Then if they don't agree with my decision, they can then appeal it above me to the Regional Forester level, and then if they don't agree after that, there is always the litigation route.

Mr. CRAPO. But what you are suggesting here is that the option that the permittee has is to either agree with the ranger or suffer the penalties and hope that somewhere up the chain, at that point in litigation, resolves the problem against the Forest Service, inside the Forest Service's own administrative system.

Mr. LEVERE. Those are two options, and a third option is that they follow the terms and conditions of their permit and not find themselves in that situation to begin with.

Mr. CRAPO. With the ranger being the one who decides whether they have done that subject to these extensive penalties?

Mr. LEVERE. That is that ranger's job.

Mr. UNGER. And that would be the case, Mr. Crapo, under the system without the uniform guidelines. The ranger, if he felt a violation had occurred, would make the decision as to whether that violation had occurred and make the decision which then, if the permittee felt was unfair, would be subject to appeal under the——

Mr. CRAPO. I understand that, and I don't disagree with the fact that we need rangers on the ground who are doing their jobs and doing them well and making these decisions and assuring that we protect our resources.

My point is that under the old guidelines and under the old approach, the rangers had a range of options that they could work with, and there truly was an opportunity to deal with one another. Now, under these new guidelines the ranger can say this is an intentional violation, and if you don't agree with me, then take her up the chain, but your permit is at least 25 percent eliminated if not 100 percent eliminated. Is that not correct?

Mr. LEVERE. That is what the uniform action guide says and that is for uniformity so that we are responding consistently across the

forest, but it is a guide, and the rangers, depending on the situation, can deviate from that guide if they see fit. They have always had that flexibility.

Mr. CRAPO. So they don't have to follow the guideline?

Mr. LEVERE. No, it is guidance.

Mr. CRAPO. I see my time is up, Madame Chairman. Thank you very much.

Mrs. CHENOWETH. We will have a second round of questioning, and I also would like to ask the members of the Forest Service to stay for the entire hearing, because we will have other witnesses, and we would like to be able to call you back. Thank you very much.

Mr. Gibbons. Before Mr. Gibbons begins his questioning, I would like to recognize Mr. Kildee and Mr. Vento, and the fact that they are with us today. I will call on you in the order in which you came into the committee. Mr. Gibbons.

Mr. GIBBONS. Thank you, Madame Chairman. Mr. Unger, you talked a lot about the uniform action guide and Mr. Crapo got into that a little bit. These are to afford opportunities under the uniform action guide, are they not, afforded to the permittee to meet with the Forest Service people, the forest ranger, to seek a cooperative solution to the problem or to the permit violation. Is that not correct, what you are saying?

Mr. UNGER. That is my understanding, yes.

Mr. GIBBONS. Would you help us on this committee, Mr. Unger, by referencing that part of the uniform action guide that permits this to take place? Would you point us to that segment and tell us where these opportunities are listed out and where they are referenced?

Mr. UNGER. I will ask Mr. Levere to respond to that directly in terms of the guides that we are discussing on his forest, but of course, the permittee and the ranger have every opportunity at any time to meet together and cooperatively discuss problems that may be viewed in the relationship from either side.

Mr. GIBBONS. We are referencing all of this discussion and all of this colloquy over the uniform action guide and how that relates to individual permittees' opportunities to resolve on a voluntary basis the permit violation that Mr. Crapo has talked about in terms of when that action takes place, how that comes before the Forest Service, what the permittee's opportunities are to voluntarily resolve in a cooperative fashion.

I would just like to know where that is referenced in these uniform action guides so that perhaps these permittees have a better understanding of just exactly what their opportunities are.

Mr. UNGER. Let me ask Mr. Levere to respond.

Mr. LEVERE. I would like to reference page two of the interim directive that I issued on April 4.

Mr. GIBBONS. Is that this year?

Mr. LEVERE. Yes.

Mr. GIBBONS. So we are talking an agreement that is exactly four days old?

Mr. LEVERE. Yes.

Mr. GIBBONS. Go ahead.

Mr. LEVERE. On page two under—and this is one of the examples in order to answer your question where the violation would be grazing excess numbers. In there, it says that under a first offense, there are two options, and this is identified as the preferred option in that interim directive, that upon receipt of show-cause letter, permittees meet with the unit ranger. A solution to the identified problems on the allotment are agreed to by the unit ranger and voluntarily accepted by the permittees. The agreement is documented and signed by all parties.

Mr. GIBBONS. So up until April 4, 1997, this voluntary agreement was not put in writing.

Mr. LEVERE. It was not explicitly contained in the uniform action guide on the Sawtooth National Forest.

Mr. GIBBONS. What about other forests, like the Humboldt-Toiyabe area? Mr. Nelson.

Mr. NELSON. The Humboldt-Toiyabe has had a uniform action guide since—well, the Humboldt since 1987.

Mr. GIBBONS. 1987, OK.

Mr. NELSON. And the Humboldt-Toiyabe since 1991. We have a little bit different system that we utilize than the one that the Sawtooth has put together.

There was a National Wildlife Federation lawsuit, I think in 1995, and as a result—against the Forest Service on the Humboldt for not enforcing grazing standards properly, and we tried to settle that out of court in cooperation with the Nevada Land Action Association, the Wildlife Federation, and the Forest Service. We worked on developing a uniform action guide that everyone could agree on. We did that, the court agreed with it, and we have implemented it now in both national forests.

This action guide separates willful violations versus unwillful violations. If it is apparent that the violation is unwillful, then we normally issue a warning letter to the permittee and the warning letter will describe what the violation is, will describe some remedies for correction, and then that will be the end of it. If it continues to occur, then we move into the actions as outlined.

It is a guide and the ranger has total discretion to use it or not to use it. It is primarily there. I think it helps both the permittee and the agency to provide for uniformity across the two forests in terms of decisionmaking.

You could have a situation easily without a uniform action guide where the penalties on two separate ranger districts could be quite different, one being much more severe than the other for basically the same thing.

In terms of willful violations of the permit, then we move right into suspension. The first suspension is recommended to be 25 percent for a three-year to five-year period.

Mr. GIBBONS. Let us get back to the question I asked Mr. Unger who deferred to Mr. Levere about where in your uniform action guide is this cooperative, voluntary agreement written that you will work with the permittees to resolve their problems. Is it in your agreement? Is it written like Mr. Levere just stated on April 5 or April 4 of this year?

Mr. NELSON. I will back up a little bit. We issue——

Mr. GIBBONS. I am just saying, is it written in your uniform action guide?

Mr. NELSON. It is not specifically in the uniform action guide, but every year, we develop operating plans in cooperation with the permittee that talk about the various requirements and agreements on how we are going to graze the forthcoming year.

Mr. GIBBONS. Mr. Nelson, I have just a very little bit of time left, and I want to ask you a question before we go on.

The discretion you talked about in the ranger to determine whether it is willful or unwillful in terms of the permit violation, what guidelines do you give your rangers to make that determination and how are they to determine whether it is a willful or unwillful violation?

Mr. NELSON. A lot of times, it is a judgment call, but sometimes, it is fairly easy to make. If someone has put their cows out a month in advance of when they are supposed to, you would have to consider that willful. If there are cows that show up in a unit that they are not supposed to be in because a fence is down, you would have to assume that was unwillful.

It is a judgment call, but it is usually not that difficult.

Mr. GIBBONS. Are there no guidelines——

Mr. NELSON. There are no guidelines to define what is willful or what isn't willful, but it is usually fairly obvious.

Mr. GIBBONS. Thank you, Madame Chairman.

Mrs. CHENOWETH. Thank you, Mr. Gibbons. I would like to recognize Mr. Kildee.

Mr. KILDEE. Thank you, Madame Chairman. Mr. Levere, does anything in the Sawtooth uniform action guide change any terms or conditions of a grazing permit?

Mr. LEVERE. No, they do not.

Mr. KILDEE. No change at all?

Mr. LEVERE. No change.

Mr. KILDEE. Does the UAG deal solely with violations of a grazing permit?

Mr. LEVERE. Yes.

Mr. KILDEE. Does anything in the UAG eliminate the right to an administrative or judicial appeal of a grazing violation decision?

Mr. LEVERE. No, it does not.

Mr. KILDEE. So they can appeal within your agency beyond the ranger on the ground?

Mr. LEVERE. That is correct.

Mr. KILDEE. And there are several levels administratively they could appeal?

Mr. LEVERE. Yes. There is a two-level appeal.

Mr. KILDEE. Hopefully, this would not have to happen, but they could have a judicial appeal if they did not feel satisfied with the administrative appeal?

Mr. LEVERE. Yes, that is correct.

Mr. KILDEE. Does the Sawtooth UAG eliminate administrative discretion in dealing then with a grazing violation?

Mr. LEVERE. No, it does not. In fact, there have been statements made that I removed that discretion from the rangers when I issued the March 3, and in that March 3 UAG, in the second paragraph on the second line, it stated that the delegated forest officer

still has the discretion and authority to determine whether a significant violation has occurred based on the merits of the individual situation.

When I issued the clarified direction on April 4, I bold-faced and capitalized that statement in an attempt to clarify that.

Mr. KILDEE. What has the general reaction of the ranchers been to the Sawtooth UAG?

Mr. LEVERE. Well, it has been mixed. I was very concerned about what I would call some of the good permittees who did voice some concerns, and that did concern me, and that is why I elected to clarify the direction last Friday in my April 4 memo.

Some of the permittees are very concerned. I guess my intent is that this shouldn't concern those permittees that are following the rules and obeying the terms and conditions of their permits. As far as those permittees that are not obeying the rules, not following the terms and conditions of their permit, my objective is that they should be concerned.

Mr. KILDEE. In your April 4, someone mentioned that it was four days old. That was in response to some of the concerns that have been expressed by some of the ranchers.

Mr. LEVERE. It was in response to some of those concerns with a few of the key permittees. I went out and solicited their comments, and then one of the other reasons, not that I was in violation of any procedure or process as has been hinted at here today, it is that I heard some folks wanted the opportunity for a public comment period, and since becoming forest supervisor of the Sawtooth National Forest, I will let my record stand that I listen to people and I respond to what I hear. I decided to allow for a public comment period in a notice that announced that in response to comments that I heard from the public. It was not that I had violated any procedure, rule, or law.

Mr. KILDEE. Thank you very much for your response, Mr. Levere. Thank you, Madame Chairman.

Mrs. CHENOWETH. I would like to now call on Mr. Vento.

Mr. VENTO. Thank you. Supervisor Levere, how many permittees do you have on the Sawtooth?

Mr. LEVERE. We have 195.

Mr. VENTO. And how many acres? That is what, some 300-plus acres of grazing land?

Mr. LEVERE. We have approximately 2,000,000 acres on the Sawtooth National Forest and approximately 80 percent of that is under grazing permit.

Mr. VENTO. Has there been any reduction or an increase in that in recent years?

Mr. LEVERE. Essentially, it has remained stable in terms of the amount of use. We have three allotments that we currently do not graze on. Two of those are in the Sawtooth Wilderness, and one of those is the Big Cottonwood allotment on the Twin Falls range district.

Mr. VENTO. Is that weather or environmental-related or simply that there is no bid on it?

Mr. LEVERE. Essentially, those in the Sawtooth Wilderness, if any of you have been there, there is uncertainty whether they are suitable or capable for livestock grazing. On the Big Cottonwood,

that was a situation where the permittee sold their base operations to Idaho Fish and Game, and we then made the decision to rest that allotment with the intent of going back at a later date and evaluating that allotment.

Mr. VENTO. So you couldn't put into a guideline all of the specifics or into a permit all the specifics, because that is something that is dependent upon basically the weather, is that correct?

Mr. LEVERE. Yes, to a certain degree, that is correct.

Mr. VENTO. Are there other factors as well that enter into it?

Mr. LEVERE. Yes. There are many factors that go into it. One of the factors right now that is probably holding us up in taking a serious look at the Big Cottonwood allotment and reissuing that permit is just budget.

Mr. VENTO. So when you are talking about budget, you have had a reduction in the number of personnel that you have to in fact serve and to monitor these allotments. Is that what you are saying? You have 190 allotments and you don't have the personnel to do the job, is that right?

Mr. LEVERE. Well, we have the same amount of personnel, but in order to charge appropriately in terms of what they are working on and with the budget we get, we are having to have that personnel work on other tasks such as timber sales, things like that.

Mr. VENTO. But these uniform guidelines didn't wipe out any law or any other procedures. It sounds like they put in place something that is more determinate, predictable, and certain with regards to what penalties and sanctions would be in place as opposed to something that was less specific, is that correct?

Mr. LEVERE. Yes. That is correct.

Mr. VENTO. So it is determinate. You know what to expect if certain things happen and before, it hadn't been quite that explicit, is that right?

Mr. LEVERE. Yes. That is correct. In fact, if you would allow me, I always say a picture is worth a thousand words, and I could show you some pictures of what I am trying to stop out there.

Mr. VENTO. You are talking about some problems with riparian areas maybe?

Mr. LEVERE. Yes.

Mr. VENTO. You are talking about fences that are chronically broken maybe?

Mr. LEVERE. I have some examples. Would you like me to——

Mr. VENTO. So that ends up kind of tripping over from Supervisor Nelson's example from something which is an accident to something that really isn't excusable, that really we need to answer.

Now, Supervisor Nelson, you have had the Toiyabe and Humboldt for a while, you have been out there, as I recall.

Mr. NELSON. That is correct. Yes.

Mr. VENTO. And the fact is, you have had these same type of uniform guidelines or uniform action plan in place and what has been the experience with it? Is it working?

Mr. NELSON. Yes. It works very well. We have consistency across the forests and I think the permittees know what to expect if they violate it.

Mr. VENTO. Let us cut to it. Has this resulted in more violations or less violations?

Mr. NELSON. I don't think it affects the number of violations at all. It helps us, I think, get some compliance in terms that we might not have.

Mr. VENTO. Through some clarity?

Mr. NELSON. Yes.

Mr. VENTO. You came to this not completely voluntarily in this case, is that right?

Mr. NELSON. That is correct.

Mr. VENTO. Mr. Unger, is this policy with regard to this uniformity and this plan in this particular mode, this streamlining is something you are trying to institute throughout the Forest Service today and encouraging it?

Mr. UNGER. No. We have no national policy. These uniform action guidelines have been adopted forest by forest in about 16 forests that we know of, and all the forests in Region 2 which is another ten, so about 25 forests have these, and those decisions have been made at the local level.

Mr. VENTO. Can you make any judgment about whether they have resulted in unfair treatment or resulted in some specific problems that—I suppose every one of these, you learn as you go along, but is there something here that——

Mr. NELSON. To my knowledge, this is the first time that there has been any serious concern about the institution of uniform guidelines.

Mr. VENTO. Part of the process here, Mr. Levere, is to provide some education ahead of time, and in retrospect did you in fact try to consult and visit and explain to folks what was happening beforehand?

Mr. LEVERE. In the almost two years that I have been on the Sawtooth National Forest, the range program is a key program on the forest and when I have interacted with permittees, we are always trying to promote good stewardship on the lands. We are trying to emphasize the need to follow the terms and conditions of the permits, and we did that.

In 1995, we issued an initial uniform action guide and based upon the performance that I saw in the 1996 grazing season, I felt the need to issue this updated uniform action guide.

Mr. VENTO. Have there been some specific problems that you are trying to resolve? You said you had a lot of examples.

I guess maybe you have some photographs you wanted to show us and pass around, I think, that probably would be useful to see what you are talking about. Do you have them here?

Mr. LEVERE. I would like to take that opportunity.

Mr. VENTO. I would like to see that.

Mr. LEVERE. This first example is a picture of salting down into a riparian area, and this is all that occurred in the 1996——

Mr. VENTO. This is barred by the agreement that they signed, that you don't put salt down in a riparian area.

Mr. LEVERE. Essentially, that is exactly the place where you shouldn't do salting. Here is another——

Mr. VENTO. Because it concentrates the cows down there.

Mr. LEVERE. In this particular area, there were 17 piles of salt in a riparian area in direct violation of the terms and conditions of the permits for that specific location.

Here is an example of some overgrazing on the forest. Here is another one of overgrazing right there by the stream. A lot of people would debate whether or not we can accurately measure that. I publicly made the statement that my 12-year-old son knows that that is overgrazed, folks. It is not that we are making a borderline call.

Here is an example of the maintenance of improvements. Here is a water trough. The responsibility of maintenance goes to the permittees. Here is an example of that.

It is this kind of thing that I am trying to stop, and I guess I would like to make the statement that this is your public land, your national forest. Is this the way you want it managed?

Mr. VENTO. I am glad you are trying. My time is up.

Mrs. CHENOWETH. Mr. Vento, I thank you and I would like to call on the——

Mr. VENTO. You are welcome, Madame Chairman.

Mrs. CHENOWETH. I would like to call on the gentleman from California, Mr. Doolittle.

Mr. DOOLITTLE. Madame Chairman, if I may, I think I will reserve my time at this point.

Mrs. CHENOWETH. Thank you. Mr. Levere, you have mentioned in your uniform action guidelines issued March 3, 1997, and you have mentioned in the press that there are good apples and there are bad apples. Can you tell me who the bad apples are?

Mr. LEVERE. Well, there are certain permittees that have had a history of not following the terms and conditions of their permits, and who have received penalties in the past, and frankly, I would prefer not naming names.

I don't know all of them specifically. There are some examples this last year where we had certain permittees have violations. In the 1996 season, 64 of our 195 permittees received some type of violation notice. Most of those were warning letters.

Mrs. CHENOWETH. Let me ask you, is Scott Bedke or Bud Bedke considered a bad apple or Joe Tugaw considered a bad apple?

Mr. LEVERE. The Goose Creek permittees—that is an allotment where we have had some challenges. Mr. Tugaw did receive a warning letter this last grazing season. I am not sure that I would consider Mr. Tugaw a bad apple. Everybody is entitled to a mistake.

Mrs. CHENOWETH. Mr. Tugaw is past president of the Idaho Cattle Association, and I do see here on page two of your uniform action guide that you say "I see an ever-increasing breakdown in the communication between the Forest Service and the permittees instead of discussing and attempting to resolve problems with the Forest Service, I see a more adversarial role occurring instead of attempting to work things out between the permittees and the Forest Service. The more immediate response by some of the more aggressive range permittees is to seek remedies either through what I perceive to be negative press targeted at individuals and/or the agency or through local political contact and hopefully, political in-

fluence over agency decisions through formal administrative appeals and/or through potential litigation."

You go on to say that in your uniform action guide that, "Although all of these remedies are within the legal rights of the affected range permittees, they frequently are not the most productive ones for the range permittees or the Forest Service from my perspective."

Would you please explain that statement?

Mr. LEVERE. Essentially, that is the crux of what I am trying to do, is to try to get the permittees to meet with the Forest Service at the local level to resolve these issues. I am not trying to allude that those other options that the permittees have available to them—they are clearly within their right to do so.

I would hope though that they won't pursue those other options in lieu of meeting with the Forest Service, and that is essentially what I was after, and that is the crux of our new uniform action guide to again, try to promote and encourage permittees to meet with rangers at the local level to resolve their problems.

That is the desired outcome.

Mrs. CHENOWETH. Have you issued or read or studied many uniform action guides or policies or have you studied NEPA or how these guidelines are issued under NEPA, and do you feel that statement is proper in the issuance of uniform action guidelines?

Mr. LEVERE. To my knowledge, the issuance of uniform action guides are not—NEPA is not required to do that. The authorities under which we administer terms and conditions of grazing permits are in FLPMA. Section 204(a) in FLPMA authorizes the Secretary to suspend, cancel, modify, and issue permits. That, in turn, is if you go to—I believe it is 36 C.F.R. 222.4, that then authorizes the Chief of the Forest Service to suspend, modify, cancel, and issue permits, and then if you go to the Forest Service manual, if you look under Forest Service manual 22.04——

Mrs. CHENOWETH. I do understand that.

Mr. LEVERE. [continuing]—that gives me my authority.

Mrs. CHENOWETH. It does, and my question though was not answered. Do you think this type of statement is proper in the issuance of uniform action guidelines plus your closing statement which said, "I am confident that most will accept the personal responsibility and accountability that goes along with the UAG. However, there is also no doubt in my mind that there will be a few range permittees who will not be willing to work with us. To those few, I can only offer these words of advice. We can either work together or we can work against one another. The route you choose is yours. The consequences of each route are yours to accept or reject. I think I have made my offer and my intention clear. Now, the choice is yours."

Do you realize, Mr. Levere, that the National Environmental Policy Act and your own guidelines set up specific methods under which new action guidelines should be issued? There is such a term under NEPA. The Supreme Court has ruled on it often as a major Federal action, and a major Federal action requires an environmental impact statement.

On page one of your own uniform action guidelines, you state that this UAG is important and you go on to say important in that

it will no doubt have major impacts both internal to the Forest Service and external to our range permittees and forest visitors.

So you have indicated that this is a major Federal action, and indeed it is, in my opinion. I agree with you, and yet there was no notice, there was no issuance of an environmental impact statement or economic impact statement, there was no attempt to put these uniform action guides in the form of rules and regulations and publish them in the Code of Federal Regulations.

I am concerned because this has been such an extraordinary process. My concern is, as I have said to Mr. Dombeck, I honestly and very sincerely want to see the Forest Service be all it can be, and I share with you the vision of Teddy Roosevelt and Gifford Pinchot.

Mr. Unger, I want your forest supervisors to be the best there is, and my comments are not personal, but rather my desire is to make sure everybody operates on the same page, and that page has been laid down by Congress, in NEPA and the APA.

Mr. UNGER. Could I respond to that, Madame Chairman?

Mrs. CHENOWETH. Yes.

Mr. UNGER. It is my understanding as well as Mr. Levere's that NEPA does not apply in this way to the issuance of guidelines of this kind because they don't cause the particular environmental result and are therefore categorically excluded as administrative actions, and thus, don't require the development of environmental analysis or impact statement.

Mrs. CHENOWETH. Mr. Unger, and we can call on your attorneys or other attorneys who are here, but the courts have agreed over and over again that a major Federal action is the key that kicks in an environmental impact statement and I think it is *National Helium* v. *Morton* issued in the late '70's that stated that with that also goes an economic impact statement.

So if we are to require or even suggest that there should be an environmental impact statement on a single reissuance of a permit and yet no environmental impact statement on a major policy change in two forests, then somehow, even NEPA becomes punitive in its application, and that is what we want to get away from.

Mr. UNGER. Well, I would agree with that, but I believe the test is whether there is a significant environmental impact expected from the action, and the action of issuing these guidelines does not result in any decision in and of itself. It sets forth guidelines for decisions to be made, and it is those decisions then that a test has to be applied as to whether there is a significant environmental impact.

Mrs. CHENOWETH. And I just returned to my opening statement, and that is that the agencies need to operate within the umbrella of authority conferred on them by Congress and when it is perceived that they step outside that authority, then our free system reacts and it causes hearings like this.

Mr. UNGER. We would certainly want to dispel any perception that we are acting outside the bounds of Congress.

Mrs. CHENOWETH. So with regards to what triggers an environmental impact statement, I would urge you to have your attorneys look back at Supreme Court decisions and the history of NEPA and

the debate that ensued around the passage of NEPA so we can get back on the same page.

Mr. UNGER. We would be happy to do that. In fact, we have a representative of our Office of General Counsel here today, if you want to explore this further now or we can do it at a future time.

Mrs. CHENOWETH. Thank you very much. At this time, I would like to call the gentleman from California, Mr. Doolittle.

Mr. DOOLITTLE. I have no questions at this point, Madame Chair.

Mrs. CHENOWETH. Thank you, Mr. Doolittle. I would like to return for another round of questioning to Mr. Crapo.

Mr. CRAPO. Thank you, Madame Chairman, and I have three or four issues I want to get through in my five minutes, so I am going to try to be hurrying along here.

Most of the questions will be to you, Mr. Levere, since the forest you supervise is in my district.

First of all, you indicated earlier that you were facing serious budget problems, and with regard to the budget issue, one of the concerns I have is that it is my understanding that a lot of time is being used by the range cons under the water adjudication that we are doing in the State of Idaho, is that correct?

Mr. LEVERE. That is correct.

Mr. CRAPO. And do you know how many thousand claims or how many claims have been filed by the Forest Service in that adjudication?

Mr. LEVERE. I can only speak for the Sawtooth. We have approximately 1,800 claims filed with the court.

Mr. CRAPO. That is an issue that I am probably going to want to talk with you about separately at some time, but the concern I have is that range cons are being used for all of that activity when it is my understanding that other agencies are using other personnel who are not in such critical circumstances, sometimes even temporary hires to do the work that is necessary.

Is there a reason that you are not doing that?

Mr. LEVERE. Yes. Essentially, the advice that I have been given and just to give you an idea, about 35 percent of our range cons' time last year was spent on the field verification for water adjudication, and in order to have credence in court, if we get to that point, that we need qualified individuals that are out there doing that field verification that have the appropriate credentials that if we do get eventually into court and need their testimony there, that they are credentialed individuals to do that, and that is why we have our range cons performing that work and not just seasonal employees that have no credentials whatsoever.

Mr. CRAPO. All right. It is my understanding that that is not necessarily necessary, but because of the pressures of time, I will discuss that with you outside the hearing. That might be an area in which you could save some funding for your budget.

Secondly, in my first round of questions, toward the end, you indicated that these were guidelines only, and the rangers did not have to follow them, is that correct?

Mr. LEVERE. That is correct.

Mr. CRAPO. I would like to ask you, is that a practical reality? In reality, are any of the rangers not going to follow these guidelines?

Mr. LEVERE. Yes, and in fact, I can give you a specific example. This last grazing season under which we had the 1995 uniform action guide in place, one of my rangers took the liberty of working with the permittee at the local level and instead of imposing a 75-percent suspension which would have been the appropriate measure as outlined in the uniform action guide at that time, he elected to, in discussing with the permittee, the permittee was willing to take a voluntary reduction for a two-year period. They worked that out. It was less than 25 percent.

Mr. CRAPO. Wouldn't it be fair to say that in the vast majority of cases, you would expect your rangers to follow these guidelines?

Mr. LEVERE. I would expect my rangers to evaluate the guidelines and make a decision that given that specific situation, do they fit; if they don't, then do something different.

Mr. CRAPO. What is the purpose of the guideline if you don't expect—we have heard a lot here about more certainty, more predictability, but if they really don't mean anything and the rangers can do whatever they want, what is the point?

Mr. LEVERE. I do have the expectation that they follow them to a certain degree unless they can explain why they shouldn't be followed.

In many cases, in fact, built into the newest version of the uniform action guide, if they follow option one, it is built in there our desire, our preferred option, that solutions are resolved at the local level and that they do deviate from the penalties as outlined.

Mr. CRAPO. Do you allow in the guidelines for variations in the penalty between voluntary and involuntary violations?

Mr. LEVERE. No. We do not distinguish between that.

Mr. CRAPO. So that a fully intentional violation will receive the same penalty as an accidental violation under the guidelines?

Mr. LEVERE. There is a range in the guidelines and I would think that if it is intentional and blatant that it actually be the upper end.

Mr. CRAPO. But the lower end is at least a 25-percent loss of the permit.

Mr. LEVERE. That is correct.

Mr. CRAPO. Earlier in some of the other questions, we were discussing whether discretion has been removed, and you pointed out that you had bolded the fact that the forest officer still has the discretion to determine whether a significant violation has occurred.

But you followed that with another sentence that I think makes the point. However, once a determination has been made that a violation has occurred, this guidance is recommended. I understand that you mean by that that this is guidance your rangers should follow unless, as you indicate, and I think it is good to hear in this hearing that you are going to be very open to letting them follow more flexible approaches that they determine to be better.

But back to the point I was addressing in my first series of questions, sure, there is discretion in the ranger to determine whether a violation has occurred. But under these guidelines, once the ranger makes a determination that a violation has occurred, whether it is by accident or on purpose, then the ranger is expected under these guidelines to implement the penalties. Is that not correct?

Mr. LEVERE. I think there are a couple options that they have available to them. If they look at that, under this direction, they are to issue a show-cause letter which proposes the 25-percent suspension, and discussions with the permittee that it shows that it was unintentional or accidental, it is at that time that the ranger can, in their decision letter, could offer a lesser penalty than those outlined in the uniform action guide.

Mr. CRAPO. But just to make the point that I was going at earlier once again, let us assume that there was a circumstance where some vandalism or some other act caused the fence to be taken down and there was a violation.

The ranger, however, felt that the fence was down because of negligence or intentional action by the permittee, so the ranger issues a violation, and say he picks 50-percent loss of the permit or whatever he picks.

Then the permittee has to go into the room with the ranger and convince the ranger that he didn't do it or something should be changed, and if he doesn't agree with the ranger, then the full penalty is imposed and he has to then appeal up the chain. Is that not the process that you are proposing?

Mr. LEVERE. In the situation that you gave, if it was say, vandalism or a fence was cut and it wasn't done by the permittee and the ranger doesn't know that initially and they issue a show-cause letter, then the permittee comes in and makes their case, and it turns out in this situation that it is determined and that the ranger agrees that it wasn't the permittee's responsibility or the permittee did not do that, that it was vandalism by someone else, the uniform action guide recognizes that.

Mr. CRAPO. But it is all subject to the ranger agreeing, and if the ranger in his wisdom decides no, then it is over at that point, and the full penalties, what I consider to be very rigid penalties, are imposed.

Mr. LEVERE. That is correct. The ranger then imposes the penalty as outlined in the uniform action guide or if they think there are extenuating circumstances, their decision letter could be a lesser penalty, but it is that ranger's call. That is within their authority, that is what I expect them to do.

Mr. CRAPO. Thank you.

Mrs. CHENOWETH. Thank you, Mr. Crapo. I would like to call on Mr. Vento.

Mr. VENTO. Did the ranger always have this type of discretion before and after this action guideline? This is nothing new, is it?

Mr. LEVERE. That is correct. They have always had that discretion.

Mr. VENTO. So there is nothing new. All that is new is that there is more certainty and predictability.

Do you review these actions? You mentioned 65 out of 195 permittees. I guess more than one went to some folks, but do you review the actions when these are issued, these warnings are issued, or do you review the results? Is that correct, do you review each of those?

Mr. LEVERE. The only time that I review those actions is if they are truly appealed. Under the new uniform action guide though, I will be monitoring to see if the option one, where they have worked

it out at the local level, I want to monitor that to see how successful that is in this upcoming grazing season.

Mr. VENTO. Well, my point was that informally, do you monitor what happens? Did you informally monitor before what was happening?

Mr. LEVERE. Yes.

Mr. VENTO. So you are concerned about the conduct of a ranger. If you have somebody out there that is overbearing or you look at that as part of how they do their job, if they are getting along to some extent.

Mr. LEVERE. My expectation of my rangers when they are issuing a show-cause letter is to give me a heads-up on that, so I am aware of——

Mr. VENTO. I understand. I don't mean a formal review. You obviously do that, but you are actually in these action guidelines now saying in these guidelines that you are going to monitor it, that you are going to pay closer attention to it, is that correct? That is what you are trying to get across.

Mr. LEVERE. That is correct.

Mr. VENTO. There was discussion about the water litigation that is going on, and you said you had 1,800 claims in the Sawtooth. How many claims totally are there that are in the Sawtooth that are not Forest Service claims? Do you know what the total range is?

Mr. LEVERE. I don't know the answer to that.

Mr. VENTO. Would you say it would be thousands more?

Mr. LEVERE. I wouldn't even want to speculate on that.

Mr. VENTO. Well, maybe for the record, we ought to look, but my point is, I would suggest to those that there are a lot of claims being made on the Federal lands, and I am sure many of them are appropriate. There are certain individuals that have various water rights there and claims that they made that should be recognized at the State level, and I am pleased to hear that the Forest Service has taken a very serious attitude with regard to protecting the Federal forests and other water rights that are necessary for this land to function properly in my judgment.

Now, Mr. Unger, you had proposed that you had someone with you that could respond to whether or not in fact this is a NEPA action, and the chairwoman had run out of time, so I thought maybe I could take of my time, if it would be permitted, to hear from that person that you have here as to whether or not these action guidelines are in fact a NEPA action. There seems to be a lot of interest in that, and I think that it would be helpful for all of us if we could clarify it.

Mr. UNGER. Mr. Michael Gippert of the Office of the General Counsel will respond.

Mr. GIPPERT. Yes. It would be our view that NEPA would not be triggered by this sort of an instrument that provides guidance, because as Mr. Unger really has pointed out, the primary reason is that it is a two-part test for NEPA to come into play, and that is whether it is a major Federal action significantly affecting the quality of the human environment.

The human environment would not be affected by the uniform action guide, at least that would certainly be my advice to the For-

est Service that there would be no application of NEPA in this instance.

There is also a provision in the Council on Environmental Quality regulations that criminal and civil enforcement actions are exempt from NEPA because, of course, if they weren't, that would drag the whole system to a complete halt.

Mr. VENTO. That would be counterproductive, I guess. The reason that that was added, do you believe that that is counterproductive and a way to avoid civil and other types of penalty actions? Is that your point?

Mr. GIPPERT. Right.

Mr. VENTO. Now, Mr. Unger pointed out that 16 forests have uniform action guides right now. Have you had any of these that have gone through any type of NEPA procedure or EIS procedure?

Mr. GIPPERT. Not that I am aware of.

Mr. VENTO. And you have had no court test of any of it, is that correct?

Mr. GIPPERT. No, there has been no court challenges that NEPA should be applied in this kind of a situation.

Mr. VENTO. I appreciate that. Mr. Nelson, on the Toiyabe and Humboldt, you have had how many years of experience with uniform action guides?

Mr. NELSON. Personally, I became familiar with them in 1992, so it would be five years.

Mr. VENTO. You said that they were working all right. Do you have an excessive number of violations? How many violations or how many warning letters have you had sent out?

Mr. NELSON. I don't know the total. I did look at it for last year. We had 40 warning letters that went out, and we took 13 actions in terms of—there were two cancellations. One was the result of a permit being waived back to the forest. The other was a cancellation because the permittee refused to pay his fees.

The rest of them were in the 25-percent suspension range.

Mr. VENTO. He didn't forget to pay his fees because of vandalism, did he?

Mr. NELSON. No, I don't think so.

Mr. VENTO. How many acres do you have on the Toiyabe-Humboldt, do you know?

Mr. NELSON. Well, the Humboldt is permitted for about 245,000 AUMs. The Toiyabe is permitted for about 75,000 AUMs.

Mr. VENTO. So that is how many permits?

Mr. NELSON. In terms of permits, I think there are approximately 170 permittees roughly on the two national forests.

Mr. VENTO. I am just trying to get some perspective. So you have had a cooperative effort that is going on in terms of if you make changes like this, it is your responsibility to try to communicate or educate the permittees.

Mr. NELSON. We work with that all the time in terms of utilization standards. We have offered several courses to anyone who is interested in how to determine proper utilization.

Mr. VENTO. Of course, riparian areas, as Supervisor Levere pointed out, are of course one of the most serious areas in terms of where we really have to work a lot harder.

Mr. NELSON. That is true.

Mr. VENTO. We did so much work on that in terms of oversight, and I think the Forest Service generally came out ahead, but it obviously is an ongoing concern in terms of weather and in terms of water, so I very much appreciate the work you are doing there, both of you, and commend you for it.

I hope that this misunderstanding about these policy guideline issues can be worked out. Thank you. Thank you, Madame Chair.

Mrs. CHENOWETH. Thank you, Mr. Vento. I would like to call on the gentleman from Nevada, Mr. Gibbons.

Mr. GIBBONS. Thank you, Madame Chairman, and I want to join you in your comments about all of us wishing to have this forest or any forest in this country managed in the highest possible manner with the greatest possible outcome, and to you gentlemen, you obviously know that while we want the forest managed in the proper way, especially for those constituents that we may have in our districts, that sometimes, there is a disagreement, and our role here is not necessarily to ask you warm and fuzzy questions that make you look good, but we are here to answer and ask those questions that are concerning the constituents that have brought up to us.

With that in mind, Mr. Nelson, and I am glad you are here, because you represent the Humboldt-Toiyabe National Forest, we have certain constituents sitting behind you that are going to testify afterwards, and would you assure this committee that your agency is not going to single them out for any particular action based on what they happen to say in disagreement with your policy if they testify here before us, because we will watch this action? Will you assure this committee that you will take no punitive action?

Mr. NELSON. Yes, sir. That would be unprofessional to do that.

Mr. GIBBONS. OK. We talked a little bit about numbers of acres in the Humboldt and the Toiyabe National Forest that you manage, and the total number of grazing allotments in there that have originally started out, with what is occurring today, what is the general trend? Have they remained the same, has there been a decrease? What has happened?

Mr. NELSON. In terms of the total allotments, as far as I know, the total numbers remain the same.

Mr. GIBBONS. How many vacancies are there?

Mr. NELSON. I would estimate there is probably about 50 vacancies on the two national forests, in that vicinity.

Mr. GIBBONS. Can you give us a percentage total?

Mr. NELSON. Slightly over 300 allotments, so we are looking at 50 as a percentage of 300.

Mr. GIBBONS. I can give you the numbers. I just wanted to know if you knew them.

First of all, on the Toiyabe, there are 122 grazing allotments. There are 43 vacant. That is a 35.2 percent.

On the Humboldt National Forest, 199 allotments; there are 16 vacancies, and that is a little over eight percent.

What is the reason for this? Why are we seeing this high rate of vacancy?

Mr. NELSON. The problem that I am having is finding the personnel to do the necessary analyses to reallocate the allotment re-

sources. Our budget in 1994 was $1,500,000, and at that level, we can do a lot of things. In 1995, it dropped to roughly $900,000.

Mr. GIBBONS. So under this manpower and funding shortage, what is your projection as to your expectations of having these reviewed?

Mr. NELSON. Right now, with the $700,000 budget roughly that we have, we can't even hardly get the permit administration job done to date. Unless the budget changes, no, I do not.

Mr. GIBBONS. Mr. Nelson, I have just one final area that I want to talk to you about. I am sure you knew that I would ask you about it, since this is an old area, old ground that we have communicated on before.

Within the last couple of years, there has been a county grand jury investigation of some of the activities of your forest rangers in Elko County, has there not been?

Mr. NELSON. Yes, sir.

Mr. GIBBONS. And you are aware of that?

Mr. NELSON. Yes, sir.

Mr. GIBBONS. And you, when they subpoenaed your forest rangers, refused to let your forest rangers testify before this grand jury.

Mr. NELSON. It was not me. It was the Regional Forester out of Ogden that refused to let them testify.

Mr. GIBBONS. And what was the reason for his refusal?

Mr. NELSON. I am going to have to defer to Dave on that.

Mr. UNGER. I would be happy to respond to that. In matters of Federal land management, it has been traditional over the years for these matters involving litigation to be handled in Federal district court.

Mr. GIBBONS. This was not a civil matter, was it?

Mr. UNGER. I am going to have to ask Mr. Gippert to comment on this further.

Mr. GIPPERT. What we did in that case was to move in Federal district court to quash the subpoena which is kind of standard practice, although this is a rare occurrence to have a Federal official subpoenaed before a State court proceeding.

The Ninth Circuit affirmed the District Court's disposition of the subpoena.

Mr. GIBBONS. What were the issues that they were asking you to come forward to testify about?

Mr. GIPPERT. I don't recall that we actually knew the issues nor would they actually be limited. Grand juries can explore whatever the grand jury is convened to explore.

I know that the issues included Federal land management, though, and it is our general course of action to remove such matters to the Federal court system.

Mr. GIBBONS. Mr. Nelson, when the grand jury report was issued, did you find anything within that grand jury report that was helpful to you in the formulation of your plans or activities and the conduct of your management on the Forest Service lands?

Mr. NELSON. Nothing I can recall, sir.

Mr. GIBBONS. You made no policy changes based on that grand jury report?

Mr. NELSON. No, I have not.

Mr. GIBBONS. Thank you, Madame Chairman. That is all I have.

Mrs. CHENOWETH. Without objection, the Chair yields to Mr. Crapo an additional two minutes.

Mr. CRAPO. Thank you, Madame Chairman. I just wanted to follow up with Mr. Levere on the question of whether the rangers really do have to follow the UAG that you put into place, because your answers have intrigued me.

Is it correct that if a ranger in your district chooses to ignore the UAG and never follows them, that there will be no consequence to that action?

Mr. LEVERE. As long as my rangers are operating within the law, rules, and regulations, I don't have any recourse there. This is a recommendation for them to bring uniformity across the Sawtooth National Forest. It is my desire that they do follow it, but they have discretion.

Mr. CRAPO. And there is no consequences to them in their employment if they choose not to follow these guidelines?

Mr. LEVERE. That is correct.

Mr. CRAPO. Mr. Unger, you indicated that there are 16 forests that are using UAGs?

Mr. UNGER. Actually more than that. There are 16 in all of the regions other than Region 2 and all the forests in Region 2 should be added to that, so a total of 25 that we have counted so far.

Mr. CRAPO. And do the rangers in those forests follow the UAG?

Mr. UNGER. To my knowledge, they have discretion in a manner similar to that that has been described here this afternoon. I have not read all of these guidelines. Some may vary from forest to forest because they have been developed——

Mr. CRAPO. What I am trying to get at here is, do the rangers follow the UAGs or don't they?

Mr. UNGER. Well, I would have to say that I would expect that they are using them, because they have used them for some years, and they are finding them useful, but I do not have any specific ability to report to you exactly how many cases they followed them or how many they did not.

Mr. CRAPO. Mr. Levere, did you want to follow up on that?

Mr. LEVERE. Yes, Congressman. Just as an example, in 1996, there were 24 actions taken against 64 permittees. Only eight of those 24 actions resulted in show-cause letters.

Some of those show-cause letters were consistent with the uniform action guide; some of them varied. Again, it depended on the situation, and that was the ranger's call.

Mr. CRAPO. Then no ranger can tell a permittee that he has to do this, that he has to follow the UAG?

Mr. LEVERE. It is a recommendation to the ranger.

Mr. CRAPO. When they are supposedly negotiating around that table?

Mr. LEVERE. That is correct.

Mr. CRAPO. All right. Thank you.

Mrs. CHENOWETH. Mr. Levere, I am interested in having you look at the display up here, and following Mr. Crapo's line of questioning, those rangers who on their own have decided to follow the UAG, if a permittee doesn't follow the UAG, there has been a dramatic change between the UAG of 1/27/95 and the one of 3/3/97, dramatic change, and if a permittee does not follow the UAG, he

can have his numbers of animal units per month reduced from 25 to 100 percent, is that correct?

Mr. LEVERE. The uniform action guides are not intended for the permittees.

Mrs. CHENOWETH. Pardon me?

Mr. LEVERE. They are direction to the rangers and how they are recommended to enforce terms and conditions of the permit. What the permittee is held accountable for is the terms and conditions of their permit.

Mrs. CHENOWETH. Do you admit that it is quite a change from the previous guide? On 1/27, their first offense was a warning letter and asking them to remove their livestock within three days. Under 3/3, the first offense is a show-cause letter suspending 25 to 100 percent of the numbers or season for three years or cancel the permit.

Mr. LEVERE. My reasoning for eliminating the warning letters from the Sawtooth uniform action guide is that I felt that warning letters were essentially ineffective and a waste of time for the Forest Service on the Sawtooth National Forest.

What I saw was the situation where permittees that continued to violate on their allotment, they ignored warning letters, and they didn't have any effect on the behavior. Those situations where warning letters did have an effect, I felt the warning letter wasn't necessary. I verbally told my rangers instead of taking the time and wasting the taxpayers' money writing warning letters, if it is that minor of a situation, just call the permittee up and tell them verbally the situation.

Again, that was my attempt at streamlining and being more efficient and effective.

Mrs. CHENOWETH. Well, Mr. Levere, we are under a great burden back here in the Congress, and that is to balance the budget, and what if we had the attitude that you are wasting our time and that maybe we ought to reduce your salary by 25 to 100 percent because I am personally offended at the way you are handling these uniform action guides? How would you feel about that?

Mr. LEVERE. I would feel that that would be a personal attack on me and something that I would think is not appropriate.

Mrs. CHENOWETH. Now, sir, you understand why there is so much tension at the Sawtooth National Forest. Number one, the fact that these guidelines are imposed inequitably depending on the permittee or the ranger, and the fact that this kind of directive has never gone through the public hearing process.

It is absolutely punitive, arbitrary, and in my opinion, capricious.

I am sorry about that. You mentioned also that you have been working with the Idaho Fish and Game. How long has it been since you have worked with the Fish and Game, and did they have input into the recommendations that you put forth or the policy or the new law, whatever it is, in the uniform action guide?

Mr. LEVERE. My reference to Idaho Fish and Game is that they had purchased the base property of one of the permittees, and it was on that particular allotment—I believe it is the Big Cottonwood allotment.

At that time, and this was a number of years ago, three or four, I believe, that the decision was to rest that allotment and then

when we had the resources to evaluate that allotment, we would take a look at that and then decide on reissuance of a permit.

It was in that—that was the reference to the Idaho Fish and Game. I did not consult with Idaho Fish and Game on the development of these uniform action guides.

Mrs. CHENOWETH. Mr. Levere, how many timber sales have you put up in the Sawtooth?

Mr. LEVERE. I don't know the specific number, but——

Mrs. CHENOWETH. Within the last year.

Mr. LEVERE. [continuing]—within the last fiscal year, the Sawtooth National Forest sold 18,000,000 board feet. That was in excess of our target on the Sawtooth National Forest.

In fact, in Region 4 in terms of percent accomplishment on timber sales, given our target, the Sawtooth National Forest produced the highest percentage in timber accomplishment.

Mrs. CHENOWETH. You indicated that there was not enough money in the budget for grazing and yet we increased your budget, the budget for grazing to the Forest Service by $11,000,000 last year. That was not a reduction, and the amount allocated for resource planning which would include ecosystem management was $130,000,000?

Mr. LEVERE. Uh-huh.

Mrs. CHENOWETH. Was there money taken from grazing management and placed by your decision into ecosystem management?

Mr. LEVERE. No, there was not.

Mrs. CHENOWETH. There was no money that was allocated from grazing into ecosystem management?

Mr. LEVERE. That decision was not made at my level.

Mrs. CHENOWETH. Was the decision made at your level, Mr. Unger?

Mr. UNGER. I would have to look at the records to see how the allocations were made. The budget was increased. Those funds were allocated to the regions and the regions then allocate the funds to the individual national forests, so we would have to see how those funds were allocated by the region and why in one forest or another they didn't receive what they would like to have.

Mrs. CHENOWETH. Mr. Unger, I wonder if we might have a full report for the committee's purpose with regard to what was allocated by Washington——

Mr. UNGER. Certainly.

Mrs. CHENOWETH. [continuing]—for grazing and for ecosystem management.

Let me ask you, Mr. Levere, how many violations or what percentage of all the violations were resource damage related last year and were there violations, resource-damage violations, on Mr. Bedke's allotment?

Mr. LEVERE. Last year, there was no penalty imposed on the Goose Creek allotment which is the allotment that Mr. Bedke runs on. Mr. Bedke is under a current 25-percent, I believe—well, a suspension. I am not quite sure of the exact percentage, but it was 14 days in the spring and 14 days in the fall.

That suspension was done in the previous grazing season, 1995, and it is a two-year suspension.

Mrs. CHENOWETH. And that suspension was for what?

Mr. LEVERE. That was for improper maintenance of improvements and cattle in the wrong unit on the allotment.

Mrs. CHENOWETH. Do you realize how much five percent means to a person whose income is dependent on that?

Mr. LEVERE. Yes, I do.

Mrs. CHENOWETH. I appreciate your being here, gentlemen, very much, and I know this is a difficult hearing. I very much appreciate your being here.

I would like to ask you to remain in the hearing room, and we would like to call you back later.

Mr. Vento.

Mr. VENTO. I have one additional question to the two supervisors, by virtue of somebody appearing before the committee, they wouldn't receive favorable treatment either, would they, by virtue of your work in terms of management of these permittees? They wouldn't receive favorable treatment by virtue of that. Coming here doesn't immunize them from something, does it?

Mr. LEVERE. That is correct.

Mr. VENTO. Thank you. Mr. Nelson, do you feel the same way?

Mr. NELSON. Yes.

Mrs. CHENOWETH. Before I dismiss the panel, I also want to ask Mr. Levere, because individuals have called the problems to our attention, I want an assurance from you personally that there will be no retribution to the individuals that have sought a political solution or have had their name mentioned in the press.

Mr. LEVERE. You do have my assurance. Like Mr. Nelson stated, anything otherwise would be unprofessional.

Mrs. CHENOWETH. Thank you.

Mr. CRAPO. Madame Chairman.

Mrs. CHENOWETH. Yes.

Mr. CRAPO. Madame Chairman, could I just follow up? I wasn't quite sure what the answer was to the question about whether there was a resource damage on the Goose Creek allotment.

Is the action being taken with regard to the Goose Creek allotment based upon resource damage?

Mr. LEVERE. It is based on not following the terms and conditions of the permit is what it is based on.

Mr. CRAPO. But does that involve resource—not following the permit can result in resource damage or it can be something else.

Mr. LEVERE. In some situations, it does result in resource damage. In other situations, it does not, and the analogy that I like to use, it is like enforcing speed limits on the highway. You don't wait for the wreck to happen to write the ticket.

Similarly, when it comes to enforcing the terms and conditions of a grazing permit, you don't wait necessarily in all cases for resource damage to happen before you issue essentially the ticket following the highway analogy.

Mr. CRAPO. Well, I understand that, and I am not trying to say that you have to wait for resource damage. I just wanted to understand whether there was resource damage in this case.

Mr. LEVERE. In that situation, I am not sure whether there was or was not. What the determination was there, was there a violation of the terms and conditions of the permit, and the answer to

that was the finding was yes, there was, and it was on that basis that the suspension was imposed.

Mr. CRAPO. But you are not aware of whether there was actual resource damage.

Mr. LEVERE. No, I am not.

Mr. CRAPO. Thank you.

Mrs. CHENOWETH. Mr. Unger, I would like to present a letter to you. It is a letter asking for more information, and it is signed by Chairman Young and myself, and so I would like to have it delivered to you.

I appreciate your being here. Thank you very much for your testimony.

Mr. UNGER. Thank you.

Mrs. CHENOWETH. I would like to now introduce the second panel, Mr. Scott Bedke from Oakley, Idaho; Mr. Mark Pollot, an attorney from Boise, Idaho; Mr. Jim Connelley from Mountain City, Nevada; and Karen Budd-Falen, attorney, from Cheyenne, Wyoming. I want to welcome you to the panel and before we get started, I would like to ask you to all stand and raise your right hand, and I will administer the oath.

Will you swear or affirm under the penalty of perjury that you will tell the truth, the whole truth, and nothing but the truth so help you God?

Let me remind the witnesses that under our committee rules they unfortunately must limit their oral statements to five minutes, but that their entire statements will appear in the record, and this record will be printed.

We will also allow the entire panel to testify before questioning the witnesses, and before I recognize our first witness, I will recognize Mr. Gibbons to introduce his constituent, Mr. Jim Connelley.

Mr. GIBBONS. Thank you, Madame Chairman, and indeed, it is a great pleasure for me to have an opportunity to recognize someone who has traveled a great distance, because you can't get to Mountain City with an easy commute to Washington, D.C.

This individual has come a long way to be here to present his concerns to this committee. Mr. Connelley has been a long-time Nevada resident, a ranch manager since 1970, and especially on the public lands and he has been a great innovator of cow-calf ranching in Elko County, Nevada.

Beginning in 1979, he had the general management authority over two additional ranches in northern California for a total capacity of around 1,000 head of cattle.

Mr. Connelley was responsible for developing cross-breeding programs, purchasing cattle and equipment, developing grazing systems and allotment management plans for ranches, including the Toiyabe and Humboldt ranges.

Mr. Connelley has more than 12 years of experience working in the legislative and regulatory arenas on issues pertinent to livestock operators. He has been most active in areas of water rights and public land issues.

Mr. Connelley has also served three years as president of Nevada's Cattlemen's Association, and was chairman of the Public Lands Committee and regional vice president for the National Cattlemen's Beef Association.

He has been elected three times to the board of trustees to Elko County School District, and was appointed by then-governor, now U.S. Senator, Richard Bryan, to represent the livestock industry on the Nevada State Board of Agriculture.

Madame Chairwoman, Mr. Connelley is indeed a man who has invested many years in understanding land use policies, and I personally feel he will be of great benefit to this Subcommittee in understanding the issues that come before us today, and again, I welcome Mr. Connelley.

Madame Chairwoman, thank you very much for allowing me this gracious opportunity.

Mrs. CHENOWETH. I thank the gentleman from Nevada, and thank you for all of your effort, Mr. Connelley, in getting to Washington, D.C., and I thank the entire panel for being here.

I would like to begin the testimony with Scott Bedke.

STATEMENT OF SCOTT BEDKE, OAKLEY, IDAHO

Mr. BEDKE. Thank you, Madame Chairman and members of the committee.

The Bedke family has ranched in the Goose Creek area near Oakley, Idaho, since 1878. I am the fourth generation of Bedkes to ranch in this area and carry on a tradition that was begun when Rutherford Hayes was the president of the United States.

This tradition predates Idaho statehood and also that of the organization of the Forest Service. We have held adjudicated grazing preference rights on BLM and Forest Service-managed grounds since the very first ones were issued.

An underpinning philosophy indicative of our longevity in the cattle business has always been to take care of the grass, and the grass will take care of you. This philosophy and practice has guided the permittees on our allotment to always take the initiative and the lead in improving things on the public range that we call home.

On the Goose Creek allotment in particular, we have developed water, planted hundreds of acres of new grass, and installed more than 25 miles of fences to further our goal of control and distribution of the livestock and also rotate the grazing use on the grass to ensure its perpetual health and vitality.

Each of the numerous improvements on our allotment has come about because the permittees conceptualized the idea and then provided the labor and the funding necessary to install and construct these improvements. In fact, in 1983, the Goose Creek allotment was given an across-the-board 13-percent increase in cattle numbers and it should be noted that these types of increases are only given to permittees whose allotments are in excellent shape and where improvements result in additional forage. Increases do not come to permittees who are poor land stewards.

I might add at this point that until 1986, the Forest Service had been willing partners in the developments and the improving of this allotment. The improvement of the resource was the ultimate goal of both the agency people and the permittees.

In fact, well, we were all proud of this allotment. It was a showplace allotment for all. The Forest Service and the BLM sponsored numerous tours of this allotment emphasizing what could be done

when all concerned parties worked together with cooperation, consultation, and coordination.

In 1986, the atmosphere changed quite abruptly when new management personnel came to the district. I will go into that later. It would be interesting to compare the Goose Creek allotment file prior to 1986 and the one that has been compiled since. It would show a sad commentary on the abuse of power afforded a district manager with a certain personal and policy bias against public land grazing.

This abuse of power has resulted in the formation of a new uniform action guide recently introduced in the Sawtooth National Forest. Regardless of the motivation behind the uniform action guide, it will prove to be a very effective means to achieve reduction and/or elimination of livestock grazing on the forest, especially when the UAG is backed up by the continuing biased interpretation of the standards and guidelines.

Accidental, nonwillful events can result, under the new UAG, in suspension of 25 to 100 percent of the livestock numbers for three years. A second accidental, nonwillful occurrence can result in permanent permit cancellation, regardless of whether any kind of resource damage was the result.

The forest management contends that of course, this type of arbitrary cancellation of permit will never occur, and that common sense will rule the day, that all we need to do is trust them. But regardless, the action guide says what it says. There does not have to be any latitude given, and at some point, some manager will take the uniform action guide literally and follow it to the letter and cancel our permits.

It is not morally right that a mid-level bureaucrat can with a biased stroke of his pen eliminate my means of providing for my family and meeting my financial obligations for an occurrence that he deems to be an infraction, and one that everyone agrees does not result in resource damage.

This is what worries me, my wife, and my mother the most, that based on the forest supervisor's memo dated 3/3/97 given to all the district rangers and the area managers is that ranchers who exercise appeal rights, those that support State management of public lands, or criticize the Forest Service, or try to obtain congressional intervention in the Forest Service actions will be classified as bad apples. I am glad to hear Mr. Tugaw is not considered a bad apple. I wish I could say the same.

Therefore, does it not follow with my very presence at this hearing that I can expect administrative reprisal being as the forest supervisor describes as an aggressive permittee?

This memo negatively singles out permittees who avail themselves to the appeals process and other processes designed to check and balance the system.

The Eighth Amendment of the Constitution comes to mind. Granted, they were talking about criminal penalties, but the phrase "nor excessive fines imposed" comes to my mind. Should this not apply to situations like this?

The guiding principle should be that the punishment must fit the crime. Is it not excessive to lose one's grazing right for three years because of a leaky water trough? Could this not be compared to

your losing your automobile or having it impounded for a simple traffic violation? The Forest Service's administrative process should not be used to circumvent constitutional protections.

Based on the same memo, grazing permit holders are being singled out because of perceived lack of governmental funding to the Forest Service. Ranchers are being threatened that if funding is not increased in the future, further reductions will have to be made. To severely penalize one multiple use over other multiple uses because of a lack of funding is clearly another indication of bias in the administration of the Sawtooth National Forest. Livestock grazing has clearly been relegated to a secondary status.

What we are seeing here is an attempt by the Forest Service to coerce the rancher into putting pressure on his congressional representatives to increase funding for the Forest Service.

The Forest Service has also said that if our grazing permits are canceled, they will be offered to other ranching interests. Our permits have been historically used as collateral for loans and taxed by the IRS. They have been bought, they have been sold, they have been traded as personal property since the first issuance of the grazing permits.

To take these permits without compensation and give those permits to another who has no financial stake in the permit may very well lead to speculative transitory-type ranchers, those who come in with no intention of investing in or remaining on the allotments for an extended period of time. This type of ranching—transitory-type, speculative-type ranching interests—are not in the best interest of the land.

In summary, one point remains. Those of us that hold permits on the Sawtooth National Forest are family ranchers. Our livelihoods depend on our ability to exercise our rights to graze our livestock on these public lands.

Our intimate knowledge of and our vested economic personal interest in the land makes us a valuable asset in the long-term management of the public's lands. Ranchers want to be and must be part of the solution. Thank you.

[Statement of Scott Bedke may be found at end of hearing.]

Mrs. CHENOWETH. Thank you, Mr. Bedke, for your testimony. Mr. Pollot.

STATEMENT OF MARK POLLOT, ESQUIRE, BOISE, IDAHO

Mr. POLLOT. Thank you, Madame Chairman and members of the committee. I appreciate being given the opportunity to appear before you today to talk about what I think is a critical issue.

As you may be aware, if you have had a chance to look at my testimony, it is ten and some-odd pages of testimony, and it is difficult to summarize that in five minutes, so I am going to focus on some of my most grave concerns, but I need to lay some groundwork first.

There has been a prevailing attitude among some segments of the population of the rancher in the west as being the "welfare cowboy." I think it is important to understand that the reason that ranchers and timber harvesters and miners and other people are here in the west is because Congress invited them to come to the west, not out of the goodness of their hearts, not to give away

something, but because the economic development of the west was in the best interests of the United States.

People came to the west, gave up their lives in the east, and they did that, and they established themselves here and their families, and for generations, have taken care of the land.

It is Congress' job, not that of the agencies, to set the policy for the United States, and that policy has always favored grazing on what have come to be called public lands in the west.

There are those who oppose grazing, and they have gone to Congress any number of times to attempt to get Congress to alter that policy. Congress has never done so. Its actions have always been the Taylor Grazing Act, the Act of 1866, July 26. The Federal Land Policy Management Act has always been to support and protect grazing as one of the valuable and important uses of western lands out here.

What happened as a result of that steadfastness by Congress has been a move to the agency level and a move to regulation by litigation, an example of which we heard here today in the opening testimony, that the Toiyabe National Forest put together its action guidelines not because it was the appropriate thing to do in its judgment, but because somebody sued them, and in the process of suing them and in the process of settling that lawsuit, circumvented the Administrative Procedure Act process and all the other processes that go into making this kind of decision on public lands.

But one of the most important things that has happened is that the lobbying effort has shifted from Congress to the agencies themselves, and the agencies themselves have become a place of employment for those people who had their own environmental and land-use agenda prior to coming in the agency and in fact, join the agency as employees specifically to use those positions to implement their view of what sound policy on public lands should be.

I was not at all surprised when the uniform action guide and Mr. Levere's accompanying memo were brought to my attention approximately two weeks ago. I was not surprised, and at the same time, I was unhappy and very concerned.

I think it is important in looking at this issue today before this committee and elsewhere not to look at the uniform action guide including the modified version of that of four days ago in isolation, but to look at them in conjunction with Mr. Levere's March 3, 1997, memo which was to the district and area rangers with a clear instruction that this was to be shared with permittees. When you read it in its entirety and you look at it, you understand why Mr. Levere wanted to do this.

It is clear to me after examining this document in particular and the uniform action guide that the purpose for the memo and the guide are as follows: A, to shift the responsibility from the agency for its management failures to Congress for having failed to give them the money that they believe that they need; B, to let those permittees who have been referred to as aggressive beware of following their legal and administrative remedies under penalty of being treated more harshly if they do so; C, to let the remaining permittees who are not aggressive be there to pressure the aggressive permittees under pain of a threat of an additional or different

sanction, that is, removing all permittees from the national forest. It is never stated that we will do this, but it is suggested that if the UAGs do not meet with everyone's fancy, that these other more strenuous penalties may be applied, and certainly, this is going to cause other grazers to want to look at those who avail themselves of administrative and legal and political remedies askance. It becomes part of a strategy of divide and conquer, something which in my practice, I have seen far, far too much of.

I am not, for example, comforted by the fact that prior panel assured us that the administrative remedies were available because part of this document is to discourage the use of those remedies, and nowhere in this document is there any hint that the forest or its managers ever considered whether they may have in part, in any part, been responsible for the breakdown of communication.

The blame seems to be laid squarely at the feet of those permittees out there who are dissatisfied, and yet history has shown that for generations, these same ranchers and their families have tried to work with the forest. There is no explanation in here as to why they would suddenly decide that this avenue was no longer fruitful and useful.

It is my experience that mature adults, when they find themselves getting into a situation over and over again, do ask themselves whether in fact they have done anything that might have contributed to the situation.

Finally, and there is probably more that I will be discussing on this topic during questions, I am sure, but that is, I am not comforted by Mr. Levere's statement. For example, not to worry, there is discretion in the hands of the rangers out there, because he has said first of all, he is both informally monitoring and will in the event of an appeal be the one looking at whether or not that ranger properly exercised his discretion to apply or not apply the UAGs.

In other words, the person responsible for putting the UAGs together and strongly through his letter recommending that they be followed is the same one who is going to review the decision to follow or not follow those UAGs. This gives me little comfort, and certainly, one of the areas that this committee and Congress should be looking at is the administrative appeal process which is in fact severely flawed in my view. Thank you.

[Statement of Mark Pollot may be found at end of hearing.]

Mrs. CHENOWETH. Mr. Pollot, I thank you for your testimony. I would like to call now on Mr. Jim Connelley. Mr. Connelley.

Mr. CONNELLEY. Madame Chairman and members of the Subcommittee, thank you for the opportunity and I am sorry that he has left, but I thank Congressman Gibbons for the introduction.

Mrs. CHENOWETH. The Chair wants to assure you that my colleague will be back very shortly.

Mr. CONNELLEY. Thank you.

STATEMENT OF JIM CONNELLEY, MOUNTAIN CITY, NEVADA

Mr. CONNELLEY. I have always had good working relations with the Forest Service. I was appointed to the Forest Service's livestock-big game review team in 1990 and was one of the original founders of the seeking common ground initiative that Mr. Unger mentioned here earlier.

I have been recognized by the Forest Service for commitment and cooperation and progressive management of my Federal grazing allotment.

I am here today testifying solely on my own behalf and have been actively involved in public land grazing for a number of years, participating in hundreds of hours of meetings with Forest Service and many, many range tours with Forest Service personnel.

I have had broad exposure to all aspects of livestock grazing and policies on the Humboldt-Toiyabe National Forest.

Based on these experiences, it is my opinion that the Forest Service, the range division in general and the Humboldt-Toiyabe National Forest in particular, is an agency lacking practical scientific vision and direction. It is currently out of control in terms of defining an ecologically sound and viable grazing management program that seeks to cooperatively resolve livestock grazing problems on the ground with the involvement of interested parties.

Some officers of the Humboldt-Toiyabe are making livestock management decisions based upon political agendas and then finding the science to support these decisions. I believe that grazing allotments on the Humboldt-Toiyabe have been and continue to be targeted for elimination of grazing, and that this goal is being achieved through the implementation of unrealistic, unscientific standards and guidelines imposed in a punitive manner.

As a result, the range division on the Humboldt-Toiyabe have lost the respect of all but those whose agendas they support. Based on this agenda, the Humboldt-Toiyabe have all but assumed a siege mentality, blaming the commodity users for all of their problems and shortcomings on the lack of budget.

Witness the State and national news coverage on the Carson City pipe bombings where Forest Service personnel were continually quoted as speculating that disgruntled ranchers or miners could be responsible. A suspect has yet to be identified or charged in these regrettable incidents.

Virtually no effort is being made today by the Humboldt-Toiyabe to work cooperatively with the grazing permittee to resolve grazing issues or problems on the ground once they have been identified.

Furthermore, the current punitive approach to permit administration employed by the Humboldt-Toiyabe more closely resembles a police action as opposed to the cooperative regulatory approach to rangeland management.

This big stick approach has only resulted in increased polarization, costly appeals, litigation, and more recently, the grand jury investigation which resulted in a finding of potential charges against Forest Service employees.

Let me explain the basis for these opinions. Other testimony that this Subcommittee will hear documents the dramatic grazing decline on the Humboldt-Toiyabe since the implementation of the respective forest plans and UAGs.

Most of this downward grazing trend can be attributed directly to the following factors. Strict and punitive enforcement by the Forest Service of unrealistic restrictive riparian grazing standards and guidelines adopted in the forest plan which lack scientific support and biological justification. In the intermountain west, riparian areas comprise only about one to two percent of the total land area.

Difficulty in maintaining economically viable levels of grazing use on most allotments prior to exceeding the strictly enforced riparian standards, and three, refusal by the Forest Service to work cooperatively with affected permittees to address existing livestock distribution and riparian grazing issues through the application of tried and proven grazing management practices.

The predominant attitude demonstrated on the Humboldt-Toiyabe today has been total permittee compliance with the imposed grazing standards, regardless of the site-specific conditions or climactic variations or they will suffer the Forest Service's enforcement of substantial penalties in the form of suspensions or cancellations. No opportunity is afforded in this process for grazing permittee and Forest Service to come together and cooperatively evaluate management options to resolve an identified grazing issue.

The simplistic reduction of livestock numbers through penalty permit actions will not, in itself, lead to a proposed reduction in animal impacts, nor will it solve the basic problem. It is important to remember that animal impacts for 50 head of grazing livestock within a given area for two weeks will be relatively the same as 100 head in an area for one week.

So the question is, what did you gain by imposing a penalty permit action that simply reduces the number of animals? Can you reasonably expect improved riparian resource conditions or have you simply penalized the rancher financially?

In most cases, the latter situation is the result and being that these are predominantly family-owned operations with little capital behind them, they are brought one step closer to elimination. These are the same family farmers and ranchers that this administration as well as others before it have promised to save.

Since the grazing permittee is the person who actually controls and manages the animals grazing, livestock control within a grazing allotment and its associated riparian areas can only be addressed and achieved through cooperative planning that involves the permittee.

Without the opportunity to explore viable management options to address livestock control and riparian issues, unjustified and unnecessary administrative permit reductions continue today on both forests.

In closing, I would like to offer the following solutions to resolve the previously described issues. This would include: one, initiate a congressional investigation to determine why the Humboldt-Toiyabe have not attained grazing output levels specified in the respective forest plans as required by the forest plans themselves and the National Forest Management Act; and two, the National Forest Management Act should be amended for purposes of de-emphasizing a dependency on standards and guidelines, at least as they relate to the livestock grazing program and in its place require the Forest Service to offer collaborative planning processes to evaluate alternative grazing practices prior to initiating penalty permit actions.

Broad blanket application of grazing standards and requirements developed at the forest level do not adapt well, nor are they often

applicable to addressing varying and site-specific environmental conditions at the allotment level.

With that, I see my time is about up. I will be happy to answer any questions.

[Statement of Jim Connelley may be found at end of hearing.]

Mrs. CHENOWETH. Mr. Connelley, I thank you very much, and the Chair now recognizes Karen Budd-Falen, attorney. Ms. Falen.

STATEMENT OF KAREN BUDD-FALEN, ESQUIRE, CHEYENNE, WYOMING

Ms. BUDD-FALEN. Thank you very much. My name is Karen Budd-Falen. I am an attorney from Cheyenne, Wyoming. I am also a fifth generation rancher on a family-owned ranch in Big Piney, Wyoming.

The information I have to present to the Subcommittee today deals with further Forest Service inflexibility and failure to collect site-specific data which has led to forest-wide grazing reductions and livestock grazing on four national forests.

The first case I want to discuss concerns the Humboldt and Toiyabe National Forests in Nevada. The original land use plans for the Humboldt and Toiyabe National Forests were promulgated by the Forest Service in 1986. Those plans contained numerous standards and guidelines such as strict utilization standards, stubble height requirements, and other "resource protection measures."

At that time, the livestock industry in Nevada bitterly complained that one, they could not continue grazing on the Federal lands if these standards were enforced; two, that these standards were only and unreasonably applied to livestock grazing and not to wildlife or recreation use; and three, that the standards would not enhance or protect the range resource.

Over the objections of the livestock industry, the standards were included in the land use plans. In opposition to the standards in 1986, the Nevada Land Action Association representing the livestock industry, sued the Forest Service. Their substantive complaints about the land use plans were never heard by the court, because the court dismissed the case saying that until the cattlemen could prove that they were harmed, they had no standing to sue.

It is ten years later; the cattlemen's predictions have all come true. Under the standards and the guidelines in the Humboldt plan, 38,994 AUMs have been lost on the Humboldt National Forest. In terms of individual permittees, in ten years, the number of permits on the Humboldt National Forest have been reduced from 160 to 135.

The same is true on the Toiyabe. In the past ten years since the implementation of the land use plan on the Toiyabe National Forest, the number of AUMs has been reduced by 35,654 AUMs. In terms of permittees, in the last ten years, the number of permittees on the Toiyabe has been reduced from 75 to only 44 remaining.

There is a second case that I would like to bring to your attention that illustrates this exact same point. The situation occurs on the Apache-Sitgreaves National Forest in Arizona. The Apache-Sitgreaves, also known as the A-S, land use plan was promulgated around 1988. That plan also contains standards and guidelines to allegedly protect forest health.

In 1995, the term grazing permits for 13 permits on the A-S were set for renewal. Because of a change in Forest Service policy, each renewal of the term permit was subjected to the NEPA analysis.

At the end of the process, every single one of those 13 term permits received a reduction in grazing of between 40 percent and 85 percent.

I think that these two cases illustrate some very common problems with Forest Service policy.

Number one, rigid, restrictive utilization standards and guidelines result in the reduction or elimination of livestock grazing. This is especially true when the standards and guidelines are only applied to livestock and not to recreation, wildlife, or other multiple uses on the national forest.

Number two, restrictive utilization standards are replacing individual allotment monitoring programs, such as monitoring for trend or condition. This means that the Forest Service, rather than being concerned with whether the individual allotment is in good ecological condition or whether it is increasing or decreasing in trend, is focusing simply on a utilization standard and whether that standard has been met. Since most of the time, utilization standards are not indicative of the health of the allotment, this method unnecessarily and needlessly eliminates livestock grazing without achieving a corresponding increase in the ecological health of the land.

Number three, the Forest Service administrative appeals system does not provide due process. Forest Service administrative appeals are heard by the next higher line officer. There is no opportunity to ever cross-examine the Forest Service decisionmaker, to ever present your own experts, and to ever talk to an independent hearing officer.

The Department of Agriculture does have an administrative appeals board, but Forest Service permittees, whether it is grazing permittees or timber producers or whoever, do not have access to this independent hearing board.

I also have solutions to these problems that I would like to propose.

Number one, the Forest Service should eliminate the forest-wide standards and guidelines and the decisions based upon those standards and guidelines. Decisions must be made on an allotment-by-allotment basis or stream reach-by-stream reach basis. A decision designed in Washington, D.C., cannot apply in Big Piney, Wyoming, or Mountain City, Nevada, or anywhere else.

Number two, mandate that trending condition monitoring be completed before any reductions in grazing are made. Trend and condition on BLM land is normally measured for at least three to five years before grazing permits can be reduced for resource damage. The same should be true for the Forest Service.

Number three, mandate that grazing permittees have access to the Forest Service national appeals board or that they have a right to some sort of an administrative appeal before an independent hearing officer, not before the next higher line officer who probably recommended that the adverse decision be made in the first place.

I thank you for the opportunity to present this information to you, and I would be happy to answer your questions.

[Statement of Karen Budd-Falen may be found at end of hearing.]

Mrs. CHENOWETH. Thank you, Mrs. Falen. The chair now recognizes Mr. Crapo for questioning.

Mr. CRAPO. Thank you, Madame Chairman. I would like to address my first questions to Mr. Bedke. Welcome again, Mr. Bedke, and we appreciate your making the effort to be here to testify.

You indicated that there was no resource damage on your allotment, is that correct?

Mr. BEDKE. That is correct.

Mr. CRAPO. Can you tell us just briefly what kind of a history there has been in terms of the new treatment that you feel that this allotment has received in the last period of years as compared to how it was treated in earlier years?

Mr. BEDKE. Like I tried to describe in my oral presentation, our allotment was viewed as a "showplace" allotment that we could—it is a good allotment resource-wise, and it was used to show other ranchers and other agency personnel what could be done when everybody worked together.

Like I said, there has never been any resource damage, there have never been any penalties based on resource damage on this allotment.

We are under suspension as was brought up earlier. This occurred—briefly, it is hard to describe what exactly took place, but suffice it to say that many small allotments were lumped into one big allotment here for the betterment or for the more efficient use of this mountain. So there were spring units set up and there were fall units set up, and there was never any differentiation between BLM and Forest Service ground within this allotment.

In the fall of 1994, we were requested to have all the cattle on the BLM side of the line within the fall unit. Now, this is just a line on a map. There was no fence, there is nothing out there. I mean, Congressman, you wouldn't know when you crossed the line, and neither did my cows.

We moved all the cattle. They requested to have all the cattle on the other side of the line for the last two weeks of the season, and we complied with that. We moved all the cattle on the 29th of October.

On the second of November, 185 head had crossed the line, and that constituted a permit violation that they took action on. Another leg of the penalty was that in the same unit, there is a pipeline system that fills four water troughs. It was a dry year. There was only enough water to put water in one trough of this system, and the others were left dry so we could congregate what water we had in the one trough, and that was considered nonmaintenance of our improvements.

Now, the supervisor at that time suspended the implementation of these penalties, because he found for the ranger yet suspended the penalties, walking the tightrope that only he understood he was faced with. We didn't quarrel, and so the first two years of the penalties go by.

We get new management, we get other infractions of similar nature, and the suspension of the penalty has activated and that is the suspension that we are currently under.

Mr. CRAPO. Thank you. You would agree, wouldn't you, that all permittees must comply with the requirements of their permit?

Mr. BEDKE. That is our goal.

Mr. CRAPO. And do you feel that the current uniform action guidelines that are under proposal, the new proposed UAGs, will put a permittee such as yourself at a disadvantage in terms of trying to work out a proper resolution with the ranger when a problem does arise? If so, why? Just explain it briefly if you would.

Mr. BEDKE. Well, after having read the memo, I would just ask yourself, if you had been recently involved in an appeal process, if you had ever criticized the Forest Service, if you had participated on the governor of Idaho's Federal lands task force, or if you were here in Washington testifying on the very thing, you would have to consider—those were the things that he described as an aggressive permittee, so I guess I think I am warranted in my fears.

Mr. CRAPO. Thank you. Mr. Pollot, I welcome you again. You were here when we had a hearing on wolf recovery a year or two ago.

Mr. POLLOT. Yes, sir. Thank you.

Mr. CRAPO. I appreciate your coming back. I guess this question is both for you and Karen Budd-Falen, or Jim Connelley, I guess. Any of you may have information on this.

Has the amount of cattle allowed to be grazed gone down under uniform action guidelines on other forests that you are aware of?

Mr. POLLOT. They most certainly have, Congressman. Certainly in the Toiyabe National Forest, the figures that have been cited to you by members of the committee as well as Karen certainly show that the numbers have gone down, and they have gone down fairly consistently.

The curve on the Toiyabe National Forest is pretty steep.

Mr. CRAPO. I see my yellow light is already on, so my question is, do you believe that the reason for this reduction is the stiffness or the rigidity or the extremity in the penalties imposed under the uniform action guidelines which have been imposed?

Mr. POLLOT. I most certainly do.

Mr. CRAPO. And Ms. Budd-Falen, do you agree?

Ms. BUDD-FALEN. Yes, sir, Congressman, I do agree. In fact, on the Toiyabe National Forest, I have been participating in studies contacting every single grazing permittee whose permit has been reduced or eliminated over the last ten years to determine if the reduction was based on market condition or was the result was implementation of the standards and guidelines and enforced by the uniform action guide.

The permittees told me that in every single case, they would "voluntarily" remove their cattle, because they knew that the Forest Service penalty that could be imposed by the uniform action guide would eliminate those livestock anyway, and they didn't want a mark (or an adverse decision against them) on their Forest Service record, because once a permittee gets those kind of marks noting an infractions on a Forest Service record, the chances of the permittee ever getting another permit or going to another district and getting another permit are slim to none.

Mr. CRAPO. Thank you very much.

Mrs. CHENOWETH. Thank you, Mr. Crapo. The Chair recognizes Mr. Vento.

Mr. VENTO. Thanks. I note that there is a discussion here going on about whether or not the lack of use in the Toiyabe and Humboldt of allotments has to do with the reduction in force or in fact has to do with the fact that these uniform action guidelines are in place, so it has been in place, I guess, for some time there.

The action guidelines are designed apparently to provide more certainty and predictability. That is at least the quest and that was a positive response when I asked that of the supervisors and of Mr. Unger.

Either there are more violations now than there were before. I could ask one of the witnesses, Ms. Budd-Falen.

Are there more violations now than there were before? Are there more warnings? Do you know that since you have checked out a ten-year record?

If you don't know, it is all right. You can always answer for the record if you don't.

Ms. BUDD-FALEN. In terms of warnings before the ten-year period and after the ten-year period, I cannot answer that.

Mr. VENTO. Well, maybe you could do some more homework on it and help us along those lines.

Mr. Connelley, I note that you pointed out and I think rightfully so, the fact that the original plans in terms of how the range is managed in the area that you are referring to, I believe it was the Humboldt-Toiyabe, was it not, Mr. Connelley, that they hadn't been updated for some time.

You point out that you believe that it would be desirable to do that, to update those plans to provide a better plan. Many requirements have been put in place as we gain new information or new knowledge in terms of the landscape, maybe endangered species and other provisions, and you think that that would be a great help if those plans were updated and approved, is that correct?

Mr. CONNELLEY. I agree that those plans need to be updated. The forest plan was dated 1985. It is mandated to be reviewed every ten years or at such time that its projected outputs fail to meet 90 percent of their projections.

By the figures that Ms. Falen has given here today, the grazing output is far, far short of 90 percent of its projections, and the 1985 forest plan was mandated to be reviewed by 1995 regardless of outputs, and we are now in 1997 and have asked specifically for a review of these plans and for reconsideration of standards and guides and all the other things that have come to pass, and that has not been forthcoming.

Mr. VENTO. You also point out in your testimony that it is your belief that they don't have the necessary personnel to do that. You testified to that, that the Forest Service didn't have the personnel to do it.

Mr. CONNELLEY. That is what they are telling us, that they don't have the personnel or the funding to do it, and I think a reallocation, as I have mentioned, would help, because what we are seeing is rangers on these districts saying, I am sorry, guys, we can't open that allotment again because we don't have any money.

Mr. VENTO. I certainly think in the Toiyabe and Humboldt—I don't know what the budgets are for each one. That question will probably come back up, but I think it is pretty clear that a lot of the resource management plans and other requirement plans for land use have been delayed because of funding. It doesn't take as high a priority.

But they do an EIS in terms of reissuing some of the permits, don't they?

Mr. CONNELLEY. Congressman, you know what I do when I don't have the funds or the time to take care of calving during the winter or whatever? I work longer and I work weekends and I work nights.

Mr. VENTO. Right. I think most of the Forest Service personnel I know work pretty hard. I was sort of amazed that somebody would question the integrity of the individuals, because they work under contract just like you and just like Mr. Bedke.

You had a contract. How many head of cattle do you run, Mr. Bedke, on these permits? You are on the Sawtooth, I guess, aren't you? What do you run on the Sawtooth?

Mr. BEDKE. We run 487 head.

Mr. VENTO. It is my impression that most of the permitted lands aren't fenced, are they? Are all the permits fenced around so you know just exactly where the lines are?

Mr. BEDKE. No. I know where the lines are but——

Mr. VENTO. Very, very few are, aren't they? You know where the lines are, but I wouldn't know where they are, would I?

Mr. BEDKE. No.

Mr. VENTO. And so this difference between BLM and Forest Service lands that you pointed out would be the same difference in terms of where a permit ends and begins. But the whole predicate is that you generally know, so obviously, in terms of number of cattle you run, when you run them there, how you run them there and treat them?

Mr. BEDKE. That is my very point, Congressman, is that there needs to be flexibility in these plans. We are trying to do the best that we can. That is our goal to do the best that we can.

No one is hurt worse by mismanagement out there than me, and so that is why we are here pleading for flexibility, and this does not represent flexibility.

Mr. VENTO. If you want me to do micromanagement, I could do that. We could do it, but obviously, we would rather see some people that are professionals that are working on the land and are nonpartisan enforcing things.

I notice one of the statements in your testimony sort of amazed me. You said that for a long time, that you could sell and lease and re-lease and trade allotments?

Mr. BEDKE. I never said lease.

Mr. VENTO. Well, you said sell. I could give you the exact quote in terms of your statement, but I was amazed by that, because I was under the impression that these were permits that are provided.

Did I misunderstand something about what you are stating here in your remarks?

Mr. BEDKE. No, you didn't.

Mr. VENTO. I can read it. They have been bought, they have been sold, they have been traded as personal property since the first issuance of grazing permits.

Mr. BEDKE. That is still correct in that you, Mr. Vento, could not bring your cattle up and graze them on my allotment because I hold the permit.

So there is value there, and there is added value to my ranch, my base property, my personal property at home because along with that property goes the right to graze cattle on the adjacent public lands.

That right has been recognized by the IRS. We have been taxed, paid estate taxes. On one side, the government recognizes it as a property right, and the other side wants to take that property right away from us.

Mr. VENTO. I don't know. I mean, it is all right, you are entitled to your view, but I think that with regards to law——

Mr. BEDKE. I think the facts bear me out, and Congressman, we have no problem with——

Mr. VENTO. One of the provisions is that you can't sell and you can't—that you are supposed to personally be using it, and so that is why I was surprised by this particular statement in here.

You are entitled to your own opinion, but there is the law and there is the contract that you signed in terms of the permit.

Mr. BEDKE. No quarrel with that.

Mr. VENTO. Yes, sir.

Mrs. CHENOWETH. Thank you, Mr. Vento. The Chair recognizes the gentleman from Nevada, Mr. Gibbons.

Mr. GIBBON. Thank you, Madame Chairwoman. Mr. Bedke, are you allowed to have a permit on an allotment basis without an underlying base property ownership?

Mr. BEDKE. No.

Mr. GIBBONS. So the permit is attached the property ownership, is it not?

Mr. BEDKE. Yes.

Mr. GIBBONS. So there is a difference between what would be a normal permit under the consideration of normal course and scope of the law and a permit for a grazing allotment that is attached to your property?

Mr. BEDKE. Yes.

Mr. GIBBONS. That is what I thought. Have you ever been—has your allotment ever been penalized for a resource damage assessment?

Mr. BEDKE. No, it has not.

Mr. GIBBONS. Mr. Connelley, thank you very much for coming here today from Mountain City. You mentioned the word attitude in your testimony.

Can you elaborate and give us some examples of Forest Service attitudes that you have been dealing with and the grazing uses in the Humboldt and the Toiyabe grazing areas?

Mr. CONNELLEY. Yes, I could give you probably the rest of the day's worth in my experience with permittees on the Humboldt and the Toiyabe, but probably two specific incidents come to mind, and you alluded earlier to the grand jury investigation in Elko County.

I don't think a grand jury investigation is something that is taken lightly, should not be taken lightly. The Forest Service declined to honor the subpoenas and testify before that grand jury and provide whatever information the grand jury asked for.

The regional forester stated that, and this was relayed publicly on radio, TV, and the print media, that it was not in the best interests of the Forest Service to testify before the grand jury. This probably did more to obliterate any credibility that the Forest Service had than anything that I have ever seen them do. It immediately led to all sorts of speculation about, well, if it is not in the best interest to answer their questions and the subject of the grand jury is how they are managing the land, then there must be a negative connotation attached to that, and it has been the source of much controversy. It has become labelled as the arrogance of the Forest Service and the attitude of the Forest Service, and I think it is very unfortunate, and I am sorry to see that happen. I believe in the collaborative process, and I think that there was a failure here of monumental proportions.

The other incident that is burned very deeply into my mind was when I was president of the Nevada Cattlemen's Association in 1990, I was invited by the forest supervisor to a ride, a two-day affair where we rode horseback through a section of the Toiyabe, camped overnight, and discussed land management issues. He had a number of examples to show us.

There was a number of us on that ride, a number of cattlemen, a number of Forest Service employees and Dr. Burkhardt, who will testify later today, and in the evening at the camp-out that we had up at a station on the forest, a very heated discussion ensued by a former president of the Cattlemen's Association and the supervisor. This went on for a couple of hours.

Toward the end of that discussion as it became clear that there were tempers flaring and there was really no amicable end to be reached, and perhaps you can attribute the situation here or the comments here to the heat of the discussion, but the supervisor and the other party in this heated discussion got up from the table. The supervisor turned to me and stated, "Mr. Cattlemen's President, I will tell you something, that I am going to get the cows off the creek, and my philosophy is that you find the biggest fish in the pond, and you take him down, and when you get that accomplished, all the other fish will fall in line." I said thank you for that philosophy. I will remember it to my dying day.

Mr. GIBBONS. What did you take his meaning to be?

Mr. CONNELLEY. Well, that he had an agenda, and he was going to accomplish that agenda, and it was, Katie, bar the door.

Mr. GIBBONS. Did he have someone in mind that he was referring to as the biggest fish in the sea?

Mr. CONNELLEY. Well, it was a very short time later that the much-publicized *Wayne Hage* case came to all of the national media when the Forest Service took a police action and confiscated his cattle.

Mr. GIBBONS. What was the end of the court result that was filed?

Mr. CONNELLEY. It has not been ended yet. The result so far is that the Hage family has lost their ranch.

Mr. GIBBONS. Right. Mr. Connelley, what suggestions would you make to this committee to improve the situation on the Humboldt-Toiyabe National Forest that could also be used in all national forests where livestock grazing occurs?

Mr. CONNELLEY. I listed about three things in my testimony, but I will make it very short and simple. Let us get the politics out of land management and get the science back into it and get personal agendas and reactions, just set them aside.

Mr. GIBBONS. Thank you. Madame Chairman, I will yield back the balance of my time. Thank you very much.

Mrs. CHENOWETH. Thank you, Mr. Gibbons. The Chair yields an additional four minutes to Mr. Crapo.

Mr. CRAPO. Madame Chairman, I would hold off at this point.

Mrs. CHENOWETH. Thank you, Mr. Crapo. Mr. Vento, do you have additional questions?

Mr. VENTO. I notice that these disclosure statements do not include the grazing permits as a contract with the Department of Agriculture. Is there some counsel ruling on this that I am not aware of or what?

Mrs. CHENOWETH. The Chair yields to counsel.

Mr. SIMMONS. That has been worked out with the minority, Mr. Vento, but the rule is that permits and those types of things were not to be included.

Mr. VENTO. I am not a fan of this particular process in any case, but I think it tends to be a transparent attempt to intimidate individuals that come before the committee, and I just think if we are going to have the rule, we are going to have to follow it.

I am not aware of any agreement with the minority. There was certainly no consultation that I had with anyone on it, and so I just think it is something that you either ought to uniformly apply it if you have it than not.

Madame Chairman, I point that out. I have no further questions at this time.

Mrs. CHENOWETH. Thank you, Mr. Vento. We will provide you with the rule. I would be happy to——

Mr. VENTO. I know the rule. It is how it is applied.

Mrs. CHENOWETH. All right. Mr. Pollot, you represented Wayne Hage, didn't you?

Mr. POLLOT. Yes, I did.

Mrs. CHENOWETH. Did you have any comments to add to Mr. Connelley's statements?

Mr. POLLOT. Certainly, the status of the case right now is that the Court of Federal Claims issued a decision and a summary judgment motion in which it said a variety of things, but not the least of which was that grazing on public lands is not necessarily and inevitably in all cases a "mere privilege," that the government may withdraw at any time that it wishes to do so for any reason or no reason at all.

In this case, the government did make a motion for interim appeal on the decision and summary judgment motion. The court denied leave to appeal that and so the case will be going forward. The trial will be divided into two parts, but certainly the observation that Mr. Hage has certainly been run out of business as a result

of this is true, and this issue goes to a certain extent to what Congressman Vento was referring to here.

The issue is that a permit may or may not be, depending on the circumstances here, a property right which may be transferred and so forth and so on. It would be an overbroad statement to say that because it is a permit, there are no property rights or even if it were a contract, because it is universally recognized that a contract is a property right and may in fact be taken by government regulation.

It is not quite black-and-white.

Mrs. CHENOWETH. And a contract can also be breached, right?

Mr. POLLOT. And the difference between the two as far as the Claims Court is concerned is whether the government's action in doing what it did was authorized.

If it was an authorized action, then perhaps what you end up with is a taking of the contract which must be compensated under the Fifth Amendment. If it was an unauthorized action, doing so, then it may be a breach of the contract for which the government may have to pay damages and may be subject to injunction to enforce the terms of the contract.

Mrs. CHENOWETH. Without objection, the Chair recognizes Mr. Gibbons for further questions.

Mr. GIBBONS. Thank you, Madame Chairwoman, and I apologize for asking you for your indulgence. I had one question I failed to ask Karen Budd-Falen, and I wanted to address the issues of known livestock production, reductions, or whatever that are coming off of the Humboldt-Toiyabe National Forest.

Are you aware of these or any reductions in the livestock production numbers?

Ms. BUDD-FALEN. Yes, Congressman. As I outlined in my testimony and since I am so terrible with numbers, I have to look at the numbers themselves, because I can't ever remember them.

On the Humboldt National Forest, in ten years, 38,994 AUMs have been eliminated. In terms of people, out of the original 160 permittees on the Humboldt, 135 remain.

On the Toiyabe National Forest, 35,654 AUMs have been eliminated in the last ten years. There were 75 original permittees; that has been reduced to 44.

Mr. GIBBONS. Let me ask a follow-up question to that. Are the livestock reductions that you have just alluded to in the Humboldt and the Toiyabe National Forests the result of poor livestock market or other market conditions rather than noncompliance with the forest plan standards and guidelines?

Ms. BUDD-FALEN. In working with the consulting organization that put together this information, we contacted each of the permittees on the Toiyabe National Forest whose permit had been reduced or eliminated. Their answers to that same question was uniform. Because of the way the uniform action guidelines enforces the land use plan, standards and guidelines we are talking about here today, the permittees cannot comply with their permits no matter what they did. Thus, the permittees would voluntarily remove their livestock, because if you get a permit violation noted on your grazing permit, you can't move to another forest and get another permit

and you can't move to another area and get another BLM permit even.

So permittees, when faced with the uniform action guide and the fact that their permits were going to be reduced or eliminated, most of the time will just voluntarily take their cows off the forest rather than having a black mark on their record which will follow them forever.

Mr. GIBBONS. Madame Chairwoman, thank you very much for your indulgence.

Mrs. CHENOWETH. Thank you, Mr. Gibbons. I would like to follow the line of questioning that Mr. Vento had initiated and ask Ms. Budd-Falen, Mrs. Budd-Falen, to follow up.

Is there a property interest in the national forest permitting system in your opinion?

Ms. BUDD-FALEN. I think what you have to do is separate the permit, the ten-year contract itself, from the thing that gives you the right to get a permit, which is the preference.

If you look at the court decisions, the court decisions say that a permit itself, that is your piece of paper that the Forest Service signs, is not a property right. The courts, however, have never looked at the underlying preference itself, the thing that got you the permit in the first place.

I think you have to think about what a preference is and what it means. If I want to place my cattle on the national forest, I can't go to the Forest Service and say give me a permit. I have to go and buy either the base property or livestock from another rancher and then buy his right to use his allotment. What you are purchasing from the rancher is his "preference". I then take that preference to the Forest Service and say I bought this base property or I bought this livestock. I have a preference to use this allotment, now give me a permit to recognize my preference.

The Internal Revenue Service in a case called *Sufflebarger* v. *Tax Commissioner* stated that the preference was a property right and taxable. For example, in the State of Wyoming, a grazing preference is taxed at one-third the value of fee simple.

So for example, my grandparents just passed away. We went through all of the estate taxes, and the IRS came in, figured out the value of our base property private land, multiplied that by one-third to recognize our grazing preference on both BLM and Forest Service, and we paid that additional tax as well.

The banks recognize a preference as collateral and will lend you money based on a preference as collateral.

The Forest Service Use Book which is the first book that ever recognized your right to go out and get a permit on the Federal land adjudicated those preferences like a water right. The Forest Service under the 1906 use book would go into an area and they would look at all the ranchers who wanted a permit. At that time, there was always a lot more ranchers wanting a lot more forage than was available on the ground. So the Forest Service would come in and say, all right, if you have historically grazed your cattle in this area, if you have been contributing to the community, if you have base property or water right to sustain the livestock when they are not on the Federal land so that you can prove you

are an ongoing ranching operation, then you get an adjudicated preference.

It is almost like a water right, meaning that a portion of that Federal land would be adjudicated to you. That is how those original preferences were created, and for any rancher, you can go back to the very first adjudication to see how the rancher got his preference. In fact, the Forest Service has these little tiny yellow cards in the archives that talk about a rancher's original adjudicated right; that is the term that is actually used on those original Forest Service cards in the archives.

Mr. Pollot already talked about the *Hage* case and how the court has ruled that a permit may or may not be property, depending upon the facts of the individual case.

I think it is also interesting to note that the courts have determined that a lot of things are a property right. For example, a welfare entitlement is property. If you qualify for welfare; the government cannot come in and take that welfare payment without affording you due process.

With regard to the Taylor Grazing Act, Judge Brimmer in his Wyoming court case ruled that the Taylor Grazing Act is a grazing statute and that it affords some sort of protection to a grazing right. One of the things that Judge Bremer looked at was section 9 of the Taylor Grazing Act which actually affords you due process, the right to a hearing under the Taylor Grazing Act when the BLM comes in and takes or reduces your grazing permit.

I think if you start adding up all of these facts, at least in my opinion, the preference is some sort of a property right that should, at the minimum, be entitled to due process if the Forest Service comes and takes or reduces your grazing permit.

Mrs. CHENOWETH. Let me ask you, so I can have it very clear in my mind, the property right concept or the use/ownership right would adhere to the preference right. The permit which can be issued, say every ten years, sets the terms and conditions?

Ms. BUDD-FALEN. For using the preference, that is correct.

Mrs. CHENOWETH. And has that historically been based on—have the terms and conditions in a permit been historically based on what criteria?

Ms. BUDD-FALEN. They are based on two criteria primarily. The first is the ten-year land use plan, the big, thick documents that the Forest Service creates which governs the management of that Forest Service unit for the ten-year period, such as the Humboldt-Toiyabe land use plans or the Apache-Sitgreaves land use plan that set all the utilization standards that permittees have to live with.

Your term permit then recognizes those conditions and in fact by law has to be uniform with the conditions set forth in those land use plans.

That is why permittees are so concerned and so involved in the land use planning process, because that giant document governs their use of their allotment. Additionally, note that a land use plan is not a decision document, but the adoption of the land use plan has to comply with the National Environmental Policy Act. That sets the terms and conditions that will be forced into your term grazing permit, so if you don't comply with the term grazing per-

mit, you are not complying with the land use plan and the uniform action guide will take action against you.

Mr. POLLOT. Madame Chairman, may I expand a little bit on this issue?

The Hage court, for example, recognized basically that there may be a right to graze your cattle on Federal land which may be independent of the permit, for example, if that is in fact an appurtenance to your water right, and that, of course, is also going to depend on facts and circumstances.

There are also other facts and circumstances. For example, in any State that was created out of the New Mexico territory, there will be people who have a right to graze on "Federal land" because of a territorial statute which, as you know, because it was ratified by Congress, is effectively an act of Congress, gave a possessory right in the surface which has been held by courts to be a property right in the surface to those people who stocked the range with cattle consistent with the amount of live water available to them, so there are other bases beside grazing preferences which would give a right which is independent of the grazing permit.

Certainly, the government can create something beyond that right in a grazing permit, for example, to decide well, maybe you have the right to X-amount of AUMs, but we will allow you to graze Y-amount of AUMs provided that you adhere to the terms of our agreement.

But the mere fact that a permit is involved or a preference is involved is not sufficient to decide whether there may not be other property rights including rights to graze on Federal land.

Mrs. CHENOWETH. Thank you, Mr. Pollot. I notice, counsel, Mr. Vento is speaking.

Did you have a follow-up question as long as we are on this line of questioning, Mr. Vento?

Mr. VENTO. I am hearing a lot of ifs and maybes and so forth. We have to be guided by what the decisions are in terms of the court with regard to the permitting process. So certainly, it is interesting to listen to individuals expound on what they think may be a right, a property right, versus what is a permit, but as far as I know, there is a ten-year document out in terms of permits, and they are permitted to use the land.

I understand the base issue in terms of water or the mixed ownership land pattern that exists, but I think that obviously, these are issues that have been set in law for a long time. There is a lot of disagreement about it, and it is interesting to hear viewpoints expressed, but they aren't particularly—I don't know that they lead us to some plan to legislate in this particular area.

That is fine. I certainly don't—I appreciate the opportunity.

Mrs. CHENOWETH. Thank you. I would like to continue in that line of questioning to Karen Budd-Falen.

If there is a possessory right and it has an equity value in the allotment, and there is a ten-year permit granted that sets terms and conditions based on the criteria of range conditions and so forth, does the permit, in your opinion, become a contract?

We heard Mr. Vento mention the word contract. Mr. Pollot mentioned contract. Is the permit a contract to manage the allotment in a certain way?

Ms. BUDD-FALEN. I believe that the permit is a contract. Unfortunately, not all the courts agree with that assessment, and there are court cases that say that the permit is not a contract because the bargain only goes one way.

Mrs. CHENOWETH. The bargain only goes one way?

Ms. BUDD-FALEN. If the Forest Service doesn't have the money to fulfill its programs, the Forest Service can violate the contract.

However, once the rancher signs on the dotted line, he must abide by every single term and condition in the contract, Forest Service regulations, the manuals, the handbooks, and the land use plan.

I would also add that there was some question about the terms and conditions and whether those were negotiable in the term permit. The reality is that they are not.

The Forest Service comes in, or the BLM for that matter, offers you a term permit. You take the terms and conditions written in the permit or you don't get a permit, and if you don't have a permit, you can't turn your cattle out.

The idea that there is some sort of a negotiated basis for the grazing permit, while it may look like a negotiated contract, the reality is that they are not negotiated. You take what you can get.

Mrs. CHENOWETH. Maybe it is an adhesive contract, but is the preference right like a car and the permit is like a driver's license?

Ms. BUDD-FALEN. I don't know if I would use that analogy. I think that it is really more like an adjudicated water right. You go to the State engineer, you prove beneficial use, you jump through all your hoops, you show that you have a right to use X-amount of water.

Here, when the original rancher was out on that Federal land, he had to jump through a bunch of hoops, prove a bunch of things; he got a right to then go to the agency and say I want a permit for X-amount of AUM based on his water or based on his base land or based on the terms of the Guadalupe-Hidalgo Treaty or whatever.

They set it up different in different ways, but it was like an adjudicated water right.

Mrs. CHENOWETH. It is an area that still is creating confusion, isn't it?

Ms. BUDD-FALEN. Yes, it is.

Mrs. CHENOWETH. I hope we can do something about that one way or another.

Mr. Pollot, let me ask you, there was a statement in the memorandum that was issued by Mr. Levere that said instead of discussing and attempting to resolve identified problems with the Forest Service, he sees a more adversarial role.

Instead of attempting to work things out between the range permittees and the Forest Service, a more immediate response by some of the more aggressive range permittees is to seek remedies either through what I perceive to be a negative press targeted at individuals and/or the agency or through local political contact and hopefully, political influence over agency decisions, through formal administrative appeals and/or through potential litigation.

Although all these remedies are within the legal rights of the affected range permittees, they frequently are not the most produc-

tive ones for the range permittees or for the Forest Service, from my perspective.

As a constitutional expert, would this statement raise any serious constitutional questions in your mind?

Mr. POLLOT. Short answer, oh, yes. The First Amendment and Fifth Amendment and other provisions of the Bill of Rights were designed to protect the right of citizens, and in fact the duty of citizens to come forward and challenge the government when they think that the government is doing something that is inappropriate or improper or unconstitutional or is even simply bad policy.

I think you are aware, Madame Chairman, that several years ago, I had a book that came out called "Grand Theft and Petty Larceny: Property Rights in America" and the first chapter in that book discussed the four, I guess you would call them horror stories, four people who were affected by government actions in pretty horrendous ways.

I deliberately chose to include four people who do not deal with the government on a regular basis, and there were two reasons for that, one of which is I wanted to show that real people, not big, bad corporations, are people who are seriously affected by government actions. The second one was although I had many stories that I investigated and verified regarding people, who like the ranchers here and other people, have to deal with agencies on a regular basis. They did not want to have their stories told. They did not want to have their stories told even in disguised fashion, because they were concerned that the agencies, the next time they had to go before them, would retaliate.

Certainly, one of the purposes, for example, of the Fifth Amendment's due process and takings clause protections is to ensure that government does not on some superficially plausible reason go out and regulate property in such a way that there is no protection, because to do so means that not only are your property rights affected but your First Amendment rights.

As I testified in my direct testimony here, as I read Mr. Levere's letter, I saw in here a severe criticism of those people who did not simply accept the agency's word that there was a violation or how the violation came about, and in fact, to go back to Mr. Vento's earlier question about how many violations where he then used the word how many warnings, as though warnings and violations are synonymous.

The fact is, a warning is the view of the government agent that a violation has occurred. The permittee should be free to either agree and therefore, sit down to try to work out a solution, or to disagree and decide that he is going to make use of the agency's processes, the judicial process, or the political process or the public comment through the media process to bring forth his concerns, get them on the record, and vindicate his rights.

When you have a document like this which culminates in a statement like that which you read, which says this really isn't a productive use of our time; when you do this, I think you are being a bad rancher—and by the way, I can verify that Mr. Levere's letter is not the only expression of this sentiment in the Forest Service.

In the context of Mr. Hage's case, in discovery, in Forest Service documents, I found a letter from a Forest Service employee to his supervisor in which two Nevada cattlemen, including I believe Mr. Connelley was one of those cattlemen who in an attempt to intervene, to mediate in a sense in the dispute between Mr. Hage and the Forest Service, asked whether if Mr. Hage were to withdraw his administrative appeal, whether that would help to cool things down and move them in some other direction.

The response of the Forest Service employee, according to his own letter, was I told them yes, because that would show that Mr. Hage is being cooperative. The definition of cooperative apparently being if you don't take advantage of our own internal processes to air your grievance and get a decision, then that is cooperative, but if you pursue your appeal rights, you are being uncooperative.

There are due process issues here, and I have received in my own practice a response to an appeal I filed in the Hell's Canyon matter, I believe it was, in which the Forest Service informed us in writing that you have no due process rights before the agency. You only have due process rights once you get to court.

This is not an isolated incident. In my view, this is a pattern and practice of discouraging people from using their due process rights, their Fifth Amendment rights, their First Amendment rights to pursue their grievances whether in the end they are determined to be just or unjust grievances against the government.

Mrs. CHENOWETH. Thank you, Mr. Pollot. One final question that I have for Karen Budd-Falen.

In your opinion, with the issue of the uniform action guide, has the Forest Service followed the requirements of NEPA and the requirements under the Administrative Procedures Act?

Ms. BUDD-FALEN. Because the uniform action guide is not a "rulemaking" and is not a change in policy, I am not sure that the APA is implicated.

I have strong questions, though, as to whether the National Environmental Policy Act is implicated by the uniform action guide.

The example I gave earlier is that land use plans must comply with the National Environmental Policy Act. Those aren't decision documents either, yet they affect ranchers on the ground and the courts have ruled that the Forest Service must comply with NEPA when they develop land use plans.

There is also another Forest Service handbook section called the Civil Rights Handbook, which is a Forest Service internal policy manual. That manual states that if the Forest Service creates policy which affects ten or more permittees, the Forest Service must consider the civil rights implications of that action, and Mr. Levere's uniform action guide did not go through that process either.

So I think that there have been violations of internal rulemaking and internal policy processes in creating the uniform action guide.

Mrs. CHENOWETH. I want to thank the witnesses very much for your testimony, for coming so far and offering very valuable testimony.

At this time, I would like to call the third panel, and again, thank you very much.

I would like to call the third panel and thank you all for waiting so long. It has been a long afternoon. I would like to welcome Karl Hess, Senior Associate of The Thoreau Institute of Las Cruces, New Mexico; my constituent, Neil Oldridge from the American Sportfishing Association, Sagle, Idaho; Leslie Glustrom, Prescott National Forest Friends, Boulder, Colorado; Linn Kincannon, Idaho Conservation League, from Ketchum, Idaho; Wayne Burkhardt, Professor Emeritus, University of Nevada-Reno, and University of Idaho-Moscow, who resides in Indian Valley, Idaho.

Before we get started, if you will all please stand and raise your right hands, I will administer the oath.

Do you solemnly swear under the penalty of perjury to tell the truth, the whole truth, and nothing but the truth, so help you God?

Thank you. Let me remind the witnesses that under our committee rules, they must limit their oral statements to five minutes, but that their entire statement will appear in the record. We will also allow the entire panel to testify before questioning the witnesses.

The Chairman now recognizes Mr. Karl Hess.

STATEMENT OF KARL HESS, SENIOR ASSOCIATE, THE THOREAU INSTITUTE, LAS CRUCES, NEW MEXICO

Mr. HESS. Thank you, Madame Chairman. My name is Karl Hess, and I am a senior associate with the Thoreau Institute, and I believe my colleague, Randall O'Toole, has been before this committee in the past.

For the past almost 100 years, the public lands or national forests have been a laboratory of sorts for prescriptive management, and it seems to me that the issue on the Sawtooth and the Toiyabe and Humboldt National Forests, what Mr. Crapo has referred to as the abuse of power, and what the Forest Service, I think, states is an appropriate action is not, in my opinion, a break in tradition of past management, merely a logical extension of prescriptive management.

I think one has to only look at past congressional records to see a prodigious number of hearings of this nature that have dealt with conflicts such as this on various sides of the issue.

In my written testimony, I refer to a different public land situation than the current one to highlight what I believe is the failure of prescriptive management, and what I refer to as the Diamond Bar Ranch in the Gila National Forest which is very close to my home.

There, I suggested, actually that the existing public land grazing policy is broken, and it can't be simply fine-tuned either to help out ranchers or to help out other parties in the situation, environmentalists, for example.

What the Diamond Bar highlights, in my opinion, and what the issue I think in the Sawtooth and Toiyabe highlights is one that there has been an enormous amount of public resources that have been misdirected and squandered in what is the micromanagement, the prescriptive management, of grazing activities. The grazing policies have failed precisely because their focus has been on what and how ranchers do things rather than on final outcomes.

Secondly, public policy has failed ultimately because it, not the ranchers, not the Forest Service, not environmentalists or other

parties, have generally been the source of tremendous amount of contention and conflict on public lands, and again because public policy reduces management options and recourse to political or judicial interventions alone.

What I suggest in my testimony and now that I talk about, is that there is another option to public land management based on prescription. As a matter of fact, it is an option that on one hand, was put forward in very forceful terms in the President's recent February, 1997, economic report, and at the same time has been supported by such conservative think tanks as the Competitive Enterprise Institute.

It is an option that takes the cue, I think, from what Congress did in the last term, initiating agricultural policy to move away from a system of prescriptive management to one that is based on individual farmer responsibility and accountability, and one that depends more on market rather than government prescriptions for achieving allocation of resources.

Specifically, in regard to public land grazing, what I am talking about is a system that is based on fully marketable forage use rights or privileges, depending from what direction you are coming from, with very long tenure; removal of government constraints to forage use rights, privileges; and removal of constraints to the marketability of those privileges to other people, specifically elimination of current nonuse limitations; removal of any kind of limitations; restrictions that say permits can be acquired only by those within the livestock business; elimination of base property requirements; elimination of prohibitions on subleasing; in a word, anything that interferes with the marketability of these and the restriction to any small limited group in society.

Specifically, what this market approach would do, its broad implications, one, it would emphasize outcomes. We would no longer be interested in how ranchers go about achieving their ends. We would not be interested, for instance, where salt is placed. We would be interested in outcomes.

There is no clear relationship between following specific rules and having particular kinds of good management. We have learned that when it comes to all other environmental areas and not just in this country but elsewhere.

Secondly, it provides nonpolitical and nonjudicial channels for public participation in land use allocation and conflict resolution. More specifically, applied to the Diamond Bar, which is the example in my testimony, or I would argue to the Toiyabe, Sawtooth or any other national forest, what it would mean in specific terms is drastic deregulation; de-emphasis on telling people what to do; a realization that numbers of cows or the season of use, all of these issues are unimportant to the ultimate outcomes we all seek on public lands.

In fact, in the 1970 Public Land Law Commission, that commission recommended that we change management on our public lands away from emphasis on numbers and other aspects, indicators of management to final outcomes.

Secondly, in regard to the Diamond Bar, these market ideas would provide new and more productive channels for resolving the land use conflicts and land use resolutions, specifically in the case

of the Diamond Bar, where essentially we have a lose-lose situation, where every party is losing. The taxpayer is losing; roughly $2,000,000 to deal with a ranch that is only worth about $750,000. The rancher is losing everything, and environmentalists are ending up with a decision that will still leave livestock on a piece of land which is the Leopold Wilderness which many of them would see better off without any livestock.

With a market approach, it would allow environmentalists to have entered into a negotiation with the rancher prior to polarization, which now occurs; for them to acquire those AUMs; and to voluntarily put them into nonuse, which the Forest Service this time under their policy will not allow permanent destocking of the allotment, and it would, of course, have saved enormous amounts of money.

The point to this, the point in talking about a market-oriented approach to reform of public lands is this, that market economies don't wage war globally. What they wage is competition.

Market forces when applied to public lands will get us away from political conflict and judicial contention and move us toward a more fruitful and productive solution.

I will be happy to answer any questions later, and thank you for the opportunity to talk.

[Statement of Karl Hess may be found at end of hearing.]

Mrs. CHENOWETH. Thank you, Mr. Hess, for your very, very interesting testimony.

The Chair now recognizes Neil Oldridge.

STATEMENT OF NEIL OLDRIDGE, AMERICAN SPORTFISHING ASSOCIATION, SAGLE, IDAHO

Mr. OLDRIDGE. Thank you, Madame Chairman and members of the Subcommittee. I thank you for the opportunity to appear before you today to summarize my written testimony, presenting the views of the American Sport Fishing Association regarding livestock grazing on national forests.

I reside as a contiguous neighbor to the Kaniksu National Forest in the great State of Idaho, and I own cattle grazing property totally surrounded by the Custer National Forest in southeastern Montana. My interests and my roots also run deep in hunting and fishing, and I have recently retired from a 30-year directing businesses in both of these industries.

As is made clear in the written testimony, the American Sport Fishing Association does not oppose responsible grazing on our public lands and considers properly managed grazing to be a very legitimate use of our national forests.

We do, however, for very sound reasons, oppose overgrazing particularly when it damages riparian zones and degrades the quality of the water in our streams.

Sport fishing is not a casual activity. It can't endure water quality degradation without a significant and negative impact to the American economy. Fifty million Americans spend $70 billion a year fishing. This fishing activity creates 1 million full-time American jobs and generates $3.4 billion in taxes.

In 1994, on U.S. Forest Service lands alone, American anglers spent 37 million days of fishing producing a total economic output

of $5.3 billion; 65,000 American jobs; $1.3 billion in wages; and $260 million in tax revenues, and that is just on national forest land.

There are no mysteries to proper range and riparian zone management. Our professionals know what to do and what not to do. We have the knowledge and we have the tools to produce both quality beef and quality sport fishing opportunities.

Most of our western ranchers with national forest grazing allotments are good operators, and I am sure that includes those who have testified here today, and they are good stewards of our public lands. Poorly managed grazing in riparian zones, however, can, has and will cause severe damage to our watersheds, our water quality, and the overall health of our fisheries. Overgrazing riparian zones is unquestionably a significant factor in the poor health of some of our western waters.

All of us with a vested interest in public forests must recognize that if livestock grazing is not well managed, aquatic populations, including recreational fisheries, will be seriously impacted.

In full recognition of the fact that different local problems often require different management techniques, the American Sportfishing Association recommends a host of management prescriptions which include the following: number one, establishing riparian zones along rivers and streams as separate riparian pastures; number two, excluding livestock from riparian pastures at certain times of the year when stream banks are most vulnerable; number three, resting riparian pastures for appropriate periods between grazings; four reducing riparian pasture AUMs, if that is what is necessary; and five, permanently excluding livestock from sensitive or badly damaged riparian zones if deemed appropriate by local management plans.

How do we do this? A direct quote from the National Riparian Service Team's mission statement says, "Restoration will not happen by regulation, changes in the law, more money, or any of the normal bureaucratic approaches. It will occur only through the integration of ecological, economical, and social factors and the participation of the affected interests."

Therein lies the solution to this issue. A new approach called cooperative riparian management programs brings ranchers and riparian management experts together to develop practical, local approaches to improving stream-side conditions through good local grazing practices.

The Forest Service, the National Resource Conservation Service, and BLM are providing leadership for this very promising means of successful fisheries restoration and grazing management. The National Riparian Service Team whose mission statement was just quoted above in part are a product of this collaborative effort.

The American Sportfishing Association urges Members of Congress to support the cooperative riparian management programs, interdisciplinary training, technical support, and field review components.

In summary, we know what to do and we have the tools in place with which to do it. We can have it both ways. We can have good beef and good fishing.

We must keep our efforts cooperative, on the ground, local, and driving by good management practice, good communication, and a whole lot of good common sense. Confrontation politics, pitting one user group or one industry against another, creating winners and losers, has not worked in the past, and I assure you that it will not work in the future.

We stand now at a crossroads. The time is right to collectively focus our energies, ranchers, fishermen, agency professionals, conservationists, and all other affected groups. Be assured that the American sport fishing industry stands ready, willing, and able to work in a cooperative effort to restore our public waterways while continuing the maximum possible use of our national forests by the grazing industry.

Thank you, Madame Chairman, for allowing me the opportunity to provide the ASA's views on this important public management issue. Thank you.

[Statement of Neil Oldridge may be found at end of hearing.]

Mrs. CHENOWETH. Mr. Oldridge, I thank you so much for being here. It is a real personal privilege for me to have you here. I have always appreciated your opinions and listened to you.

Mr. OLDRIDGE. Thank you.

Mrs. CHENOWETH. You may have noticed a bit of confusion up here. I apologize for that, but we just got word, and you can hear the bells going off, that the Floor is requiring that we go vote, and Mr. Crapo and I have been trying to work out a strategy here to keep this committee hearing moving, so Mr. Crapo, in a short period of time, will be excusing himself from the committee, and he will vote, and then come back, and run the committee while I vote.

That is the confusion, and I do want to thank you very much for being here.

Now, I would like to call on my constituent—actually, you are from Ketchum, but you do a lot of business and are very active and a very good spokesman for the Idaho Conservation League in my district, too. Linn Kincannon.

STATEMENT OF LINN KINCANNON, IDAHO CONSERVATION LEAGUE, KETCHUM, IDAHO

Ms. KINCANNON. Thank you, Madame Chairman, and I am happy to be here today. I am Linn Kincannon. I am from Ketchum, as you said, and I appreciate the opportunity to meet you and Mr. Crapo here today.

I work for the Idaho Conservation League. It is Idaho's oldest and largest statewide grass roots conservation group, and I am also a member of the Upper Snake Resource Advisory Council which consists of various folks from different user groups who have gotten together to advise the BLM on various resource issues, and we were amazingly successful in writing grazing standards and guidelines during the last year for grazing on public lands with ranchers on the committee.

I am also lucky to be the mother of two great kids, and because of that, I have a very personal interest in the future of our public lands because they are an important and priceless part of our national heritage, and I think that those kids deserve a chance to fish and swim in clean water, and to picnic and play along shady

streams, and also to view and hunt wildlife and other animals on the public lands.

But those rights have been lost or at least they are at risk in many places. Ranchers often say, and Scott Bedke said it today, why would I harm the land when I depend on it for my livelihood.

I think that shows that ranchers know a lot about managing cattle and about their business and about the forage that is important for their cows, but they often don't know about the species, native species, that have been lost through overgrazing, and they often don't know whether a stream is functioning in a healthy condition and why it is important for it to do so.

The fact is, those are multiple use lands, and they need to be managed to support all the uses, not just grazing, and I am not criticizing their ability to manage those lands for grazing. Clearly, they are able to do that.

But I have included in my testimony a number of photos, and they are just representative of hundreds of photos that tell the same sad story. The first one is Trout Creek on the Sawtooth National Forest. The first picture shows an exclosure, which means that livestock have been fenced out for five years, and you can see the components of a healthy, functioning stream there. The banks are covered with deep-rooted plants that hold them in place and prevent erosion. Tall grasses catch sediment during floods, keeping the water clean. The stream is narrow and deep, which provides good habitat for fish, keeps the water cool, and there are also willows growing along the stream that provides habitat for ground nesting game birds and also for migratory songbirds whose populations are in trouble, incidentally.

Photo number two is upstream from the Trout Creek exclosure. It shows the obvious effects of overgrazing. I am not saying that the entire stream looks like that, but it certainly doesn't look like the land in the exclosure.

I will skip ahead. There are other photos, but I would like to skip ahead to photo five, which is a section of Shoshone Creek when there was season-long cattle grazing along that creek. Photo six shows that, with a change in grazing management (cattle haven't been excluded there, as I understand it) but you can see some improvement in that stream. There are actually some grasses growing on the bank and stabilizing it.

Photo seven is an aerial view of the upper East Fork of the Salmon River in the Sawtooth National Recreation Area. The steep terrain forces cows to stay in the narrow valley bottoms until all the forage is gone, and that damages the streams. As you know, Congressman Crapo, this is typical of central Idaho terrain. It has high recreation values and a lot of recreation use there.

Photo eight is a closeup of Bowery Creek which is in that drainage that you can see in the photo, and again, the effects of overgrazing are evident there.

With all the controversy and the concern over livestock grazing over the last few years, there have really been very few changes on the ground, and why is that?

One thing is that enforcement of terms and conditions of grazing permits by both the Forest Service and the BLM has been pretty poor. Leaving cows behind when it is time to move them or allow-

ing them to drift back are a couple of examples that can cause overuse and some of the problems that I have shown in those photos.

I think we need to ask the question, how can we improve enforcement of those terms and conditions to help ensure that the kind of damage we see in those photos becomes a thing of the past.

I think a shortage of funds is a problem also. Conditions on the land need to be monitored so we can tell the effects of grazing management, and cows must be moved before they overgraze the vegetation or trample stream banks, and they need to be kept where they are supposed to be.

Assuming agencies won't have enough funding to do those things, how can permittees be helped to assume these responsibilities so the conditions will improve? I believe, based on my experience with the RAC, that improved enforcement will benefit ranchers who are doing a good job.

When cows trespass from another allotment or overgrazing upstream cause problems downstream, those ranchers suffer. But they have said to me, I am not going to tell my neighbor, cause a fight, embarrass my neighbor; it is simply not something I am going to do, but I want the agencies to enforce those terms and conditions and fence maintenance, et cetera, so that I am not put in that position and my allotment is not damaged.

I have to say, though, that enforcement and accountability I don't think are the whole answer. The problems on the public land aren't all caused by bad operators. In some places, the standards probably aren't sufficient to protect fish habitat and wildlife habitat and recreation opportunities.

Management changes are needed which incorporate the scientific knowledge that has been gained over the years, and that acknowledge the multiple-use aspect of the land, the increasing importance of recreation.

Fortunately, there is plenty of information available on how to graze with fewer adverse effects. Wayne Elmore of the BLM and professors at Oregon State University have experimented with grazing systems that have improved stream conditions without eliminating grazing, and I know Wayne Burkhardt has worked on some of that as well.

I think that Supervisors Levere and Nelson are trying to do something to address the problems here by enforcing terms and conditions, and if the committee finds that that is not a good thing to do, well, I wish you would say what is, because something needs to happen to address these problems. They are of great concern.

I don't believe that it is a favor to ranchers to say we are going to maintain grazing management as we have always done, because more and more recreationists are coming to the public lands, and they are going to say, we demand a change. Help ranchers get their ecological house in order so they can point with pride to streams and wildlife populations instead of the kind of problems that we see in so many places.

Thank you, and I am sorry I went over my time.

[Statement of Linn Kincannon may be found at end of hearing.]

Mr. CRAPO. [Presiding] Thank you very much, Linn, and we appreciate your testimony and your patience in waiting today. Mr. Burkhardt.

STATEMENT OF WAYNE BURKHARDT, PROFESSOR EMERITUS, UNIVERSITY OF NEVADA-RENO AND UNIVERSITY OF IDAHO-MOSCOW, INDIAN VALLEY, IDAHO

Mr. BURKHARDT. Thank you, Congressman, it is a pleasure to be before the committee again, and again, it is on grazing matters, and in fact, I find it rather ironic that something that humans have been involved in for thousands of years, probably the second or third oldest human endeavor, is grazing. Something of that tenure still generates or now generates such immense controversy, and I think there are reasons why that happens.

Certainly, part of that lies within the change in our own society. We have become almost entirely an urban society, and grazing certainly is a rural activity. Urban people want those lands protected as God and motherhood stuff and so do I. They are important to all of us.

But I am also struck here today that there is something vastly wrong in the way we are going about doing that. The disconnect that was so damned apparent here in these hearings today between the standards and the policing action and resource issues, a major disconnect. I have been sitting here listening to this, and I have the feeling the Forest Service is a policing agency, not a land management agency.

I have taught range management and proper ways to graze and Lord knows we have grazing problems, and we ought to be dealing with them, but I have been involved in this business for 30-some years and taught grazing management practices for many of those and still do.

When I look at the standards and guides and I look at the uniform guides which are the subject of this hearing, I don't see anything in there that relates to what I have taught for years as appropriate approaches to grazing management.

First of all, standards and guides utilization——

Mr. CRAPO. Mr. Burkhardt, could I interrupt you? I have four and a half minutes to vote. The Chairman is not back, so I am going to ask if we could recess for a minute and have you continue your testimony when she arrives back.

She should be coming in the door any minute.

Mr. BURKHARDT. That would be fine.

Mr. CRAPO. I apologize for this. It always happens, so the committee will be in recess for a few minutes.[Recess]

Mr. CRAPO. Ladies and gentlemen, I apologize for that delay. When we got over there, we found out that instead of it being two 15-minute votes, it was one 15 and one five, so our plans didn't work anyway.

Representative Chenoweth may or may not be able to make it back because she is involved in a meeting over in the Speaker's office that starts in just a few minutes as well.

We will see where we go from here, and Mr. Burkhardt, again, I apologize for interrupting you mid-sentence, and welcome you to start again.

Mr. BURKHARDT. Thank you, Congressman Crapo. I mentioned that I was struck here by the disconnect between what we have been discussing largely this afternoon and real grazing management.

I see the standards and guides often being used and set up in a way to guarantee that grazing management cannot succeed, being used as a vehicle to reduce grazing on public lands to some token activity that is no longer a political headache.

I see that as a very concerted agenda and having little to do with setting up a scenario where ranchers can be successful in grazing management.

Over the years in teaching grazing management, one of the things—first of all, let me back up a minute. Large animal grazing on the landscape is a natural biologic process. It has been present on this landscape, the far west, for millions of years. The absence of large grazing animals is unnatural, and yet in this business, we so often exclude the animals in the form of an exclosure, see what happens, and say, oh, that should be our goal. The fossil record indicates that large grazing animals should be part of the system.

Now, if we look at those natural grazing systems, I think they provide a model for us on how we should manage livestock grazing, a very sustainable model. It is important to me, it is important to a lot of folks, Linn here and many others, that grazing be practiced in a way that the resource is sustained as well as the use of the resource.

If we look at natural grazing systems, I cannot find one example where utilization standards, double-height standards, are a functional component of making those natural herbivories sustainable.

These standards, utilization standards or otherwise, are conventions of man, not part of natural grazing systems. They were designed to control, designed to be the only management tool available to us when we were practicing season-long, every-year grazing.

We have long known that season-long grazing is an inappropriate grazing strategy. The western rangelands did not evolve under that kind of a herbivore influence, and we have major resource problems when we practice that.

Utilization standards was our tool for dealing with that, and an ineffective and inappropriate one at the time. We have learned a great deal more about how to appropriately manage large animal grazing. Timing of grazing, rest, rotation of that use, those are the features of natural grazing systems, the African Serengeti, the bison on the plains, the Pleistocene megafauna, it does not matter. You look at any natural herbivory. It functions on the basis of timing, rotation, rest, grazing. Not one of them function on the basis of utilization levels.

In terms of livestock grazing, when we practice rotation grazing that is designed to fit the resources of that allotment, we do not have the creek bottom problems that we are all agonizing over. We have healthy riparian areas. It is important to the fisheries; it is important to the wildlife.

When we impose artificial standards like the utilization standards and the guides that we are talking about here, what do you see on that chart as the remedy for a problem? A cut, a 25-percent cut or more, whatever.

Let us think about that for a minute. Grazing problems on the Sawtooth, grazing problems on the Humboldt or elsewhere in the west at this point in our history are largely what I call selective grazing problems. In other words, there are those special portions of the landscape that the grazing animal wants to concentrate in, the creek bottoms and the spring areas, those favorite areas.

So we got a grazing problem, and we don't reach a utilization standard in those creek bottoms, those riparian areas, and we implement a cut. What is the impact of implementing that cut? Does it solve that grazing problem in the riparian area?

The next year with 25 percent less or 50 percent less livestock out there, the utilization level on the riparian areas, those preferred areas, is as high as it ever was, because the cattle just simply stay there until it is all gone.

What we have accomplished by that, though, is we have increased the portion of the allotment that gets no use. This is an absurd approach to managing grazing, and we have known for many years that it didn't work, and yet it is a knee-jerk reaction, and that is why—it is a reaction I encounter on virtually every allotment I am called into to work on to help solve the grazing problem.

The agency proposal always is, we got use problems out here, let us cut. So we make a cut and the use problems on those areas remain the same. We haven't solved the problem.

We need to build in rest, rotation of that use, and it needs to be done on a cooperative level. I am appalled to think we are sitting here talking about 25 percent, 50 percent, or more cuts in response to violation of things like water troughs or fences or cows not being in the right unit when the units aren't even fenced. What in the hell is going on?

This is not grazing management. That is policing action. By the implementation of conservative use limits or stubble-height limits, what we have done is put the livestock rancher in an absolutely impossible position. He cannot, if he wanted to, accomplish that and stay in business. We have not solved the resource problem, and we have given folks with an agenda against grazing ample opportunity to beat up the rancher and the agency for not solving the resource problem.

I think Mr. Hess' comments about we ought to tailor grazing management, livestock grazing management, to the end product, the health of the resource, not did you abide by some term and condition in your permit.

What is the endpoint? Is the trend of the resource in a positive direction or in a negative direction, and if not, then look at why.

I would urge the committee in its deliberations to think strongly about the problem, as Mr. Hess said, of prescriptive management. It has to be cooperative.

If it is prescriptive, the permittee and the agency wind up head-to-head, fighting. When we are in a confrontation mode, our attention turns from managing the grazing to how to get the best of the other person. Our energies are siphoned off to the side into a fight.

We need to refocus that. Public land grazing may be analogous to a marriage, and far too often, it is an unholy marriage between

the permittee and the agency people, and when that happens, we all know it is not a very successful marriage.

We need collaborative management. The Forest Service or the BLM and the grazing permittee should be working together, not knocking heads, and I recognize the fact that we have uncooperative, poor ranchers and in that case, rather than across the board edicts that stifle incentive and cooperativeness for all permittees, focus your attention on the problems.

With that, I see my time is up, Mr. Chairman, and I appreciate the chance to visit with you.

[Statement of Wayne Burkhardt may be found at end of hearing.]

["Herbivory in the Intermountain West" may be found at end of hearing.]

Mr. CRAPO. Thank you. I gave you a little extra time since we interrupted you in the middle of your first comments.

Leslie, why don't you go ahead? Thank you.

STATEMENT OF LESLIE GLUSTROM, PRESCOTT NATIONAL FOREST FRIENDS, BOULDER, COLORADO

Ms. GLUSTROM. Thank you, Mr. Crapo, and I appreciate your patience. You have had a long day, and I will also summarize my testimony. I would also like to thank you for your commitment to managing the resource, ensuring that terms and conditions of grazing permits are complied with, but doing it in a way that is fair to all sides. I think it is just that kind of perspective that is needed if we are going to move forward.

I have been on the other side of the agency many times, and I know what it feels like to be blindsided. I know what it feels like to be treated cavalierly, and it is as Chairwoman Chenoweth said, you get really upset, and I understand some of that.

I also want to second, though, Linn Kincannon's comments that if the agency is not proceeding in a way that is fair, that is somehow being too rash, or not giving enough time or not allowing enough time for cooperation, help them learn how to do that in a way that doesn't hamstring the agency, because as you said, we need rangers on the ground doing their job.

I have lived right next to a national forest for 13 years that is in terrible shape where it is not necessarily the ranger's fault. They are good people, but they have been incapable of doing the job they needed to do because of the political and cultural constraints. I really appreciate your support for rangers on the ground doing what they need, and if they are not doing it well, help them learn how, but don't hamstring them.

In a nutshell, I see that as really a key thing for representatives from all western States to be helping the agency learn how to do it, because believe me, I know they don't always do it in the best way possible, but don't try and turn them off either, because that has been happening for a century, and the result, you can see from the pictures in my testimony.

My pictures are from the Prescott National Forest in west central Arizona. When they did their land management plan, the Forest's own data found that 99 percent of the riparian (or stream-side areas) on the forest were in poor or very poor condition.

I often say it is a little bit like having 99 percent of a heart attack. It is not a good situation. The top picture on the cover of my testimony gives you some feel for what I spent 13 years hiking through. I spent hours and hours and hours and hours hiking through what should be riparian areas but instead are barren wastes. It is a riparian area, whether it is in Arizona or not, and you can have grasses and trees and well-defined stream channels.

There were 31 native species of fish in Arizona. We have almost lost all of them because as you can see, we are not going to have any fish living in places like this.

I have a whole basement full of pictures. This is not an unusual situation. It is unusual in that through a little bit of encouragement from me, the Forest Service did agree to fence it—more than a little bit, but I helped build the fence just so that they could see that this isn't just the way it is in Arizona.

The bottom picture shows the same area. The tree, the main juniper is almost occluded, but you can start to see the area recovering, but this recovery is very much the exception.

I have a whole series of reports that I have prepared on allotment visits that I did last year. Every picture in here is a violation of forest plan standards and guidelines. Not only did I not get a response to any of these when I sent them to the Forest Service, nothing has been done about any of those.

I could go out tomorrow and find an equal or many times more that number of forest plan violations. I know we can't do it, but I can easily take you out and for every hour we spend on the forest, I can show you a dozen forest plan violations.

We need the rangers out there, we need them doing their job. They may need some help learning how to do it in a way that is fair and a reasonable process, but please, don't hamstring them.

I guess maybe we could just take a minute and look at the pictures on page four. It has been a long day, so I will try not to go on too long.

Mr. CRAPO. Looking at pictures is easier anyway.

Ms. GLUSTROM. If we look at the top picture on page four, it shows the grazing allotments on the Bradshaw District of the Prescott National Forest. You can see how steep these areas are and their questionable suitability for livestock grazing. Then, the middle picture shows kind of a similar but a little closer-up perspective. If you are a cow, cows need about 25 pounds, sometimes 30 pounds of forage a day, and you are a cow, and it is July in Arizona, where are you going to find that 25 pounds of forage if you are looking at that middle picture?

The little green tufts you see are snakeweed. They can't eat that, because it will cause abortions, so there is nothing to eat in the foreground, there is nothing to eat in the middle ground, and if you walk, which I have done and did for 13 years, just walked and walked and walked, there is nothing to eat in the background, either. That goes on and on—it is about a 1,000,000-acre forest.

The forest's own data shows 99 percent of riparian areas are in poor and very poor condition. They almost never do range analyses on their allotments. I finally got them to do one, and they found out that 98.6 percent of the allotment in the middle picture there, 98.6 percent of that allotment is in poor or very poor condition.

The permittee on that allotment, as on most of the allotments on the Prescott National Forest is not an old-time rancher. He is not like Scott or the folks you have heard from. He is a multi-millionaire. He has been written up in Forbes magazine. I have attached the Forbes article; it is the second page from the back. His name is Rex Maughan, and he markets in a pyramid scheme. He markets aloe vera products, has major aloe vera plantations all over the world. Forbes estimates—I have no idea how rich this man is, but Forbes estimates on the bottom of the back side of the page is that his personal take must have been in the tens of millions of dollars every year.

When you think about people who have permits to graze on the public lands you have to think about the Rex Maughans too. You see, I have ten years of experience. Mr. Maughan happens to be the richest of the permittees that I have tried to deal with, although I have never met him, because he has never come to the table.

When you think about these permittees, I think you have to include thinking about the Rex Maughans. In over ten years of work, I have only worked with one permittee who really depends on their public lands permit for their income.

I realize I am running out of time. I would just ask you to remember those things, and my testimony includes ideas for how we can move forward, have a vision for the future that includes the responsible permittees, keeping them on the land, keeping them in business, keeping the true ranchers out there working and using the public lands, and starting to make some decisions about whether we should still continue to manage all of these areas for livestock grazing.

Thank you.

[Statements of Ms. Glustron and Jeff DuBonis may be found at end of hearing.]

Mr. CRAPO. Thank you, Leslie, and let me say to the Forest Service personnel who are here, I know that the Chairman had asked you to stay. I understand that you have some other events or need to be other places at 6:00.

I am not going to take very much longer, so you are welcome to stick around and hear what I say at the end here, or you are welcome to take off. I appreciate your staying here throughout the hearing.

I wanted to get back for this panel to make sure that I got a chance to ask some questions. The testimony from this panel has caused me to decide I want to make a little statement first and then ask you to respond to that, if you would.

It seems to me that we have a problem not just in grazing but in our environmental management policy in this country, and it has been addressed in one way or another by every one of the speakers on this panel and actually by all of the panelists today, but particularly on this panel.

My way of saying it, and I guess I am just going to say this and then ask you to each take just a short couple of minutes to respond.

I don't want to go through a whole big long round of statements again, but it seems to me that there are at least two areas of our national approach to environmental law that are wrong, and they

are wrong, I believe, for the environment and for the economy, and in that sense for people.

By the way, I don't mean to presume that I have identified everything or that I am even right here. It is just that it seems that these two jump out at me.

The first is that it seems to me that our system of enforcement, if you will—no, that is the wrong word. The fact that I used that word shows the problem. The system of solution-finding is adversarial, and even to the point that when we say that we are going to create a system that involves public input, that system is one which essentially boils down to a series of what we call hearings or opportunities for public comment on a decision that has been made already and put out there to be evaluated in some context on some issue that has already ripened into a dispute.

The hearing is not an event at which people come together to collaborate and decide how to solve a problem. It is an event at which they come together to do battle. Each side uses, or most often, each side uses that hearing as an opportunity to make their case for the media, to make their case for potential litigation, to make their case for the decisionmaker, or whatever it is, but it is not where they sit down at a table and talk to the other side about what their point of view is and how they might be able to find common ground.

It is my belief that there is common ground or that there are better solutions in most cases. This thought is not original with me, but if you think of an X-Y axis, with X being the axis for good for the economy, and Y being the axis for good for the environment, many of the solutions are down where the axis crosses. They are low for the environment and low for the economy, many of the solutions that we get driven toward, but that there are solutions that are further out.

I am not describing this very well for you, but where you go further out the graph that are higher for the economy and higher for the environment, and I think those exist in most cases, and I think there is a creative ability among Americans, if they can work together in a system to find solutions where they collaborate, that they can find answers that are further out on that chart, if you will.

Anyway, my first point is, our system is adversarial and it is statutorily and regulatorily designed to create conflict. Now, maybe that is an overstatement, but it seems to me that that is a big part of the problem.

Secondly, and perhaps I should have started with this, many of the decisions are driven by distant decisionmakers, and by that, I mean we often—it is a common thing to criticize the bureaucrats in Washington, the Congressmen in Washington, whoever it is, and it is not always the Congressmen in Washington or the bureaucrats in Washington or whoever who are making these decisions, but so often, the policy decisions as to how we will manage our public lands are made by decisionmakers who do not live where the problem is and have not had the opportunity to sit down around the table with the stakeholders who live there.

It seems to me that if you get people who know the allotment or who know the steam or who know the circumstances and sit them

down at a table, someone who has walked the area, to sit them down at a table that they can find better solutions for that particular piece of the world than someone who lives somewhere else and who is working from a more generic understanding of the issues.

Again, that is my perspective. Now, I don't know where that leads us in terms of the solutions we are trying to achieve in this hearing.

It is pretty obvious, I think, from my questions earlier, that I believe that the UAG has been proposed moves us further down that adversarial model, and it heightens the potential for adversarial relationships.

It is pretty obvious that the Forest Service does not believe that and does not intend for that to be the case, and different people fall in different places along that perspective, but I would like to ask if you would each take maybe a minute or so, and if you don't want to respond to what I have said, just say whatever might still be on your mind that you haven't said and give me your perspective here on how we can solve this problem or the approach to the environment in general, and I guess we will just start at the end here again with Mr. Hess.

Mr. HESS. Thank you. Well, I would, I think, in general agree with you. I guess the analogy——

Mr. CRAPO. By the way, I will try to be a timekeeper here, because I know nobody is great at keeping time to two minutes.

Mr. HESS. One of the analogies that one of my colleagues used is a grocery store, and using your examples, it is as though we have people living thousands of miles away from the grocery store deciding on the goods that will be stocked in that grocery store and then asking for public input as to whether that stocking is correct or not.

Of course, that is conducive to a tremendous amount of conflict, and in terms of how we manage our public lands, in terms of the outcomes that we are seeking, it is not dissimilar to that, and the reason that I have suggested market approaches, approaches that would open up the system of public land ranching voluntarily to market negotiations, it would allow people essentially, using the metaphor of the grocery store, to decide through their sort of vote in the marketplace of what goods will be stocked.

The fact is, in riparian-area management, there probably is no final, ultimate correct solution. Even with good management from the perspective of a credible range of scientists that may not produce outcomes that are desirable by other groups.

But as it stands now, those other groups don't have other alternatives, don't have other options. Environmental groups cannot acquire leases—in general, leases to allotments and totally destock.

In New Mexico, just to summarize, there is a wonderful example of how this cooperation works. The Southwest Environmental Center has established a program on State grazing lands where they said, we would like to sublease from any rancher voluntarily their riparian areas for a period of five years, and we will build the fences, put in the grazing management—not the management, but restore the riparian area. At the end of five years, the fences, everything is yours to do as you want. All we want is an opportunity to participate and enter into a voluntary subleasing agreement.

It is a market solution, it is win-win, and it is one that is very conducive to ending conflict.

Mr. CRAPO. Thank you, and that is one idea about how to maybe get there. Mr. Oldridge.

Mr. OLDRIDGE. I think you are very perceptive, Congressman Crapo; you put it very well.

A couple of summary comments that I would add. This problem can't be solved here. It cannot be solved in Washington.

You can't impose your will on ranchers and the multiple users of the forest lands, and I think that is best issued in terms of a resolution by saying whose land is it. Once again, it is not a real thought, but the land does not belong to the grazer. That land also, by God, does not belong to the Forest Service.

It is our land, and the Forest Service's charge is to manage that land to the very best of their abilities, to make the widest range of benefits available to the public that they are serving, and that means grazing, and that means fishing, and that means bird watching, and that means all of the things that we like to do on our public lands.

Get it out of Washington, put it at local levels, insist that these things happen, insist that resolutions are in fact effected, because we know how to do it and that will go a long way toward resolving this issue.

Mr. CRAPO. Thank you. Linn.

Ms. KINCANNON. I think I have said in my testimony that I had had a positive experience on the Resource Advisory Council working with ranchers and other folks to try to work on some issues. We will see what happens when we go out on the ground and try to implement them, but so far, so good.

My experience in the general arena when I first went to a ranching meeting several years ago was I never said anything during the meeting except who I was and that these were public lands. That was it, and what the ranchers said to me was you don't know anything about cattle management, you have no right to be here, you have nothing to say to us that we are interested in, goodbye.

Mr. CRAPO. Well, everybody has to be at the table.

Ms. KINCANNON. But I think beyond that—what has made the RAC successful is the BLM has said if you don't figure out what to do, we will.

I hate to say you've got to have a hammer to make people negotiate, but they have to have something to lose if they don't negotiate. If they can maintain the status quo by doing nothing, why wouldn't they? That is a smart business move.

Mr. CRAPO. That is always a good point. If either side, and I don't mean there is just two sides, but if any group at the table has the ability to win by doing nothing, then they have no incentive to move forward, and that is a part of the whole solution that needs to be concerned. Thank you.

Ms. KINCANNON. Thank you.

Mr. BURKHARDT. It would seem to me, Congressman, that the Forest Service's job would be to make this work in terms of sustainable use of natural resources on the forest lands, to make it work, and as you perceived there, we have a very adversarial situa-

tion and always seem to have a top-down prescriptive type of management. Those guarantee that it isn't going to work.

I think life would be much more pleasant, plus resource conditions would be better if indeed we were going at this in a way that works.

Resource use for human needs and services is absolutely appropriate. Every population of organisms on this planet extract their livelihood from the natural resources around them, humans included, and we should do that. Our goal should not be to put natural resources off limits, look but don't touch. That is absurd, and the only way we get around these adversarial situations in my mind is to get it on not a prescriptive edict-type of management, but cooperative, local-level planning.

I think you are focused on something not only in this matter but our other environmental efforts, the Endangered Species Act, and otherwise, you are focused on two points that are dear to my heart.

Mr. CRAPO. Thank you very much. Leslie.

Ms. GLUSTROM. I think they learned in timber that you don't really get anywhere by standing at either end of Main Street and shooting at each other, and we are going to learn that on this issue, too, and I have been involved in the issue for a while.

I am actually heartened by today because I hear a number of people saying we are not going to get there by shooting at each other. How are we going to move forward?

I think your ideas, Mr. Crapo, are really valuable. I would like to add that in order for them to really work, to really, truly move away from an adversarial kind of position, there are three fundamental principles that everyone has to have when they come to the table, and I believe you have those, but I will be honest, many permittees don't.

I have spent many, many hours, not as many hours as hiking, but many, many hours in meetings that should have been cooperative but that have been essentially useless. We have generated mountains of paper and gotten nothing done on the ground.

What has been missing out of those, and I think this is a role that D.C. and the congressional delegations can really help with, are three fundamental points. The first point is that this is public land, and while ranchers may—and I don't want to speak too broadly, but the permittees I have dealt with have had an attitude that says, "Well, yeah, it is public land, but the public doesn't have any role in the management of it."

The first point is that it is public land and the public has a role in the management of it. I think that is what the RACs have done.

Secondly, rules and regulations need to be complied with. Again, I am not trying to speak too broadly, but my experience is that essentially, every permittee I have dealt with is like a spoiled child.

I am a mother, I know what a spoiled child acts like. I know if you tell a spoiled child that they can't write on the wall any more, and if they are spoiled, they are going to kick and scream on the floor, and if you don't want to deal with that temper tantrum, and you say, OK, go ahead and write on the wall, they are going to keep writing on the wall forever, and then if you beat up on the principal when the principal tells them not to write on the wall in

school—and frankly, that is a mindset that I have run into for ten years, and it is extremely frustrating.

Their attitude seems to be, "This is our land. We do with it as we please, and anybody who tries to do something about it will be intimidated."—they have tried to intimidate Bill and Linn and me and many other people in very serious ways. You don't necessarily want to hear that story, but believe me, it is no fun dealing with these spoiled children. They are not all spoiled, but a whole bunch of them are.

This is the second thing they need to hear from their congressional delegation is that this is public land, there are rules and regulations. You can have a role in being involved with them, but you don't get to do whatever you want on the public land.

The third point is that we need to protect the resources. They are public resources, and we need to protect them for future generations and so that we are managing the public lands as the Multiple Use Act says, "in the combination that best meets the needs of the American people." I think with that kind of direction, your ideas can actually be hugely helpful, but without that direction, we will keep spending a lot of time, generating a lot of paper, and not getting anything changed. That is my experience.

Mr. CRAPO. Thank you very much. Those were all very helpful comments, and I just want to tell you, I can only speak for myself, but I think that my sentiments are shared by both sides of the aisle here in Congress by most of us, and we obviously have some very broad differences in perspective and philosophy and point of view here on the committee.

I believe that at a general principle level, virtually all of us can agree that we want to protect and preserve the rich heritage that we have in our public lands. I can tell you one of the reasons that I live in Idaho is for the clean air and the clean water and the tremendous environmental opportunities we have. It disheartens me when I see our environment in Idaho degraded.

On the other hand, I am a strong believer that, within that context, we can have public land usage, grazing, timber harvest, mining, and other usage—irrigation, whatever it may be. It just means that we are going to have to work together.

It is interesting to me that very often when you hear those who are on the multiple-use side of the issue begin speaking to a group, they say I am an environmentalist and I believe in the environment. I just did that, by the way. Then they get on to their point, OK? And when you hear somebody on the other side of it, they say I am not trying to run everybody out of a job. Some of you just did that in your testimony, and I am not trying to destroy the economy, but we got to protect the environment.

I believe that most people fall in that category. Most people, and I don't know whether it is 99 percent or 89 percent or whatever, but the vast majority of Americans, wherever they live, want to protect the environment and they don't want to do so in a way that unreasonably destroys the economy, the natural resource-based opportunities that we have.

Within those parameters, we have to find a way, and I think it is a collaborative way. I think something in the concepts that we have talked about here today, somewhere in there, there is a ker-

nel of the approach that is going to be a much better solution than our current system. We have to find a way to move forward so that we can reach those solutions that are better for everybody.

Anyway, thank you all for your patience and coming today. I assure you that although the Members here have dwindled, your testimony is well received, and this hearing will be adjourned.

[Whereupon, at 6:20 p.m., the Subcommittee was adjourned; and the following was submitted for the record:]

[Additional material submitted for the record follows.]

STATEMENT OF

DAVID UNGER
Associate Chief

FOREST SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Before the
Committee on Resources
Subcommittee on Forests and Forest Health
United States House of Representatives

Concerning Livestock Grazing Policies on Public Domain National Forests

April 8, 1997

MADAM CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the opportunity to present the subcommittee with an overview of the Forest Service range management program in the western States.

The Forest Service has been managing rangelands for nearly 100 years, and has a long history of partnership with the livestock producers who rely upon National Forest System lands. In fact, grazing on federal lands was one of the earliest resource debates in America. When the debate raged over whether livestock grazing would be banned from the Forest Reserves, it was Gifford Pinchot, who would become the first Chief of the Forest Service, who argued that grazing be controlled rather than prohibited.

Then, as now, that view was based on scientific range research, first begun in 1897 by the Department of Agriculture in the Cascade Mountains of Oregon. The Forest Service began to

implement the concept of a "special tract permit system" as it was known, and began to collect fees in 1906 that were intended to pay for administration of the permit system. By developing concepts such as carrying capacity and grazing systems involving deferral and rotation, these early range scientists and managers laid the foundation for sustainable resource use. In many ways, the Forest Service was first in developing a model range management program for the world.

Livestock grazing on National Forests reserved from the public domain is maintained under a number of statutes, including the Multiple-Use Sustained-Yield Act of 1960 (MUSY) and the Forest and Rangeland Renewable Resources Planning Act of 1974. MUSY specifically provides, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." These uses supplement the original authority under which National Forests were established, found in the Organic Act of 1897 which stated, "No National Forest shall be established, except to improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of the citizens of the United States..."

The Range Management Program Today

Nearly half of all National Forest System (NFS) lands lie within the boundaries of grazing allotments, over 95 million acres of land in 33 states. The Forest Service administers approximately 9000 paid permits which provide for about 9.9 million head months of grazing by cattle, horses, sheep, and goats. Nearly all this permitted grazing is located in the western states, with only 1.1 percent occurring in the eastern forests. Although less than two percent of the nation's livestock production involves federal lands, we recognize that livestock grazing is an important component of the economies of many western communities.

Authorized grazing use on NFS lands has been declining over the past 10 years, from about 11 million head months in 1986 to about 9 million head months for each of the past 3 years. Reasons for the decline in authorized use over this period include continued efforts to improve range in "poor" or "fair" condition, more emphasis on restoring degraded riparian areas, adjustments for effects on threatened and endangered species, declines in transitory range as tree cover increases, and not restocking submarginal lands which are not well suited for grazing as these allotments become vacant. Economic factors related to cattle markets also affect permittee decisions regarding the stocking of permits.

Rangeland Conditions

Despite improvements in rangeland conditions since the turn of the century, we have work to do. Management objectives for range vegetation are contained in land and resource management plans (forest plans). Currently, about 72 million acres of rangeland have such management objectives identified in forest plans. These objectives address such variables as the desired condition, composition, and utilization of vegetation. Approximately 51 million acres (71 percent) meet or are moving towards the specified objectives. Another 8 million acres (11 percent) do not meet these objectives or do not show signs of improving. Another 13 million acres (18 percent) are in an indeterminate status category due to lack of current data. In FY 1995, monitoring to determine whether forest plan standards were being met covered almost 22 million acres, so the "undetermined" status category should decline quickly.

Grazing Permit Administration

Permittees using the public's land have made an agreement with the Forest Service to use it in a certain way. They are responsible for holding up their end of the bargain and should be held accountable for a chronic failure to comply. The Forest Service takes action when this is the case, both to protect the public's resources and the vast majority of permittees who are meeting their obligations.

Forest Service officers have discretion in administering permits to achieve the resource utilization and protection purposes they are designed to serve. In some cases, managers have chosen to use "uniform action guides" as a tool to obtain more consistent and fair actions by the Forest Service when permit violations occur. These guides are in use on the Sawtooth, Humboldt, and Toiyabe National Forests as well as many other units in the western states. No matter what the approach used or the management tools applied, the objective of permit administration remains protection of the natural resources of the public's lands, while providing fair and equitable treatment for all permittees.

Forest Service Range Management Budgets

Downsizing of the agency and increasing complexity in the management of rangelands has required the Forest Service to streamline its processes and cut costs, while increasing effectiveness. Examples of specific actions taken to stretch our dollars include forging collaborative monitoring programs with some of our partners, including rangeland permittees, universities, cooperative extension services, and various industry and environmental organizations. This effort has shown early success and holds great promise in improving communication and coordination, as well as increasing the effectiveness of the rangeland management budget.

Other partnerships offer similar opportunities. "Seeking Common Ground" partnerships have been developed in eight western states. These involve demonstration projects to manage big game and livestock grazing interactions and common habitats. "Pulling Together Partnerships" is a new program with the primary objective of managing noxious weeds on a landscape basis across jurisdictional boundaries. Based on challenge cost-share grants and local partnerships, there has been great enthusiasm for this program. Typical efforts involve the Forest Service, Natural Resources Conservation Service (NRCS), Bureau of Land Management, other federal and state agencies, counties, private landowners, industry groups, and environmental groups.

We are working with other agencies such as the NRCS, Council on Environmental Quality, U.S. Fish and Wildlife Service, National Marine Fisheries Service and the Environmental Protection Agency to streamline consultation and analysis processes so that we can be more responsive to the permittees, the public, and local communities' needs. For example, this effort has already resulted in a reduced backlog of consultation cases and shortened the time needed for consultation under the Endangered Species Act.

This concludes my prepared statement. I would be pleased to answer questions that you or other members of the Subcommittee may have.

TESTIMONY
submitted to

the Committee on Resources Subcommittee on Forests and Forest Health
Oversight hearing on Livestock Grazing Policies on Public Domain National Forests

2:00 PM, April 8, 1997

Committee Room 1334 Longworth House Office Building

Submitted by

Scott C. Bedke
Cattle Rancher
630 N. Center
Oakley, Idaho 83346

TESTIMONY
submitted to

the Committee on Resources Subcommittee on Forests and Forest Health

Submitted by

Scott C. Bedke
Cattle Rancher
Oakley, Idaho

The Bedke family has ranched in the Goose Creek area near Oakley, Idaho, since 1878. I am the fourth generation of Bedkes to ranch in this area and carry on a tradition that predates Idaho's statehood (1890) and the organization of the Forest Service (Organic Act 1898). We have held adjudicated grazing preference rights on the FS and BLM managed land since the very first ones were issued.

An underpinning philosophy, indicative of our longevity in the cattle business and that of our neighbors on the Goose Creek Allotment, has always been, "Take care of the grass (resource), and the grass will take care of you." This philosophy and practice has guided the permittees on our allotment to always take the initiative and the lead in adding and implementing improvements on the public range that we call home.

On the Goose Creek allotment in particular, where average annual rainfall is ten inches, we have developed nearly every viable source of water, putting it into troughs and pipelines to evenly distribute the water to all parts of the allotment. The results are the livestock and our resident wildlife population are distributed more evenly. We have also taken voluntary cutbacks in time of use and numbers of cattle to allow for the establishment of new grass seedings. We have installed miles of fences to further the goal of control and distribution of the cattle and also to rotate the grazing use on the grass to insure its perpetual health and vitality. We have been innovators when it came to implementing "state of the art" techniques and ideas from the Universities with regards to range and cattle management. Indeed, our herd is one of four herds in the state of Idaho selected by the University of Idaho to collect data for several of their ongoing "*Idaho Total Beef*" research projects.

Each of the numerous improvements on this allotment came about because the permittees conceptualized the idea and then provided the labor and funding to install or construct the improvements. In fact in 1983 the Goose Creek allotment received a thirteen (13) percent, across-the-board increase in permitted cattle numbers. These types of increases are only given to permittees whose allotments are in excellent condition and where the improvements result in additional forage. Increases are not given to permittees who are

poor land stewards.

I might add at this point that until 1986, the FS has been willing partners in the development and the improvements of this allotment. The improvement of the allotment was the ultimate goal of both the agencies and the permittees. We were ALL (the permittees and the FS), proud of this allotment. The Twin Falls FS Ranger District and Burley BLM District sponsored numerous range tours of this allotment inviting many land management agency personnel, governmental representatives, and other ranchers. The tours emphasized the potential of the range resource and what could be done when all concerned parties worked together with cooperation, consultation and coordination.

In 1986 the atmosphere changed quite abruptly with a change in management in the District. On one of the above mentioned tours, scheduled prior to the management change and carried out after the change, the new manager made the comment at one of the stops that he had been on numerous allotments in his career, and he had never "seen one in as bad a shape as this one." This comment and the arrogance with which it was made, stated by a ranger whose career, to this point, and training had been in TIMBER management, was a "slap in the face." Not only was this unwarranted criticism demeaning to the permittees who had worked so hard and long to make the Goose Creek allotment the showplace that it was (and is still), but also to the agency personnel (FS and BLM).

What has changed on this allotment since 1986?
The resource?
The allotment operating plan?
Or the Forest Service personnel?
Fact: The Forest Service's own benchmark trend studies on this allotment range from "stable" to "up".
Fact: The allotment operating plan remains the same since 1978.
Fact: A new manager comes to the Twin Falls district with a different interpretation of the standards and guidelines and of grazing policy in general. Suddenly the Goose Creek Allotment file changes from one of a "showplace" allotment to one full of "permit violations" and various "abuses."

It would be interesting to compare the Goose Creek allotment file previous to 1986 with the file since 1986. It will show a sad commentary on the abuse of power afforded a district manager with a certain personal and policy bias against public lands grazing. This abuse of power has resulted in the formation of a new "Uniform Action Guide" (UAG) recently introduced on the Sawtooth National Forest by its management.

Regardless of the motivation behind the new UAG, it ultimately will prove to be a very effective means to achieve reduction and/or elimination of livestock on the Forest, especially when the UAG is backed up by continuing biased interpretation of the standards

and guides. Accidental, non-willful events, i.e. cattle in the wrong places, gates left open by the public, mechanical malfunctions of the water systems (all of which are facts of life on an allotment the size of and as diverse in topography and elevation as the Goose Creek allotment) can, under the new UAG, result in a suspension of 25% to 100% of the livestock numbers for three years. A second accidental, non-willful occurrence can result in permanent permit cancellation, regardless of whether any kind of resource damage was the result. The Forest management contends that of course this type of arbitrary reduction or cancellation of permit will never occur and that common sense will rule the day and all the permittees must do is to "trust" him. But regardless, the action guide says what it says. There does not have to be any latitude given. At some point, some manager, lacking in common sense, will take the UAG literally and follow it to the letter and cancel permits. The whole scheme is set up to punish the rancher who does not acquiesce to a non-common sense decision.

It is not morally right that a mid-level bureaucrat can, with the biased-stroke of his pen, eliminate our means of providing for our families and meeting our financial obligations, for a non-willful event that he considers an infraction. The permittees have a vested economic and a vitally personal interest in taking care of the grazing resource. From the perspective of the public, this is the best kind of land steward to have--one whose own interests are furthered by the proper, long term management of the public's land. After all is said and done, in the event of any resource damage, the permittee is the first entity to experience loss; therefore, the responsibility for proper stewardship of the land is already in the proper place.

Based on the Forest Supervisor's memo (3/3/97) to the district and area rangers, ranchers who exercise appeal rights, support state management of public lands, publicly criticize the Forest Service, or try to obtain Congressional intervention in FS actions, will be classified as permittees "who are not trying to put their 'best' foot forward." Therefore, does it not follow, with my very presence at this hearing, I can expect administrative reprisal for being, as the Forest Supervisor describes, an "aggressive" permittee? This memo negatively singles out permittees who avail themselves of the appeals process and the other processes designed to check and balance the system.

The Eighth Amendment to the Constitution comes to mind -- granted the framers were referring to criminal penalties -- but, the phrase "...nor excessive fines imposed..." forcefully comes to mind; should it not also apply to situations like this? The guiding principle should be that the punishment must fit the crime. Is it not excessive to lose one's grazing right for three years because of a leaky water trough? Could this not be compared to losing your car for a simple traffic violation. The Forest Service's administrative process should not be used to circumvent Constitutional protections.

Based on the same 3/3/97 memo, grazing permit holders are being singled out because of a perceived lack of governmental funding to the Forest Service. Ranchers are being threatened that if that funding is not increased in the future, further reductions will have to be made. To severely penalize one multiple use over other multiple uses because of a lack of funding is clearly another indication of bias in the administration of the Sawtooth National Forest. Livestock grazing has clearly been relegated to secondary status, at least in the management of the Sawtooth. What we are seeing here is an attempt by the managers in the Forest Service to coerce the rancher to put pressure on his Congressional representatives to increase funding for the Forest Service.

The Forest Supervisor has said that if grazing permits were to be cancelled, the permits would be offered to other ranching interests. These permits have historically been used as collateral for loans and taxed by the IRS. They have been bought, have been sold, and have been traded as personal property since the first issuance of grazing permits. To TAKE the permits (which raises Fifth Amendment Constitutional questions) and GIVE them to another who has no financial stake in the permit may very well lead to speculative, "transitory" ranchers, those who come in with no intentions of investing in or remaining on the allotment for an extended period of time, and who have no regard for the rural communities dependent on economic returns from public land livestock grazing. For long term management, transitory ranching is not in the best interest of the land.

In summary, one critical point remains: the permit holders on the Sawtooth National Forest are family ranchers whose livelihoods depend on their ability to exercise their right to graze their livestock on public land. Their intimate knowledge of, and vested economic personal interest in the land make them a valuable asset in the long term management of the public's land. The ranchers want to be and must be part of the solution. We can not let this valuable asset fall prey to a flawed political agenda. The Forest Service regulations have the latitude to use livestock as an integral element in the development of the range resources and converting those resources into an economic reality in the communities adjacent to the public rangelands. We are the best resource the land has, our work is our heritage and our future.

TESTIMONY OF MARK L. POLLOT BEFORE THE SUBCOMMITTEE ON FORESTS AND FOREST HEALTH OF THE COMMITTEE ON RESOURCES UNITED STATES HOUSE OF REPRESENTATIVES IN RE: LIVESTOCK GRAZING POLICIES ON PUBLIC DOMAIN NATIONAL FORESTS

APRIL 8, 1997

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TESTIMONY OF MARK L. POLLOT BEFORE THE SUBCOMMITTEE ON FORESTS AND FOREST HEALTH OF THE COMMITTEE ON RESOURCES UNITED STATES HOUSE OF REPRESENTATIVES IN RE: LIVESTOCK GRAZING POLICIES ON PUBLIC DOMAIN NATIONAL FORESTS

APRIL 8, 1997

Madame Chairman and Members of the Committee:

Thank your for the opportunity to appear before you to present my views on the livestock grazing policies on public domain forest lands and particularly as they involve the Sawtooth and Toiyabe-Humbolt National Forests. I have spent a significant part of my professional career dealing with grazing and other western land issues in the context of my legal practice and my studies on constitutional matters. While my expertise is primarily in legal matters, and my purpose in being here is to address the legal side of grazing policy and management activities, the legal issues that I intend to address cannot be examined in a vacuum. Some knowledge and understanding of history and science, as well as of constitutional and other law, is required.

Grazing on public lands, as well other activities such as mining and timber culture, came about because Congress encouraged members of the

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public to leave their settled lives in the East and to come West to establish new lives. Congress did not do this arbitrarily, or simply to bestow a gift. It did so to further the economic well-being and development of the West. As part of this effort, and to ensure that grazing and other western land activities would become and remain viable, Congress passed a series of laws including, among others, the Taylor Grazing Act, the Act of July 26, 1866 (*see*, e.g., 43 U.S.C. § 661, *et seq.*; 43 U.S.C. § 932), and the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. § 1701, *et seq.*).

Notwithstanding vigorous anti-grazing legislative lobbying efforts over time, Congress has consistently held firm on an overall policy favoring public land grazing. This lack of success by anti-grazing forces in the halls of Congress has led to several developments including, among others: (1) the lobbying of, and application of political and other pressures to, administrative agencies by those opposed to public domain land grazing; (2) the movement into administrative agency service of people whose purpose in joining the agencies was to have greater influence on federal environmental policy; and (3) the development of regulation by litigation. These developments have led, in turn to other developments.

One of the most disturbing of these later developments is the growing trend of agency personnel substituting their policy preferences for those of Congress. This hearing itself, and the matters on which I will be speaking, concerns just such efforts. There is substantial evidence supporting this contention. Some of the evidence has been or will be placed directly before this committee, including the adoption of a "Uniform Action Guide"

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and accompanying documents by the Forest Supervisor for the Sawtooth National Forest. Further evidence for these contentions can be found in such things as the existence of organizations of government employees, for example, "Public Employees for Environmental Responsibility", the purpose of which are to advance the environmental and land use policy preferences of their members. Given that these employees have as their job the effectuation of congressional policy, their membership in organizations which advocate policies which may directly oppose congressional policy is a matter of concern and, in my view, represents a conflict of interest on the part of government employees who are members of these organizations.

Ultimately, the setting of national policy is the province of Congress, accomplished by legislation.[1] The implementation of that policy within the parameters set forth by Congress is the province of Executive branch agencies. Federal agencies do not have the constitutional authority to substitute their judgment for that of Congress. Far too often, however, agencies, whether intentionally or otherwise, thwart Congressional policy. By judicious "interpretation" of Congress' mandates through regulations and internal guidance documents, creative allocation of internal resources, and selective enforcement activities, agencies and their personnel alter the intent

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[1] It may be argued that the President also sets national policy and, within a limits, this is true. However, the President's policy setting role is limited to proposing legislation and budgets to Congress, the making of judicial and similar appointments, and the use of certain executive prerogatives, such as prosecutorial discretion. Even in areas in which the President has primary responsibility (such as foreign policy), the President's discretion is limited by the Senate's power to ratify or to withhold ratification of treaties and to withhold consent to presidential appointments..

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of Congress or substitute their policy preferences for those of Congress.

I was recently made aware of actions by the Sawtooth National Forest which involve all of these mechanisms and perfectly illustrate the problem of agency excess. These actions include the development of a program called a "Uniform Action Guide" (UAG), the circulation of a memorandum accompanying the UAG to District and Area Rangers in the Sawtooth National Forest, and the circumventing of administrative, statutory, and constitutional mechanisms designed to protect grazers and other users of public land from arbitrary, improper, or unwarranted agency actions. Of these actions, the most revealing and disturbing is the memorandum accompanying the UAG.

The memorandum is dated March 3, 1997 and signed by William P. Levere, Forest Supervisor of the Sawtooth National Forest. It purports to set forth the reasoning of Mr. Levere for adopting the UAG although, in reality, it does much more. The memo was officially directed to Mr. Levere's subordinates, but contains a virtual directive to these rangers to share the memorandum itself with holders of grazing permits on the Forest. There are, I believe, significant and disturbing reasons for this direction by Mr. Levere.

The memo begins by acknowledging that Mr. Levere is "set[ting] a new course for rangeland management" on the Sawtooth, and that his decision has "environmental, economic, social, and political" ramifications. There is no indication that this admittedly major decision was in any way subjected to the administrative, public comment, environmental review, and other processes mandated by law for decisions having such significant implications

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(such as the Administrative Procedure Act, 5 U.S.C. § 501 *et seq.*, and the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*).

The memo then divides permit holders into two categories, those who are "good permittees" who "put their best foot forward," and those "who are always trying to get around the system instead of trying to work within it." One need not read very far in the memorandum to discover that "good permittees" are those who simply accept the pronouncements of the agency and do not take the administrative appeals, or utilize judicial and political processes provided for by law to challenge decisions the permittee believes to be inappropriate, improper, or overreaching.

The denigration of permittees who challenge agency decisions believed by the permittees to be objectionable is not unique to the Sawtooth National Forest. For example, in one case in which I was involved in the Toiyabe National Forest, a document came to light in which a Forest Service employee openly stated that withdrawal of a pending administrative appeal would demonstrate that the permittee involved had become cooperative. The agency employee involved indicated that the agency would treat the permittee more gently if he withdrew his appeal.

A careful and thorough analysis of the Levere memorandum reveals that the underlying intent of the UAG is:

(1) to blame Congress' "failure" to maintain budgets at the level the agency prefers for agency's management failures (while self-consciously denying such an intent);

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(2) to put pressure on permittees to lobby Congress on the agency's behalf to increase the agency's budget;

(3) to pressure permittees unhappy with a decision by the Forest to forego their administrative, judicial, and political remedies on pain of incurring the most stringent penalties;[2] and

(4) to "divide and conquer" the ranching community by threatening to impose a more stringent alternative on *all* permittees if the lesser number of permittees do not start "cooperating."[3]

The normal practice of the Forest Service for the majority of its existence has, appropriately, been to recognize that even the most conscientious rancher cannot have one hundred percent control over cattle

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[2] The memorandum makes it clear that permittees who "voluntarily" accept the agency's verdict on an issue "may" be given somewhat more lenient treatment in the discretion of the ranger. The memorandum also contains a clear threat that the Forest may be forced to abandon the UAG and simply discontinue all grazing on "the more expensive [allotments]," that is, those allotments whose permittees require the agency to respond to appeals, legal actions, or letters and inquiries from their Congressmen and Senators., or who otherwise force the agency to deal with public relations or political issues, if permittees do not start being more "cooperative.".

[3] The Levere memorandum sets forth four alternatives: (1) discontinue *all* grazing on the Forest, (2) discontinue grazing on the "more expensive" allotments, (3) continue the current UAG, and (4) implement the proposed UAG. The threat to use alternative one, discontinuance of all grazing, would, or so the agency must hope, persuade the "good" ranchers to pressure the "bad" ranchers to be more "cooperative." The memorandum also includes an implied threat that resistance to the proposed UAG will result in one of the other even more draconian alternatives being implemented.

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given the nature of cattle, western terrain, and other factors. It has also been appropriately recognized in the past that the usual situation, in which cattle end up in places where they are not scheduled to be at a given time, results in no actual resource damage. Under these circumstances, the existing rules and policies have been that penalties are not imposed where there is no wilful violation or actual "resource damage." Even where there is "resource damage," the remedial measures have been properly tailored to actual resource damage, that is, measures tailored to the repair of damage. Only where there has been repeated, wilful violations where there is no reasonable ground for disputing the agency should there be actual penalties, and then only to the extent that the penalties are proportionate to the violation.

The adopted UAG is rationalized as saving its existing resources to enable the agency to distribute those resources more efficiently. Of course, this will not be the result. The proposed sanctions in the UAG are such that no permittee who is on the receiving end of the one of these administrative actions can afford to let it pass without challenge. This is true notwithstanding the proposal by Mr. Levere to allow his rangers to reduce the penalty (by an insufficient amount) if the permittee will just not challenge the agency's determination. This is so for a variety of reasons.

For example, a permittee cannot with any frequency allow to stand agency claims of violation which the permittee believes to be unfounded. This is true regardless of whether the sanction is reduced and, on its own, tolerable. Allowing such claimed violations to go unchallenged is certain to result in a claim at a later date by the agency that the permittee has a pattern

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or practice of violations which justifies the cancellation of the permit or the denial of permit renewal. Similarly, even reduced sanctions stand a good chance of rendering an otherwise viable operation into one which is economically infeasible.

The UAG raises a large number of significant legal and constitutional questions. For example, as Mr. Levere admits without using the specific language, the UAG constitutes a major federal action within the meaning of the National Environmental Policy Act (NEPA). He also acknowledges that the UAG decision has significant environmental, economic, social and political implications. This being the case, in my view, the Forest was obliged to perform an adequate environmental review, with a complete consideration of a full range of alternatives before adopting this decision and proceeding with its implementation.

Similarly, the Forest was obligated, particularly given Mr. Levere's open acknowledgment that something other than a mere internal interpretive guidance is involved, to follow the normal rulemaking process, which includes, among other things, publication in the federal register, a public comment period, and the like. Failure of the agency to follow these processes is actionable under the Administrative Procedure Act, cited above.

The Forest was equally obligated, before threatening to take any action, to review whether it has the statutory authority to simply discontinue all grazing on the Forest, or even selected parts of the Forest, merely for its administrative convenience or because it prefers to spend its budget in different ways. Indeed, statutory language in the Taylor Grazing Act *supra*, for

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example, appears to make it clear that permits must be renewed unless the permittee involved has acted so badly that discontinuance of the permit is truly appropriate and within congressional contemplation.

Of course, in all of these matters, the Service was free to ask the current Administration to propose changes in the law to Congress if the Service felt that some such change was necessary for the protection of the Forest. It is not, however, in the agency's discretion to simply ignore express applicable law for its own convenience. Clearly, either the Administration or the Service did not believe that it could credibly make such a proposal or simply preferred to not bother with a legislative change in policy on forest usage or to risk being told "no."

Most important, however, are the constitutional implications of Mr. Levere's decision and approach to forest management. The potential constitutional infirmities include, among other things, separation of powers issues (insofar and to the extent that the decision contravenes the intent of Congress and exceeds the delegation of authority given to the agency by Congress) and due process and first amendment questions, to the extent that the decision deliberately discourages permittees from pursuing their administrative and legal remedies as well as their constitutionally protected right to petitioner their legislators when they believe that political action is necessary to curb abuses, whether real or perceived, or to akes advantage of the public opinion area.

It is not enough, of course, to simply complain about what is, in my view, egregiously improper action. It is important to at least suggest

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remedial actions that should be taken. I will briefly state a few measures that should be considered, but which are by no means all that should be considered.

First, Congress should consider amendments to the Administrative Procedure Act that directs courts to provide a meaningful review of agency action, including agency interpretations of Congressional enactments. These amendments should also prohibit the courts from applying such a high degree of deference to agency determinations and interpretations of law. Second, Congress should consider providing more explicit limitations on the ability of the agency to take action against a permittee in the absence of wilful or persistently negligent violations of permit terms or conditions. Third, Congress should consider providing that agencies have a clear and convincing evidentiary standard to meet before imposing a penalty or other sanction on a rancher for alleged permit violations. This provision should also prohibit the agency from imposing remedial measures on permittees that are disproportionate to actual injury to resources or the degree of violation. (Under the UAG, suspension of between 25 to 100 percent of a permit for three years can occur if one cow wanders into an improper place for however brief a time. If a second cow does so at some future time, the UAG requires a permanent cancellation of the permit. The same thing can happen if a recreational user leave a gate open or pulls a staple from a fence.) Finally, Congress should consider express language prohibiting an agency from providing for or imposing higher penalties or other sanctions on permittees who exercise their rights to challenge objectionable agency actions.

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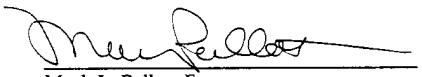
Again, I thank you Madame Chairman and members of the Committee for the opportunity to address you and will be happy to provide whatever other information I can at your request.

Respectfully submitted,



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United States Department of Agriculture | Forest Service | Sawtooth National Forest
2647 Kimberly Road East
Twin Falls, ID 83301

Reply to: 2200

Date: March 3, 1997

Subject: Sawtooth National Forest Rangeland Management

To: District and Area Rangers

Introduction

I want to start out this letter with an apology for it's length, however, given the subject matter I feel the need to take the time to explain my rationale and thought process for the decision I have made. Although I write this letter to each of my Rangers, I write it with the expectation that it be shared with all of our range permittees, employees, and other special interests. This is probably one of the most important, yet frustrating, difficult, yet challenging pieces of direction I have yet to write to you as Forest Supervisor of the Sawtooth National Forest.

"Important", in that this decision sets a new course for rangeland management on the Sawtooth National Forest. "Important", in that it will no doubt have major impacts, both internal to the Forest Service and external to our range permittees and Forest visitors. "Frustrating", in that I feel I have very few options and/or alternatives to the decision I have made given our role and mission in the Forest Service. "Difficult", in that I realize that this decision may be highlighted as just one more example of why the management of public lands in the West needs to be turned over to someone else. Many of the individuals that are proponents on that particular cause are, in my opinion, the same individuals that have encumbered us to the point that I feel our options are limited. "Challenging", in that there are many ramifications to my decision — environmental, economic, social, and political. Given the history in this area, the political ramifications will no doubt be the biggest challenge of all.

Before I begin to explain my rationale and thought process, I'd like to premise this by describing who I think will be directly affected by this new direction. My observation is that we tend to spend a small percentage of our time dealing with a large number of our range permittees. These permittees can be described, for the most part, as "good" permittees — trying to do the right thing — trying to follow their permit as best they can. Conversely, we also spend a significant amount of our time dealing with a small number of our range permittees. These permittees are the ones who are not attempting to put their "best foot forward" — the ones who are always trying to get around the system instead of trying to work within it. It is this latter group that will be most affected by this new direction. It is my hope and desire that once this new direction takes effect, we can then move forward — spending more of our time with the larger number of

permittees trying to do the right thing -- working together to make it even better for them and their operations on-the-ground.

Background

I have been Forest Supervisor of the Sawtooth National Forest for over a year and a half. In that time I have observed several things as it relates to rangeland management. First, there is quite a history (or should I say past-controversy) on this Forest as it relates to rangeland management, the Forest Service, and its relationship with range permittees. Although that history pertains to a few Districts (both north and south), it has more recently, in my opnion, been used as a scapegoat by several range permittees for not taking personal responsibility and/or accepting personal accountability for their actions on their range allotments across the Forest. That history (or controversy), and its use as an excuse for other wrongdoings and/or problems on other areas of the Forest, is creating an ever-increasing gap in the relationship between the Forest Service and several range permittees on the Forest.

Second, because of this increasing gap in relationships, I see an ever increasing breakdown in communication between the Forest Service and the range permittees. Instead of discussing and attempting to resolve identified problems with the Forest Service, I see a more adversarial role occurring. Instead of attempting to work things out between the range permittees and the Forest Service, the more immediate response by some of the more aggressive range permittees is to seek remedies either through what I perceive to be negative press targeted at individuals and/or the agency; through local political contact and hopefully political influence over agency decisions; through formal administrative appeals; and/or through potential litigation. Although all these remedies are within the legal rights of the affected range permittees, they frequently are not the most productive ones for the range permittees or the Forest Service, from my perspective.

Third, I see an alarming increase in permit violations. We should accept some responsibility for the increase in permit actions (because we can no longer tolerate violations); however, we should not apologize for these actions, given the violations. Much of the increase is directly due to my November 27, 1995 direction (Appendix A) to each of you in regard to the "Sawtooth National Forest Uniform Action Guide". This direction was intended to serve as a guide for consistent permit administration across the Forest. This direction or "uniform action guide" was shared with all of the range permittees across the Forest before the 1996 grazing season. It was then my expectation that the appropriate actions be taken if permit violations occurred during the 1996 grazing season. My expectations were clearly met as to the application of the uniform action guide; however, I was severely dismayed to the extent for which my direction had to be applied.

The following is a summary of the 1996 grazing season: Eleven warning letters were issued for overuse, not following permit terms, unauthorized use, and/or lack of maintenance of improvements. Eight "show cause" letters were issued for excessive use, improper salting, using areas more than once, and/or overuse. Six decision letters were issued proposing either suspensions and/or outright cancellation of permits. For three allotments, continued suspensions from previous years also continue to be in effect. Of the 195 range permittees on the 153

allotments across the Forest. 64 range permittees (33 percent of total) on 29 allotments (19 percent of total) are either under suspension from a previous year's violation or were found to be in violation of the terms and conditions of their grazing permit during the 1996 grazing season. Although many attempt to blame the Forest Service for this situation. I want to point out that none of these actions would have been necessary on our part had it not been for what we have perceived to be the unwarranted behavior on the part of some of the range permittees this last grazing season.

In addition to these items I have observed in the last year and a half, there are several other facts that influence the rangeland management program on the Forest. However, before I discuss these facts, I also feel it is necessary to outline what I think our rangeland management objectives are.

Rangeland Management Objectives

I have heard and continue to hear from several of the individuals that I interact with in Southern Idaho, that there is a hidden agenda in the Forest Service to do away with grazing on the National Forests. Nothing could be further from the truth. I write this letter with several rangeland management objectives in mind. I expect every one of my Rangers to manage the Sawtooth National Forest with the same objectives.

With respect to rangeland management, these are my main objectives:

1) to protect and restore the health of the land (this is the number one priority).

2) to manage for livestock grazing in the broader context of our overall mission of managing under our multiple use-sustained yield mandate — outdoor recreation, livestock grazing, wildlife and fisheries, watershed protection, and timber production.

3) to provide forage for livestock grazing on areas determined to be suitable/capable of supporting some level of livestock grazing.

These are what I feel to be the broad objectives with respect to rangeland management. I think it is also important to review some of the more specific goals and objectives in the Sawtooth National Forest Land and Resource Management Plan.

Land and Resource Management Plan

The Sawtooth National Forest Land and Resource Management Plan (Forest Plan) has several proposed resolutions of the issues, concerns, and opportunities (Page III-3) as they relate to rangeland management and domestic livestock grazing. They are:

1) Riparian areas will be more intensively managed improving all riparian values.

2) No grazing will occur on lands not capable of sustaining such use (these lands have been or are being inventoried).

3) Increase range operations and maintenance funding to $580,000/year from $433,000/year (1986) to enable better management of the program, thereby reducing other resource conflicts, etc.

4) Increase investment in range improvements from $166,000 (1986) to $240,000, to better utilize the range resource, reduce conflicts with other resources, and maintain livestock numbers.

5) Maintain the treatment of approximately 1,000 acres of noxious weeds.

6) Cattle will be excluded or more closely managed in concentrated recreation areas.

7) Utilization standards will be developed by an interdisciplinary team for riparian areas and incorporated into the allotment management plans.

Several other resolutions for rangeland management and domestic livestock grazing are outlined as they relate to wildlife conflicts. The issues revolve around big game. The Forest Plan (Page III-4) states that the following will be done or continued:

1) Little deer and elk winter range occurs on the Forest. Where such key areas occur, big game will take priority over livestock.

2) Grazing will be restricted or eliminated from important mountain goat/bighorn sheep areas.

3) Allotment management plans will be designed to reduce or eliminate conflicts with fish and wildlife in key habitats, such as riparian areas, big game winter range, etc.

4) Range improvements will include needs for wildlife.

5) Forage utilization will be lower in key riparian areas or sensitive recreation areas, such as parts of the Sawtooth National Recreation Area and other important streams.

In addition to the above expectations, the Forest Plan also outlines quite an exhaustive monitoring and evaluation program as it relates to the rangeland management. It includes such expectations as:

1) one-third of all range allotments will be inspected annually to evaluate grazing use, livestock distribution and compliance with allotment management plans and annual operating plans.

2) weekly inspections of transitory range will occur during periods of grazing use.

3) monitoring and reading of long-term condition and trend transects will occur every five years.

4) field review and inspection of at least 20% of all range improvements will occur each year.

5) field review and desk audit of 5% of all allotment management plans will occur each year (It should be noted that this expectation has been accelerated — I will discuss this later).

As one can see by the above, which are only a few of the excerpts from the Forest Plan, there are some clear expectations as they pertain to the rangeland management program on the Sawtooth National Forest. All of these require time, people, and dollars to achieve. This was recognized in the Forest Plan — both on the basis of needed budget levels and on the basis of what action should be taken if required budget levels needed to achieve these goals did not materialize. With respect to this latter point, the Record of Decision for the Forest Plan (Page 5) says, "if measures cannot be developed to improve riparian conditions identified in the Plan, or funding will not permit their implementation, permitted use will be reduced."

Given this, I think a review and/or comparison of the last few years funding levels is appropriate and warranted. Similarly, I think we also need to note or discuss several other items, expectations, or programs of work that have arisen since the Forest Plan was approved.

Budget Situation

Budgets related to rangeland management have fallen dramatically in the last few years. In fiscal year (FY) 1996 the range budget (NFRG and NFEM budget line items tied to the range program) totaled $618,000. For FY 1997 this fell to $491,000. This is a 31% reduction in rangeland management dollars in just the last year. When comparing this with the needs identified in the Forest Plan, today's range budget falls far short of the amount needed to maintain permitted animal unit numbers and meet Forest Plan goals, objectives, standards, and guidelines. For example, if I were to compare the FY 1997 budget level with just the range operation and maintenance (O&M) fund needs described in the Forest Plan, there is a $331,000 shortfall when these range O&M needs are inflated to FY 1997 dollars.

Where Are We Focusing Our Work? -- Where Should We Be Focusing Our Work?

We attempt to perform work in many areas when it comes to rangeland management. We try to perform annual range administration duties through allotment inspections. We try to monitor and read long-term condition and trend transects. We try to review and inspect range improvements (water troughs, fences, etc.). We try to work on updating our allotment management plans and annual operating plans. We try to respond to information requests -- which come in many forms

(internal, external, Congressional, and sometimes court-ordered). As budgets have become tighter, we have had to reduce the amount of effort we have historically put into some of these areas. Annual range administration has become more difficult to accomplish, and when we feel the need to take some type of permit action the amount of time and money spent on appeals and preparing for potential litigation is fairly significant. Our long-term monitoring efforts have declined significantly. We are having more and more difficulty in updating our allotment management plans to the level that is needed. Information requests appear to be increasing and not declining.

When I review this last year, it appears to me that we did not do the range administration job with the intensity that everyone would have liked. Not only are we not getting it done on some allotments and areas of the Forest, but where it is being done, more and more time is being spent taking permit actions and responding to appeals, and preparing for potential litigation. It appears that long-term monitoring is the first task we put on hold, in that it's not critical if we don't do it in any given year; however, I now see a trend where we aren't doing it to the degree that it is needed over several years. We are trying to work on updating some of our allotment management plans and annual operating plans, but we are clearly not doing it to the extent we'd prefer. Information requests are ever-increasing, and the amount of work required to respond to these requests is increasing exponentially --- for example, our latest internal policy on how we must now respond to Freedom of Information Act requests as they relate to permittees has increased the amount of time we must devote to these types of requests anywhere from five- to ten-fold. The amount of time we must devote toward water adjudication in preparation for court is just one more time consuming and unfunded task.

As we have attempted to do more with less, we have sacrificed and/or compromised many of the tasks we should be doing, in order to maintain an adequate level of range administration. This was done on the premise that in the absence of range administration, the potential for resource damage could be great; whereas the "putting off" of other tasks, in order to accomplish the immediate need of range administration, was not perceived to be as impacting on the basic resources. I still believe this to be the case in the short-term; however, if we continue to neglect these long-term needs, I think we will begin to see some long-term impacts to the resource. In the absence of long-term data we just won't know one way or the other.

The bottom-line is I think we need to re-group. We need to be doing an adequate level of range administration, while at the same time devoting a proportionate amount of our time toward long-term monitoring and evaluation. We need to be focusing an appropriate level of our resources toward updating our allotment management plans and annual operating plans. We need to be doing all these things while at the same time be responding to the information requests and tasks that will no doubt continue to come our way. Clearly, increased funding levels would help us significantly, but until that occurs I think we have only one option, and that is to change the way we do business. It is this change — in the way that we do business — that I'd like to discuss further.

What's Under Our Control — Area of Flexibility

Part of the frustration I have as it relates to the rangeland management program on the Sawtooth National Forest is that when I try to look at our options they are fairly limited. Much of those limitations are because many of the program components are totally beyond our control. In terms of the revenues (or the fees) we bring in from the grazing program, the formulas for which these fees are calculated and set by law and not by the Forest Service. In terms of the rules and regulations under which we must operate, most are guided by the laws which are passed by Congress for which there is no discretion. The budgets we receive are endorsed by Congress and higher levels of the administration, for which we have little discretion once passed. Don't get me wrong — I'm not trying to lay blame on Congress for our woes. I'm just trying to point out that when it comes to solutions, a limited few are within our hands as opposed to others. So, what does this leave us? Again, in my mind, what is left is the way we do business -- the way we approach it -- the areas in which we choose to spend our time and limited resources.

Other Tasks — Are they Discretionary?

There is a growing increase in what I refer to as "other tasks" that are necessary for our range personnel to carry out and be involved in. As we have experienced, the listing of threatened and endangered species has increased workload in terms of consultation and in complying with terms and conditions as defined in biological opinions (or mitigation as defined in biological evaluations), particularly in anadromous habitats. As I referred to earlier, we see an increased role, and major impact to range personnel, as it relates to field verification of water sources in preparation for water adjudication across the Forest. With the passage of the recission bill, we now see an accelerated effort to update allotment management plans and the creation of a schedule to complete these updates within the next fifteen years. I don't argue the need for any of these tasks -- in fact I applaud many of them. However, it is more work -- work which is clearly not discretionary, and work for which I have not seen any discernable increase in funding for which to accomplish these tasks. Therefore, I feel this just exacerbates our need to change the way we have been and are going to do business in the future.

What are our Options? -- Alternatives

As I have evaluated the various ways we could change the way we do business with respect to rangeland management, four options and/or alternatives seem to be consistently mentioned or brought up by various folks within the Forest Service. I think these options are worthy of a brief mention here. I also feel the need to give my personal perspective on each. I don't expect everyone to agree, nor do I expect everyone to disagree, with my viewpoints and observations. I do this to let you know what thought process I went through in reaching my decision on how we will go about changing our way of doing business as it relates to this topic.

Option 1 -- Suspend all grazing on all allotments pending adequate funding levels — This

option, at first glance, would certainly save dollars and give the Forest Service the ability to use existing funds on other tasks related to the rangeland management program. However, I think there is a certain expectation on the part of the Forest Service, Congress, and many of our Forest Users that a certain level of grazing and/or rangeland management is expected if the Forest receives funds in that particular area. Others might think that this type of response would get the needed attention of those individuals and/or organizations in order to get an increase, or at least a redistribution of funds at other levels, to the Sawtooth National Forest so as to solve our immediate problems on this particular Forest. This might be one response, however, that would no doubt cause additional problems or funding dilemmas for other Forests that are probably in a situation no better than ours. Last, but not least, this option does not satisfy one of the objectives I outlined above -- to provide forage for livestock grazing. It is for this reason that I am not willing to consider such an alternative at this time.

Option 2 -- Suspend all grazing on a select number of allotments (e.g., the more expensive ones) — This option, clearly has some desirable traits, as compared to the previous alternative. However, it also maintains some of the non-desirable traits of the previous alternative. One additional problem associated with this option is in the development of the criteria that would be used to decide which allotments are the more expensive ones and which are the inexpensive ones. I cannot help but think that a great many would attempt to make the argument, regardless of the method we choose, that it would be an arbitrary process at best.

Option 3 -- Continue to implement the current uniform action guide — Many argue that continuing to implement the current uniform action guide will create the desired results for the future. I tend to agree with this, but I'd also ask at what expense? In dealing with an uncooperative range permittee (one not willing to accept the responsibility and accountability that goes along with the privilege of grazing on public lands), one could go through a series of warning letters, show-cause letters, decision letters and the appeal process and potential litigation that might go with each decision. This process could occur over several years -- possibly over the entire term of the grazing permit. At each one of these steps in the process I see the relationship between the range permittee and the Forest Service getting further and further apart. I also view this process to be extremely costly and one for which there are only marginal gains each year; more so, if the permittee maintains or enhances their uncooperative behavior. Where violations continue to occur, I see penalties being invoked for marginal gains over extended periods of time, with no incentives for the range permittee to work things out with the Forest Service.

Option 4 -- Operate under a revised direction for uniform action — Another option is to reduce the amount of warning letters, show-cause letters, and decision letters and the number of appeals and potential litigation that might go with each decision. This can be done by modifying the current uniform action guide such that it is much more stringent in regard to the penalties imposed when a violation occurs. Instead of spending a lot of time, money, and resources on a series of penalties where violations are a recurring situation over many years (which is my perception of the current situation), penalties will be more

severe and potentially more impacting to the range permittee that is not following the terms and conditions of their permit. In situations where a range permittee consistently commits violations and shows absolutely no desire to change such behavior, then these more stringent penalties would be invoked. If the behavior continues, then our business relationship with the permittee will rapidly come to an end. Although this alternative is much more severe than the current way of doing business, it is clearly not as severe as the first option portrayed in this section. Another advantage is that instead of the Forest Service being the sole determinate in who will be allowed to continue to graze and who will not (as outlined in option 2), the determination will partially be in the hands of the range permittees themselves -- it will be based upon the range permittees performance and behavior. The biggest advantage I see in this alternative is that it puts personal responsibility and personal accountability where it should have always been -- in the hands of the permittees.

Given this, I have modified the current uniform action guide (Appendix A), and I am directing each of you to follow the attached direction for uniform action (Appendix B) this upcoming grazing season. This new direction will be shared with all range permittees before this upcoming grazing season.

This last option, and the one that I prefer, may at first appear to be extremely harsh for all permittees. That would be true if viewed in isolation; however, I believe its success will be in "how" it is to be implemented. In this regard, I think I need to underscore several additional expectations that I have in "how" this direction should be implemented. First, is "how" I view penalties being imposed where there is an absence of resource damage. Second, is "how" I view this new direction for uniform action (Appendix B) should be enforced with each range permittee and the options they might have. Third, is "how" I think this new direction in regard to range improvements should be handled. And lastly, is "how" I think we can work with our permittees toward alternative (and hopefully better) ways of managing each allotment, if these new expectations are thought to be impossible to meet.

Penalties in the Absence of Resource Damage

On several occasions, points have been raised with respect to the range permittees having to accept penalties when no apparent resource damage has occurred as a result of these violations. In the management of grazing on public lands, the Forest Service strives for two basic goals: compliance with the terms and conditions of the grazing permits, and compliance with Forest Plan grazing utilization standards and guidelines. The terms and conditions of the permit are requirements that we impose to insure that the appropriate grazing system is being followed and to prevent resource damage from occurring. The Forest Plan standards and guidelines are the measure for which appropriate forage utilization standards are set.

The analogy that I like to use is the setting of speed limits on the highway. Much like speed limits are set to prevent accidents from occurring, terms and conditions are set to prevent resource damage from occurring. In the enforcement of speed limits one does not wait for the accident to

occur before they are enforced — they are enforced when the speed limit itself is violated, hopefully long before the accident occurs. In the enforcement of terms and conditions of a grazing permit, we take the same approach — they are enforced long before the resource damage occurs. Therefore, it is totally appropriate to enforce terms and conditions of a grazing permit in the absence of resource damage. In fact, by design, if resource damage has occurred, it is probably an indicator that we have not been doing our job as the land and resource managers of these public lands.

Invoking Penalties When Violations Occur

My expectation is that the attached direction for uniform action (Appendix B) be followed whenever issuance of a "show-cause" letter is warranted. However, if the permittee is willing to voluntarily take a less stringent penalty, a unit ranger should consider and even promote that type of alternative penalty, as opposed to the strict enforcement of the direction contained in the uniform action. For example, if we have a situation where over-utilization has occurred, as per the direction for uniform action, the permittee should be notified, and a "show-cause" letter issued, suspending 25 to 100 percent (permitted numbers or season of use) for 3 years.

Unit rangers should consider alternatives to issuing a final decision letter if the permittee is willing to accept these alternatives on a voluntary basis. In this example, one alternative might be total rest of the unit where excess use occurred, for the following grazing season. Another alternative might be lighter use (e.g., 15% utilization instead of 30%) of the forage the following grazing season if the infraction was minor. Another might be total removal of all livestock from the allotment before the season end. Again, alternatives to the direction for uniform action must be voluntary on the part of the permittee and are solely up to the discretion of the unit ranger.

Alternatives to penalties outlined in the direction for uniform action should not be considered if there are consistent and repetitive violations by the same permittee for the same type of infraction during the term of the grazing permit.

Declaring Un-maintained Improvements

Implementation of this new direction might seem unduly harsh with respect to the maintenance and upkeep of range improvements (e.g., water troughs, fences, etc.). Particularly in a situation where there are a large number of improvements in disrepair — this would almost guarantee the eventual cancellation of a permit. Although the less knowledgeable individual might think we are asking our permittees to do something that is unreasonable, I must point out that when the base fees were originally calculated in 1966, allowances were made for maintenance of improvements.

Even with this being the case, I know that an argument will be made that we, the Forest Service, have never held permittees to such a high standard with respect to range improvements, in the past. Instead of arguing and debating the past, which cannot be altered, I want to stress "the here and now" — and the expectations for this upcoming grazing season.

Given this, I will view this upcoming grazing season as one in which a certain level of "temporary reprieve" can be declared. I want to make it clear that this only applies where range improvements are concerned. If a range permittee is aware of some range improvements that have not been maintained, they can declare them as such this year. It will then be my expectation that the range permittee and unit ranger develop a plan for which all un-maintained range improvements will be fixed in no less than a two-year period after this upcoming grazing season. It will be the sole responsibility of the range permittee to verify that the improvements have not been maintained, and it will be their sole responsibility to pay for having them fixed (both labor and materials).

Other Areas Where We Can Work Together

There is no doubt in my mind that many range permittees will claim that this new direction for uniform action is too stringent -- that they just can't operate under these types of expectations and potential penalties. I've already heard such claims under the current uniform action guide, so I'm sure they will increase under this new direction.

In anticipation of this reaction, I'll ask a question: Is the direction for uniform action unreasonable, or is what we are trying to do out there on-the-ground unreasonable? This new direction is not asking the range permittee to do anything different than what we have always asked them to do in the past. The only thing that has changed is the penalty that will be associated with a violation. If a range permittee has strong feelings that this new direction for uniform action will not be feasible for their particular situation and/or allotment, then my response is that it is not the new direction that is unattainable, but what we expect out on-the-ground in terms of range management.

In these situations, I think we must then take a hard look at the current allotment management plan and ask if it is realistic in its expectations. In many cases, it may not be the allotment management plan that needs to be re-evaluated, but the annual operating plan. Allotment management plans are not easily modified, and I'm not saying that we should deviate from our current schedule to update these allotment management plans. Annual operating plans, on the other hand, are much easier to modify and update.

Again, I'll state that this new direction does not change what we are asking to be accomplished out there on-the-ground -- if we can't meet what our allotment management plans or our annual operating plans say, then it's not this new direction that should be changed. It's the allotment management plan or annual operating plan that needs to be changed. We need to ask: Is the reason we can't operate under this new direction because we don't have a workable grazing system for this particular allotment? Is it because we have based our grazing system and/or permitted numbers on acres that we have called "suitable" or "capable" for grazing when we really know they are not? Or is it that we're just expecting too much from the land given the current resource conditions? I don't pretend to know all the questions we should ask, nor do I pretend to know the answers, but we should ask the questions and we must come to some type of conclusion on the answers.

We can evaluate these types of questions through two different methods. First is through the updating of the allotment management plans, for which I have already stated that we have a schedule to accomplish this task. However, my expectation is that this new direction for uniform action be followed immediately and any one range permittees' scheduled update may not be for many years. By that time, it may be too late. For this reason, I think the second method is more feasible — through the evaluation and modification of the annual operating plans.

We can approach this in two ways. For those range permittees that think they just can't operate under this new direction, we should be willing to sit down with them and ask the hard questions (some of which I've anticipated above). It is then my hope that we could come to some mutual agreement (on a voluntary basis) as to how we should modify the annual operating plan so that operating under this new direction for uniform action is attainable. Alternatively, if those same range permittees are not willing to work these problems out on a voluntary basis, then my only conclusion is that they are then willing to accept the status quo and will have to live with the consequences of operating under their current annual operating plan and this new direction for uniform action.

Consideration of Other Options

I want to note that I am willing to consider other options to those that I've outlined above, and that I'm more than willing to discuss these options in a constructive and positive way. I will, however, place two conditions on these discussions. First, that the goals and objectives of the Forest Service need to be taken into consideration as well as those of the range permittees. Second, that this new direction for uniform action will remain in effect while those discussions are taking place.

Summary

Again, I will say that this has not been an easy decision for me to make. I realize some range permittees will not be willing to do what this decision asks them to do. If this new way of doing business does not work, we might find ourselves once again entertaining some of the other options I have discussed. However, for this upcoming grazing season I think the choices are clear. We have an obligation to protect and restore the health of the land. We have an obligation to manage for livestock grazing in the broader context of our overall mission of managing for multiple use. We have an obligation to provide forage for livestock grazing.

At the same time I feel strongly that each range permittee must take personal responsibility and accept personal accountability for their actions while grazing on public lands. I think my decision is clear on this point. For those range permittees who are unwilling to take that responsibility and are unwilling to accept personal accountability, I think the consequences are clear. We will deal with them on that basis -- we will impose severe penalties when violations have been committed, and we will no longer do business with them if this type of behavior continues and our findings hold true. I do not find this approach to be the easiest, nor do I think it will be without economic

and social consequence. I do find it to be the most efficient and effective approach, given all of the other expectations we are asked to satisfy relative to the rangeland management program and the limited resources, time, people, and dollars we have to accomplish it with.

For those range permittees who are willing to take personal responsibility and are willing to accept personal accountability, I think the consequences are also clear. They will be held accountable, but to a lesser degree if they accept responsibility. We should work with them on the challenges we are both facing and willing to accept. We will hopefully develop a relationship where they better understand our goals and objectives and we better understand theirs.

I feel the majority of the range permittees on the Sawtooth National Forest are more than willing to take the personal responsibility I am referring to. At the same time I'm confident that most will also accept the personal accountability that goes along with it. However, there is also no doubt in my mind that there will be a few range permittees who will not be so willing. To those few, I can only offer these words of advice: "We can either work together or we can work against one another. The route you choose is yours. The consequences of each route are yours to accept or reject. I think I have made my offer and my intentions clear — now the choice is yours."

William P. LeVere

WILLIAM P. LEVERE
Forest Supervisor

Enclosures

COMPARISON of 1/27/95 SAWTOOTH NATIONAL FOREST UNIFORM ACTION GUIDE and the 3/3/97 DIRECTION FOR UNIFORM ACTION(S) ASSOCIATED WITH GRAZING PERMIT VIOLATIONS

The following chart displays abbreviated penalties for the listed livestock grazing violations under both of these documents. The actual documents must be reviewed for complete detail of penalties imposed for each listed violation.

VIOLATION	1/27/95 GUIDE	3/3/97 DIRECTION
1. Grazing Excess Numbers	Accidental - First Offense warning letter - remove livestock within 3 days; bill at unauthorized use rate Accidental - Second Offense show-cause letter suspending up to 25% grazing privilege for 1-3 years; bill at unauthorized use rate Accidental - Repeated Offense show-cause letter cancelling previously suspended numbers, suspend or cancel up to remaining permitted numbers; bill at unauthorized use rate Willful or Knowing - First Offense show-cause letter suspending 25-100% for 1-5 years; bill at unauthorized use rate Willful or Knowing - Repeated Offense show-cause letter cancelling total permit; bill at unauthorized use rate	First Offense show cause letter suspending 25-100% numbers or season for 3 years, or cancel permit; bill at unauthorized use rate Second Offense show-cause letter cancelling total permit; bill at unauthorized use rate

2.	Livestock on Forest Outside of Permitted Season	Accidental warning letter & remove livestock within 3 days; bill per billing guidelines Accidental - First Offense if livestock not removed in 3 days, show-cause letter suspending up to 25% of permitted numbers for 1-3 years Accidental - Second Offense within Suspension Period show-cause letter cancelling suspended numbers, suspend additional 25% numbers for up to 5 years; bill for excess use Knowingly or Willingly - First Offense show-cause letter suspending 25-100% for 1-5 years; bill for excess use Knowing or Willingly - Second Offense show-cause letter cancelling permit; bill for excess use	First Offense show-cause letter suspending 25-100% of numbers or season for 3 years; bill at unauthorized use rate Second Offense send show-cause letter cancelling total permit; bill at unauthorized use rate
3.	Grazing Un-owned Livestock Under Term Grazing Permit	First Offense show-cause letter cancelling portion of permit equal to un-owned numbers; suspend remaining numbers depending upon circumstances Second Offense show-cause letter cancelling total permit	First Offense show-cause letter cancelling total permitted numbers

4.	Failure to follow Management Plans or Instructions in Annual Operating Plan	warning letter describing possible penalties if infraction not corrected within 5 days; bill for excess use at unauthorized use rate First Offense if not corrected within 5 days, send show-cause letter suspending up to 25% for 1-3 years Second Offense show-cause letter cancelling suspended numbers and suspending additional 25% for up to 5 years Repeated Offenses show-cause cancelling remainder of term permit	First Offense show-cause letter suspending 25-100% numbers or season for 3 years; call permittee(s) within 24 hours notifying them that if infraction is not corrected within 72 hours it will be considered a second offense; bill for excess use at unauthorized use rate Second Offense show-cause letter cancelling total permit; bill for excess use at unauthorized use rate
5.	Failure to Follow Utilization Standards as Defined in Annual Operating Plan or Part 3 of Term Grazing Permit	First Offense Call permittee and notify of problem and arrange to meet within 5 days; notify of possible suspension and/or cancellation if further violations occur; remove livestock within 5 days; (if permittee is aware of utilization standards from interaction with FS during past 3 years, consider to be second offense); consider reduced use next season Second Offense show-cause letter suspending at least 10% of numbers for 1-3 years	First Offense show-cause letter suspending 25-100% numbers or season for 3 years; call permittee(s) within 24 hours notifying them that if infraction is not corrected within 72 hours it will be considered a second offense; bill for excess use at unauthorized use rate Second Offense show-cause letter cancelling total permit; bill for excess use at unauthorized use rate

		Third Offense show-cause letter cancelling 10% of numbers and suspend 10% more for for up to 3 years Fourth Offense show-cause letter cancelling 10% of remaining numbers and suspend 20% more for 3-5 years	
6.	Failure to Maintain Improvements to Standards	warning letter to permittee that suspension and/or cancellation could occur if infraction is not corrected within 10 days First Offense if not corrected within 10 days, send show-cause letter suspending up to 25% of numbers for 1-3 years Second Offense show-cause letter cancelling suspended numbers and suspend an additional 25% for up to 5 years Repeated Offenses show-cause letter cancelling remainder of permitted numbers	First Offense show-cause letter suspending 10-100% numbers or season for 3 years; call permit tee(s) within 24 hours notifying them that if the improvements are not repaired within 10 days the violation will be considered a second offense (period can be extended beyond 10 days if permittee(s) can document a reason beyond their control); any violations after 3 show-cause letters in a grazing season will be considered a second offense Second Offense show-cause letter cancelling total permit

7.	Failure to Notify Forest Officer of Change in Qualifications to Hold Grazing Permit within a Reasonable Time (90 days) - pertains to control of base property	send warning letter - permittee has 1 year to comply with requirements; send show-cause letter suspending 25% of numbers for 1-3 years if situation warrants cancel permit if permittee fails to meet requirements within 1 year	First Offense show-cause letter suspending 25% numbers or season for 3 years; notify permittee that they have 1 year in which to meet requirements; if permittee fails to meet requirements within 1 year, send show-cause letter cancelling total permit Second Offense show-cause letter cancelling total permit
8.	Turning on Livestock before Paying Fee	First Offense show-cause letter suspending up to 25% of numbers for 1 year; bill per billing guidelines Repeated Offense show-cause letter suspending 50% numbers for 3 years; bill per billing guidelines	First Offense show-cause letter suspending 25% numbers or season for 3 years; bill per billing guidelines Second Offense show-cause letter cancelling total permit; bill per billing guidelines
9.	Failure to Remove Livestock at the End of the Grazing Season or when Instructed by Forest Officer	send letter warning permittee of possible suspension or cancellation if livestock are not removed within 5 days; bill at unauthorized use rate First Offense if livestock are not removed within 5 days, send show-cause letter suspending up to 25% numbers for 1-3 years Second Offense show-cause letter cancelling suspended numbers and suspending an	First Offense show-cause letter suspending 25-100% numbers or season for 3 years; call permittee(s) within 24 hours notifying them that if infraction is not corrected within 72 hours it will be considered a second offense; bill for excess use at unauthorized use rate Second Offense show-cause letter cancelling total permit; bill for excess use at unauthorized use rate

		additional 25% of numbers for up to 5 years; bill at unauthorized use rate Repeated Offense show-cause letter cancelling remaining permit numbers; bill at unauthorized use rate	
10.	Unauthorized Non-use	First Offense show-cause letter suspending number equal to number not turned on for 2 years; no refunds or credit for unused grazing fees; if violation occurs after using full 3 years of allowed permittee convenience non-use, cancel the number not run Second and Subsequent Offenses show-cause letter cancelling number equal to number not turned on; no refund or credit of unused grazing fees	First Offense show-cause letter suspending numbers for 3 years equal to number not turned on; no refund or credit of unused grazing fees Second Offense show-cause letter cancelling permitted numbers equal to number not turned on; no refund or credit for unused grazing fees
11.	Conviction of Failing to Comply with Federal, State or Local Laws Relating to Livestock Control and for Protection of Air, Water, Vegetation, Fish, Wildlife and Other Values when Exercising the Grazing Use Authorized by the Permit	First Offense show-cause letter suspending or cancelling up to 100% of permitted numbers Second Offense show-cause letter cancelling up to 100% of permitted numbers	First Offense show-cause letter suspending 25-100% numbers or season for 3 years or cancel total permit Second Offense show-cause letter cancelling total permitted numbers

12.	Permit Holder Leases Base Ranch Property or Livestock and Allows the Lessee to Use and Manage the Grazing Permit	show-cause letter cancelling permit	show-cause letter cancelling permit
13.	Knowingly and Willfully Falsifying Information on Application and Supporting Documents	if violation is known before permit issuance, don't issue permit; if violation is discovered after permit is issued, cancel 100% of permit	if violation is known before permit issuance, don't issue permit; if violation is discovered after permit is issued, cancel 100% of permit
14.	Running Unauthorized Brands, Markings, or Ear Tags	First Offense send permittee letter notifying of violation and give opportunity to rectify situation within a specific time frame thru: 1. brand all permitted livestock with presently authorized brand; 2. submit document(s) for consideration of approval of additional brands Second Offense show-cause letter suspending 25% for 1-3 years Repeated Offense cancel 100% of permitted numbers	First Offense show-cause letter suspending 25-100% numbers or season for 3 years or cancel total permit Second Offense show-cause letter cancelling total permit

April 2, 1997

Honorable Helen Chenoweth, Chairman
U.S. House of Representatives
Committee on Resources
Subcommittee on Forest and Forest Health
Washington, D.C. 20515

RE: Testimony Regarding Livestock Grazing Policies on the Humboldt-Toiyabe National Forests, Nevada

Madam Chairman and Subcommittee Members:

My name is Jim Connelley. I reside in Mountain City which is a small community located along the Nevada-Idaho boundary in Elko County, Nevada. I have managed a cow/calf ranching operation with a U.S. Forest Service grazing permit on the Humboldt National Forest for the past 27 years.

I was President of the Nevada Cattlemen's Association for 3 years; Chairman of the Federal Lands Committee and a Regional Vice-President for the National Cattlemen's Beef Association.

I have always had good working relations with the Forest Service. I was appointed to the Forest Service Livestock / Big Game review team in 1990, and was one of the original founders of the "Seeking Common Ground" initiative. I have been recognized by the Forest Service for commitment and cooperation in progressively managing my federal grazing allotment. A resume summarizing my experience and expertise is attached to my written testimony for the information of this Subcommittee.

I am here today testifying solely on my own behalf. Having been actively involved in public land grazing for a number of years, and participating in hundreds of hours of meetings with the Forest Service and many, many range tours with Forest Service personnel, I have had broad exposure to all aspects of the livestock grazing policies on the Humboldt-Toiyabe National Forests (NFs).

Based on these experiences, it is my opinion that the Forest Service range division in general, and the Humboldt-Toiyabe NFs in particular, is an agency lacking vision and direction. It is currently out of control in terms of defining an ecologically sound and viable grazing management program that seeks to cooperatively resolve livestock grazing problems on the ground with the involved and interested parties. Officers of the Humboldt-Toiyabe NFs are making livestock management decisions based upon political agendas and then later finding the "science" to support those decisions.

I believe that grazing allotments on the Humboldt-Toiyabe Forests have been, and continue to be, targeted for the elimination of grazing, and that this goal is being achieved through the implementation of unrealistic, unscientific grazing standards and guidelines imposed in a punitive manner. As a result, the range division and the Humboldt-Toiyabe NFs have lost the respect and favor of all but those who's agendas the Forest Service supports. Based on this agenda, the Humboldt-Toiyabe NFs have all but assumed a siege mentality, blaming the commodity users for all of their problems and shortcomings. Witness the state and national news coverage on the Carson City pipe bombings where Forest Service personnel were continually quoted as speculating that disgruntled ranchers or miners were responsible. A suspect has yet to be identified or charged in these regrettable incidents.

Virtually, no effort is being made today by the Humboldt-Toiyabe NFs to work cooperatively with the grazing permittee to resolve grazing issues or problems on the ground once they have been identified. Furthermore, the current punitive approach to permit administration employed by the Humboldt-Toiyabe NFs more closely resembles a police-action, as opposed to a cooperative regulatory approach to rangeland management. This "big stick" approach has only resulted in increased polarization, costly appeals, litigation, and more recently, a grand jury investigation resulting in potential charges against Forest Service employees (*see attached news article*).

Let me explain the basis for these opinions. Other testimony this Subcommittee either has, or will hear, documents the dramatic grazing decline on the Humboldt-Toiyabe NFs since the implementation of the respective Forest Plans. Most of this downward grazing trend can be directly attributed to the following factors:

1. Strict and punitive enforcement by the Forest Service of unrealistic, restrictive riparian grazing standards and guidelines adopted in the Forest Plans which lack scientific support and biological justification[1];

2. Difficulty in maintaining economically viable levels of grazing use on most allotments prior to exceeding strictly enforced riparian grazing standards; and,

3. Refusal by the Forest Service to work cooperatively with affected permittees to address existing livestock distribution and riparian grazing issues through the application of tried and proven grazing management practices.

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[1] Riparian areas are those areas that are located adjacent to streams, springs and other water bodies that support vegetation and habitats dependent upon free soil water. In the Intermountain West, riparian areas comprise about 1 to 2 percent of the total land area.

The predominant "attitude" demonstrated on the Humboldt-Toiyabe NFs today has been permittee compliance with the imposed grazing standards, regardless of the site-specific conditions or climatic variations, or they will suffer Forest Service enforcement of substantial penalties in the form of permit suspensions or cancellations. No opportunity is afforded in this administrative process for the grazing permittee and the Forest Service to come together and cooperatively evaluate management options to resolve an identified grazing issue.

The fundamental problem with this administrative approach is that riparian areas represent natural animal concentration areas by providing all the elements for easy living, including water, shade and shelter, nutritious green feed, and often times gentle terrain. Left to their own devices livestock will naturally congregate and remain in these areas until they either run out of feed, or grazing management practices are imposed to control the timing, duration, or level of livestock use within these areas.

As such, the simplistic reduction of livestock numbers through penalty permit actions will not in itself lead to a proportional reduction in animal impacts, nor solve the basic problem—livestock control and access within riparian areas. It is important to remember that animal impacts for 50 head of cattle grazing within any given area for two weeks will be relatively the same as 100 head grazing the same area for one week. So the question is, what have you gained by imposing a penalty permit action that simply reduces the number of animals that can be grazed? Can you reasonably expect improved riparian resource conditions, or have you simply penalized the rancher financially? In most cases, the latter situation is the result bringing these predominantly family-owned operations one step closer to elimination. These are the same family ranchers/farmers that this Administration, as others before it, have promised to save.

Since the grazing permittee is the person who actually controls and manages the grazing animals, livestock control within a grazing allotment and its associated riparian areas can only be addressed and achieved through cooperative planning that involves the permittee. Yet, the administrative approach currently applied on the Humboldt-Toiyabe NFs (i.e., compliance or penalty permit action) does not afford the opportunity for either the permittee or the Forest Service to develop and evaluate livestock management practices that will address animal control issues. Without the opportunity to explore viable management options to address livestock control and riparian issues, unjustified and unnecessary administrative permit reductions continue today on both Forests at a rapid pace.

Furthermore, this documented decline of grazing on the Humboldt-Toiyabe NFs has produced grazing levels far below the output projections identified in the respective Forest Plans. These grazing output projections were in turn used in the National Environmental Policy Act (NEPA) environmental impact statements that accompanied the Forest Plans and justified a finding of "no significant impact" to the human environment or the dependent ranching operations that

were in place at that time. There is a problem here. Either the Forest Plans must be revisited and revised to reflect the true impacts of the imposed grazing standards and guidelines, or the grazing standards and guidelines themselves must be amended in order to achieve the specified grazing output levels. As it stands today, the NEPA analyses associated with these Forest Plans are erroneous and invalid as they pertain to the livestock grazing element.

The solutions that I would like to offer to resolve the previously described issues, include:

1. Initiate a congressional investigation to determine why the Humboldt-Toiyabe NFs have not attained grazing output levels specified in the respective Forest Plans, as required by the Forest Plans themselves and the National Forest Management Act.

2. The National Forest Management Act should be amended for purposes of de-emphasizing a dependency on Forest standards and guidelines. at least as they related to the livestock grazing program, and in its place require the Forest Service to offer collaborative planning processes to evaluate alternative grazing practices prior to initiating penalty permit actions. Broad, blanket application of grazing standards and requirements developed at the Forest level, do not adapt well, nor are they often applicable, to addressing varying and site-specific environmental conditions at the allotment level.

In closing let me bring to your attention that numerous Allotment Management Plans (AMPs) were jointly developed by the Forest Service and grazing permittees 20-30 years ago to address site-specific resource conditions and issues at the allotment level. Only a handful of these original AMPs have been revised over the past decade on the Toiyabe National Forest.

Since these AMPs were developed, a host of resource issues and environmental regulations have evolved that are now applied to the Forest Service grazing program, including riparian areas, grazing standards and guidelines, threatened and endangered species, and water quality to name a few. Obviously there is an urgent need to revise these plans to better reflect current resource issues and priorities. However, under the constraints of limited funding and manpower allocations, the initiation and completion of this process by the Forest Service has been painfully slow to the point of being non-existent. Congressional prioritization and full funding of Forest Service programs to update existing AMPs, and develop new AMPs where none currently exist, would go far in resolving the issues that I have discussed today.

Thank you for providing me with this invitation and opportunity to testify on these issues that are important to me and my livelihood.

Respectively submitted,

Jim Connelley

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attachments

JAMES E. CONNELLEY, Resource Specialist

EDUCATION	• Post Graduate Ag. Education, UNR, 1966-67 • B.S. Animal Science, Cal Poly, Pomona, 1966
CERTIFICATION	• Nevada Vocational Agriculture Teaching Certificate
PROFESSIONAL AFFILIATIONS	• Nevada Cattlemen's Association • National Cattlemen's Association • Society for Range Management • Nevada Farm Bureau
EXPERIENCE	
Byington Ranches 1970 to Present	• **Ranch Manager**: Mr. Connelley has been employed as Ranch Manager by Byington Inc. on a public lands dependent, cow-calf ranch in Elko, County, Nevada. Beginning in 1979, he had General Management authority over 2 additional ranches in Northern California for a total capacity of around 1000 head. Mr. Connelley was responsible for developing cross-breeding programs, purchasing the cattle and equipment, developing grazing systems and Allotment Management Plans for the Ranches.
Elko County School District 1967 to 1970	• Mr. Connelley taught Vocational Agriculture, shop and farm management to both high school and adult classes.
ASSOCIATION WORK:	• Mr. Connelley has over 12 years experience working in the legislative and regulatory arenas on issues pertinent to livestock operators being most active in the areas of water rights and public lands issues. Mr Connelley is active in the Nevada Cattlemen's Association as Vice Chairman and Chairman of the Public Lands Committee during the "Synar Years"; also as NCA Region VI Vice President and representative to the Public lands Council and Western Livestock Producers Alliance. Mr. Connelley has prepared and given testimony to the Nevada Legislature and to both houses of Congress in support of Public Lands dependent ranchers.
COMMUNITY SERVICE	
1983 to Present	• Mr. Connelley has been elected three times to the Board of Trustees of the Elko County School District.
1986 to Present	• Appointed by Governor to represent the livestock industry on the Nevada State Board of Agriculture
RECOGNITION	
	• College of Agriculture Alumni of the Year, Cal Poly, Pomona, California • Nevada Cattlemen's Association "Above and Beyond the Call of Duty Award" • Nevada Cattlemen's Association "Cattlemen of the Year"

Grand jury finds public lands crimes committed

By Steve Sexton

Elko County Grand Jury this morning reported four state and two federal officials involved in the Independence Mining Co. expansion committed the gross misdemeanor crime of "oppression under color of office," but the statute of limitations on the charges have expired.

Elko District Attorney Gary Woodbury informed Elko District Judge Mike Memeo about the two-year limitation on the crimes, which last occurred in July 1994.

The [redacted] called a presentment, says Nevada Division of Wildlife Director Willie Molini and fellow NDOW employees Duane Erikson, Larry Barngrover and Kenneth Grey, along with U.S. Forest Service employees Ben Siminoe and John Inman committed the crimes by forcing IMC to pay $500,000 toward mule deer habitat improvement before acquiring permits to expand its mining operation on forest service land.

"NDOW and USFS had essentially absolute control over IMC's financial well-being," the grand jury report says. "The grand jury recognizes that disparate bargaining positions often exist between contracting parties, but suggests that when one of those parties is a governmental agency or has governmental powers, that disparity can be disastrously out of proportion."

Brent Chamberlain, IMC's human resources manager, said he could not comment on the report because IMC was not a part of the grand jury process.

Molini and the other NDOW employees did not return telephone calls to their offices this morning. Local forest service spokesman Cheri Howell referred the matter to the agency's attorneys in Washington, D.C., who did not call with comment.

According to the report, IMC sought to expand its operation in 1989 when its mineral resources were approaching exhaustion and applied to the forest service in 1991 for expansion on lands managed by the agency.

The forest service solicited comments in an environmental assessment and NDOW responded with [redacted] with the forest service that the permits would not be granted without NDOW approval, the report says.

NDOW determined the expansion would have an "adverse impact" on about 5,500 acres of range used by mule deer in the Independence Mountains, the report says. NDOW said for every acre disturbed, IMC should improve three acres of habitat in other areas at a cost of $105 per acre, with a total cost of mitigation of $1.5 million, the report says.

The money was to go into a fund administered by NDOW, which has no direct statutory authority for the acquisition of funds from persons alleged to be affecting habitat, the report says.

After several meetings to resolve the issue, Molini and IMC President Robert Zerga agreed Sept. 30, 1992, on a formula that brought IMC's mitigation fee to $500,000.

"Giving NDOW the power to obtain and distribute funds not under legislative control ... eliminates the check and balance system of government and that the abuse of power by NDOW against IMC was the natural result," the grand jury says. "The grand jury has found indictable criminal activity in this investigation and would recommend prosecution but for the fact that the statute of limitations on gross misdemeanors has passed."

The grand jury said its heard testimony from other mining representatives that their companies had not been forced to participate in any off-site mitigations that required a payment before permits were issued. The mining representatives from Barrick Goldstrike, Newmont Mining and [redacted] U.S. also testified [redacted] mitigation before, but only with the U.S. Bureau of Land Management, which never allowed NDOW to dictate terms.

"It is evident to the grand jury that two factors placed IMC in a different position," the report says. "It was a company without a sophisticated lobbying program and it was dealing with the USFS rather than BLM."

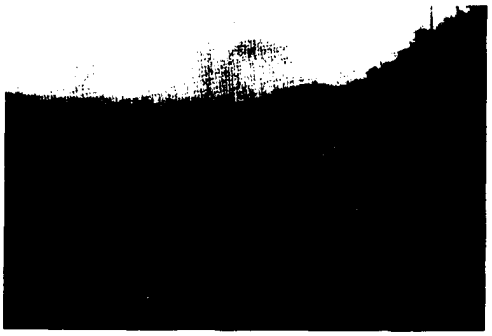
The grand jury also found a federal law, the Pitman-Robertson Act, which would have supplemented any contribution made by IMC at a 3:1 ratio. The grand jury says IMC was unaware of the law, but NDOW had full knowledge of the act and its use.

"Had NDOW been successful in obtaining $1.5 million from IMC as it originally demanded, application of the Pitman-Robertson Act would have given NDOW approximately $6 million to pay for mitigation costs of only $500,000," the report says.

The grand jury recommended its report be forwarded to Molini's boss, Pete Morros, director of the Nevada Department of Conservation and Natural Resources, and to the Nevada Legislature for review.

Exhibit

Photo of "Dust Bowl" Taken Same Day U.S. Forest Service Confiscated Cattle



This is the Meadow Canyon Allotment where the United States Forest Service (USFS) claimed resource damage had occurred, describing the area to the press as a "dust bowl." This photograph was taken on the very day Hage's cattle were confiscated. Pictured above, standing in Knee-high lush forage are (left to right): Dave Steward, USFS, Al Winward, USFS, and Jim Connelley, National Cattlemen's Association. (In 1990 the government declared Hage's grazing lands in such "pristine" condition that they qualified for Wilderness status.

The Story Behind the Pine Creek Ranch Takings Case

"Cattle free by '93," the battle cry adopted by radical environmentalist, came true for family ranchers Jean and Wayne Hage in the summer of 1991.

When they purchased the Pine Creek Ranch in 1978, the Hages had heard stories about the U.S. Forest Service's harassment of the former owners. However, since Wayne always had worked well with the Forest Service, his experience gave him confidence any conflicts would be resolved as they had in the past.

The purchase of Pine Creek Ranch included water rights recognized by the Nevada State Water Engineer, so the Hages were shocked to discover the Forest Service had fenced off a critical spring belonging to Pine Creek Ranch in order to pipe their water to the ranger station through a newly-installed $50,000.00 water system. The excess water emptied into a ditch, wasting water which could have been used for livestock. It also created a drainage area so unsightly even the Forest Service took note; in fact, the mechanical damage created by the Forest Service's own water system was one reason they cited to justify reductions in the Hages' livestock numbers in seasons to come. The Forest Service ignored the Hage objections, and continued to monopolize the water in violation of the laws of the State of Nevada. In addition, the Forest Service acted to acquire title to water which belonged to Pine Creek Ranch for more than one hundred years -- longer than the U.S. Forest Service has been in existence.

The purchase of Pine Creek Ranch also included grazing rights to National Forest lands. The Hages requested (as had their predecessors, many times) that the Forest Service convert his 5000-sheep preference to cattle units. The Forest Service denied the request, claiming there was insufficient vegetation to support the additional animals. The following summer, to the astonishment of the Hages, the Forest Service granted their unused sheep preference to the Nevada Department of Wildlife for a program to introduce non-indigenous elk to the

(Continued on Page 4)

(continued from page 1)

A History of Takings

Hages' allotments.

In 1989, Wayne Hage published his research analysis of illegal practices carried out by land management agencies in his text Storm Over Rangelands, and the book made its way into the permanent collections of many eminent law libraries including that of the United States Supreme Court. However, with the increased threat of public exposure, the Forest Service attempted to silence its author with a barrage of charges against Pine Creek Ranch.

Some of the Forest Service activities against Pine Creek Ranch included, 70 visits and 40 letters during a single 105-day grazing season. Citations included a reprimand for failure to maintain drift fences (a single staple was missing from a 20-mile stretch of fence) and numerous occasions of "trespass" and other "violations" arising from Forest Service personnel's own actions. When it became apparent that the Forest Service's arbitrary and unjust cancellation and suspension of the ranch's summer grazing permits locked up the ranch's summer range, the Hages began to gather and sell their cattle; it had beome clear the only way to guarantee strict compliance with Forest Service grazing policies *was to graze no cattle at all.*

The systematic sale of the Pine Creek Ranch's only source of income did not dissuade armed members of the Forest Service from herding the remaining head of cattle, impounding them, and selling them off on two separate occasions. These cattle were rounded up for the offence of straying across an unfenced Forest Service boundary.

The Hages' sole remaining alternative was to take their case to the U.S. Claims Court in order to hold the Forest Service accountable for the land and water policies which obliged at least one family to sell Pine Creek Ranch, and forced the Hages into bankruptcy.

Government agencies can continue to deny private citizens their due process rights as long as they are allowed to conduct their hearings and to quash any challenges from outside individuals. Throughout the entire 14-year conflict, the Forest Service has controlled the appeal process with its own administrative proceedings; not surprisingly, the Forest Service never has required its staff to make their charges under oath or to stand up to cross-examination, despite repeated requests by the Hages. The Forest Service continued its accusations against Pine Creek Ranch, knowing that each time they cited a violation, levied a fine, or penalized the property, the Hages' only recourse was to petition the Forest Service themselves for redress.

NATIONAL FEDERAL LANDS CONFERENCE

August 8, 1991

Jim Connolley
Buington Ranch
Mountain City, Nevada 89831

Dear Jim:

For your information, we are enclosing the following factual packet regarding the entrapment of livestock on Pine Creek Ranch near Tonopah, Nevada. On July 27 and 28 while Pine Creek Ranch personnel were gathering cattle for sale from one of our Forest Service allotments, the U.S. Forest Service arrived and ordered them to cease the gathering. This gathering was being done in order to comply with a Forest Service order.

The Forest Service proceeded to impound these cattle, which are worth approximately $30,000. Said cattle have been removed to the Livestock Auction Market in Fallon, Nevada, for public auction.

On July 29, a memo from the U.S. Forest Service in Washington, D.C. was widely circulated within the District. The Hage family has asked for assistance from the Nevada Congressional delegation.

As you well know, there is always another side of the story. Enclosed is a narrative on the history of the problems with the U.S. Forest Service since Wayne and Jean Hage purchased Pine Creek Ranch. I think it reflects a series of problems, which became far more intense in 1989, when Mr. Hage's book, "Storm Over Rangelands," was published, and the National Federal Lands Conference was founded.

The Hage's now have no cattle, the sale of which has gone to the lending institution. Because of the burdens the U.S. Forest Service has placed on their permits, the ranch is now unsalable. As Chairman of the NCA's Public Lands Committee we would appreciate anything you can do to help resolve these problems with the U.S. Forest Service; and thank you for the time you have already spent on this problem.

Sincerely,

Ruth Kaiser

Ruth Kaiser
Executive Director

Enclosure

P.O. Box 847 • Bountiful, Utah 84011-0847 • (801) 298-0858
1117 East 500 North • Bountiful, Utah 84010

NATIONAL FEDERAL LANDS CONFERENCE

HISTORY OF THE RELATIONSHIP BETWEEN
PINE CREEK RANCH AND THE U.S. FOREST SERVICE

In 1978 E. Wayne Hage and Jean N. Hage purchased the Pine Creek Ranch. The Pine Creek Ranch had a preference on the Table Mountain allotment for 5,000 sheep which the U.S. Forest Service had refused to convert to cattle AUMs.

In 1979 the U.S. Forest Service and Nevada Department of Wildlife planted fifty (50) non-indigenous elk using the Table Mountain allotment and the stock water rights of Pine Creek Ranch. The Pine Creek Ranch preference for 5,000 sheep was used to justify the planting of elk. No compensation was offered to Pine Creek Ranch which had been granted against its wishes to a third party (Nevada Department of Wildlife), or for the use of the Pine Creek Ranch's vested and court decreed stock water rights on Table Mountain.

In 1980 the U.S. Forest Service took a spring in Meadow Canyon covered by Pine Creek Ranch's vested rights to install a water supply system for their own use. To gain equipment access to the water development site, the U.S. Forest Service destroyed three tenths of a mile of private fence on private land belonging to Pine Creek Ranch.

Pine Creek Ranch asked the Nevada State Water Engineer for a field hearing to arbitrate the dispute between Pine Creek Ranch and the U.S. Forest Service. The State Engineer ruled in favor of Pine Creek Ranch and instructed the U.S. Forest Service to desist in using Pine Creek Ranch's Water.

Following the decision by the state Water Engineer and During the summer grazing season, Pine Creek Ranch received 40 letters and 70 visits from the U.S. Forest Service, most of which alleged violations of their regulations or demanded a new condition for the use of the allotment.

Pine Creek Ranch filed a request with the Nevada State Water Engineer for a formal water adjudication.

In 1982 the U.S. Forest Service filed water claims over all of the vested water rights of Pine Creek Ranch on the Table Mountain and Meadow Canyon allotments.

In 1982 the U.S. Forest Service rendered several adverse decisions against Pine Creek Ranch. Pine Creek Ranch appealed all these decisions. All charges were dropped, except two, which were subsequently reversed.

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In 1988 the elk hunting season on Table Mountain was set to overlap the grazing season by two weeks. This prevented Pine Creek Ranch from getting all of its livestock off Table Mountain by the end of the grazing season.

In 1989 the district ranger made a decision to suspend twenty (20) percent of the permitted use on Table Mountain for the 1990 grazing season, for failure to control livestock. This decision was appealed on the grounds that it was the planting of non-indigenous elk on the range and water rights of Pine Creek Ranch and the imposition of an elk hunting season to overlap the grazing season which created livestock control problems rather than any fault on the part of Pine Creek Ranch. In 1990 the regional forester upheld the ranger's decision.

The 1990 annual operating plan for Table Mountain contained a provision stating that full numbers would be permitted on Table Mountain pending the regional decision at which time the ranger would confer with Pine Creek Ranch as to the implementation to the 20% suspension.

Pine Creek Ranch was on record in the appeal that any suspension would render the Table Mountain allotment uneconomical to use. This was a standing conditional notice of non-use.

The district ranger notified Pine Creek Ranch of the regional foresters decision to uphold the 20% suspension by hand delivered letter on Friday afternoon, June 29, 1990. The on date for the Table Mountain allotment was Sunday, July 1, 1990. The district ranger did not confer about the 20% suspension. Pine Creek Ranch decided to only use the allotment if there were on-going drought conditions and that event, the U.S. Forest Service would be notified of the intent to use the allotment.

The district ranger then notified Pine Creek Ranch that ninety (90) percent of the permitted use must be made or Pine Creek Ranch would be in violation of the terms and conditions of the permit.

On August 6, 1990, a U.S. Forest Service person opened the gate at Mosquito Creek to allow Pine Creek Ranch's cattle to drift on the Table Mountain allotment.

In September, the district ranger notified Pine Creek ranch of cattle on the Table Mountain allotment and subsequently made a decision to suspend 20% of the permitted use on Table Mountain for two years for lack of livestock control.

The district ranger then made a decision to permanently cut twenty five (25) percent of the Table Mountain permit for failure to formally apply in writing for non-use during the 1990 grazing season.

In July 1990, the district ranger notified Pine Creek Ranch that allowable use may have been met on the Meadow Canyon allotment and that livestock may have to be removed by August 10, 1990. Another inspection would be made to confirm the former evaluation. A request for a stay of a decision to remove livestock by August 10, was made by Pine Creek Ranch because of the short time frame and the expense and character of the Meadow Canyon allotment. This was denied. The district ranger then made a decision to cut the Meadow Canyon permit by thirty eight (38) percent and demanded that all livestock be kept off the Meadow Canyon allotment for the remainder of the grazing season because all livestock were not off the allotment by August 10.

The Monitor Valley West allotment is a narrow strip of land which until 1989 was part of the Meadow Canyon allotment. It extends from the foot of the mountains into the valley about a mile wide and 22 miles long. There is only one (1) mile of fence between these two allotments. In some places there are some natural barriers, but through the 22 mile border it remains open and unmarked. There is unrestricted access ways between these two allotments. Pine Creek Ranch cattle by instinct and desire have returned to Meadow Canyon allotment year after year. These cattle are familiar with the access ways to the Meadow Canyon allotment.

To the east of the Monitor Valley West allotment is the main Monitor allotment (BLM) belonging to Pine Creek Ranch. There is an unfenced and unrestricted boundary between the Monitor allotment (BLM) and the Monitor Valley West allotment (U.S. Forest Service) for more than twenty miles. Pine Creek Ranch cattle continued to drift from the Monitor allotment through the Monitor Valley West allotment to the Meadow Canyon allotment despite extensive efforts by Pine Creek Ranch. The district ranger then made another decision to cut the Meadow Canyon Allotment by 100% for a minimum of five years.

In March 1991 Pine Creek appealed this decision because the only way to comply was to use none of its summer range in Monitor Valley because of the impossibility to control drift on the unfenced boundaries. Again, Pine Creek Ranch requested a stay of the district ranger's decision. The request for stay was denied.

In the spring of 1991 the district ranger licensed Pine Creek Ranch on the Monitor West allotment to accommodate drift from the Monitor (BLM) allotment.

At a later date, Pine Creek Ranch was notified of Supervisor Nelson's boast that he had already taken one of Pine Creek Ranch's permits and that he was going to take the rest.

Pine Creek Ranch asked the U.S. Forest Service in writing to discuss the problem of this uncontrollable drift. The district ranger replied in writing that it was Pine Creek Ranch's duty to control the drift problem.

In May 1991 Pine Creek Ranch arranged for liquidation of the Pine Creek Ranch cattle herd to avoid the prohibitive cost of more U.S. Service appeals and potential impoundments.

In June 1991 the district ranger notified Pine Creek Ranch that any cattle found on the Meadow Canyon allotment would be impounded without notice.

From June 1 until July 27, with the exception of July 4 and 21, a four man crew from Pine Creek Ranch worked to gather cattle to keep them off the Meadow Canyon allotment and to classify these cattle for sale. During this period of time Pine Creek Ranch sold and shipped from the Monitor Valley area 350 head ow cows, 243 replacement heifers, 155 steers, and assorted other cattle.

The remaining 1,200 head of cattle were being gathered, classified for sale, and moved to the north end of the Monitor Valley allotment and private lands to reduce the possibility of drift on the Meadow Canyon allotment. All but approximately 100 head of Pine Creek Ranch cattle had been so gathered by July 27, 1991.

Between June 1 and July 27, 1991, the Pine Creek Ranch spent 26 days gathering cattle directly from the Meadow Canyon allotment. Pine Creek Ranch left the gates of private land in Meadow Canyon open to attract any cattle which might stay into that part of the Meadow Canyon allotment so they would not be subject to impoundment. The district ranger opposed the opening of gates onto private lands in Meadow Canyon for this purpose.

On July 27, 1991, the Pine Creek Ranch crew was stopped by a U.S. Forest Service special agent from any further gathering of cattle from the Meadow Canyon allotment. The U.S. Forest Service then proceeded to gather and impound any Pine Creek Ranch Cattle found across the boarder between the Meadow Canyon and Monitor Valley West allotments.

Pine Creek Ranch has lost the use of its entire ranch holding. The Hage family has been forced to liquidate its cattle heard, which was its sole means of income. The Hage family has been left with no means of support. There are no cattle left on the ranch and no way to produce any income from the ranch.

The long history of problems between the U.S. Forest Service and the Pine Creek Ranch began when Wayne Hage objected to the U.S. Forest Service taking his water springs in 1980. Since the publications of his book, "Storm Over Rangelands," he has been relentlessly attacked

The value of the Pine Creek Ranch has been destroyed by the U.S. Forest, as it is now unsalable.

Wayne Hage - U.S. Forest Service Situation

A Report and Observations
by Jim Connelley
President, Nevada Cattlemen's Assn.; Chairman, National Cattlemen's Assn. Public Lands Committee

My involvement in the Hage-Forest Service controversy has nothing to do with Wayne Hage the individual, but everything to do with the principles this country and the West were founded upon. Fairness, respect for private rights of individuals as well as the resource base, protecting family farmers; wise, sustained use, just compensation and just plain respect all formulated the reasoning.

This particular situation has run hot and cold for over 15 years. When the area in which the Meadow Canyon allotment is situated was nominated for wilderness designation, the proponents of that action were finally frustrated by the fact that the owners of Pine Creek Ranch had several court decreed water rights in the area and wished to continue utilizing them for livestock grazing. If the USFS wants these rights on the particular operation off of this particular section of real estate,so bad, why don't they do it the old fashioned way; let them buy his right and interest in the property at fair market value. The agency has land acquisition dollars in its budget.

Regardless, it is not right to force a man, his family, and his life's work out on the basis of attitude backed up by a very questionable one-time survey coupled with "professional judgments" made by administrators from places like Pennsylvania. While it is my opinion and "professional judgment" that some changes in management would enhance the resource, the condition of the resource on July 27, 1991, is testimony to the fact that the prescription for 5 years non-use and the late October-November 1990 study upon which it was based, is basically flawed and unduly influenced by a predisposed attitude toward the operator.

Al Winward, the range ecologist who did the study in the fall of 1990 and accompanied me in July said that, "the allotment was so close to being in good condition that it's too bad better cooperation in instituting management can't be achieved."

I then asked Mr. Hage if he had been or would be willing to participate in development of an allotment management plan to address the management question? He responded in the affirmative. See attached letter.

Mr. Winward also told me in response to a direct question that his prescription for 5 years non-use last fall was actually 3-5 years maximum and based on what he'd seen that July day, was overkill.

I'm sure that it is not coincidental that the prescription came down in the decisions 5 years and that is the length of time after which you loose your water rights in Nevada.

Page 2.

My personal involvement in the July tour was to try to get an objective look at the resource and discuss the whole situation with representatives of the Forest Service and the livestock industry at the national level. Then, try to mitigate the developing confrontation with a common sense approach which would provide both parties a way out and institute a better management plan for the allotment. The Washington office of the Forest Service assured me that this was agreeable to them.

The week after the tour, on July 27th, with Dave Steward and Al Winward, I met with Bobby Williamson, Washinmgton, D.C. USFS Director of Range Management, in Denver and reported my feelings and observations to him. He told me that while he was not as optimistic as I was, he would assign someone from the Regional Office in Ogden to contact me immediately and attempt to work out the situation. He also stated that he felt the Forest Service had some "vulnerability" with the way the impound had been handled.

The promised follow-up and cooperation was apparently all window-dressing as no contact was made until some weeks later; after the sale of the impounded cattle. I am totally frustrated by the cavalier attitude of the Forest Service, particularly the Toiyabe National Forest personnel.

The basis for the impoundment and sale was Mr. Hage's non-compliance with the non-use decision. One must realize that there are approximately 21 miles of unfenced border between allotments in the area. Thus, if Mr. Hage were to comply totally, he would have to leave the other adjoining units ungrazed also. He could not do that and still feed his livestock; therefore, he grazed the adjoining allotments and hired cowboys to attempt to keep the cows out of Meadow Canyon allotment. I believe every reasonable attempt was made to comply and the resource condition we saw in July shows that it was reasonably successful. The livestock industry then attempted to implement a common sense approach to diffuse the confrontation and allow for a plan to correct the management question and was totally frustrated by the Forest Service in that attempt.

It matters not whether Wayne Hage is the operator there or someone else; what matters is that the resource base <u>and</u> the sanctity of the rights and properties of individuals be protected as per the Constitution. There are a myriad of ways to do this: but, to have Big Brother come in and confiscate a man's livelihood and life's work, as well as devalue his base property (which is probably his retirement plan) is not right. It was tried for some 75 years in eastern Europe, and the resource as well as the people suffered immensely.

STATE OF NEVADA

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GOVERNOR

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MEMORANDUM

DATE: August 29, 1991

TO: All Board Members

FROM: Steve Mahoney

SUBJECT: Disposition of the sale of Hage vs United States Forestry Division livestock sale.

On August 27, 1991, United States Forestry Division sold all the cattle they had impounded from Wayne Hage. No brand inspections were written for change of ownership, and none were requested for transportation. David Grider (Division of Forestry) stated that they tried to reach me on a mobile phone but I must have been out of range (no pun intended).

On Wednesday, August 25, 1991, some of the cattle were consigned to Gallaghers and went through the sale ring twice. Change of ownership certificates were written on the final sale of these cattle. Please see attached copies of the bills of sale on the cattle.

This violates State Law!

BUDD-FALEN LAW OFFICES, P.C.

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Karen Budd-Falen
Franklin J. Falen

Daniel B. Frank
*Vance E. Haug**
**admitted in Nebraska*

Testimony of Karen Budd-Falen, Esq., Cheyenne, Wyoming
Before the U.S. House of Representatives
Committee on Resources, Subcommittee on Forests and Forest Health
Oversight Hearing on Livestock Grazing Policies on National Forests
April 8, 1997, Longworth House Office Building, Room 1334

My name is Karen Budd-Falen. I am both a rancher and an attorney who represents ranchers and local governments who are dependant upon the use of the federal lands. The information provided at this hearing is based both upon my personal knowledge as a fifth generation rancher on a family owned ranch located near Big Piney, Wyoming, and upon the problems of my clients, whose livelihoods are dependent upon the conservation and use of the federal lands. I am here to discuss with you my concern for federal land management, based upon personal experience and my knowledge of the statutory authorities binding the actions of the U.S. Forest Service. While not all employees of the Forest Service are attempting to eliminate the federal lands user, in my view, the Forest Service is not following the mandates of the federal statutes or the U.S. Constitution. This failure is leading to the unnecessary elimination of many federal lands grazing permits and leases.

I. Humboldt-Toiyabe National Forests, Nevada

A. General Description of the Problem

1. Humboldt National Forest

The Humboldt National Forest is located in the eastern side of Nevada and encompasses over two and one-half million (2,500,000) acres. In 1986, the Forest Service promulgated the Humboldt National Forest Land and Resource Management Plan (LRMP or Forest Plan). The Forest Service listed goals and objectives in the Humboldt LRMP which projected that in 1995, the Humboldt National Forest would annually produce 300,298 animal unit months (AUMs) of livestock grazing. Until 1993, livestock grazing permits existed for over 300,000 AUMs on the Humboldt National Forest. However, between 1987 and 1993, the Humboldt National Forest actually authorized only 215,546 AUMs per year.

Although over 300,000 AUMs were authorized in 1993, the Humboldt National Forest reduced the permitted livestock grazing to approximately 241,000 AUMs and authorized only approximately 199,000 AUMs of livestock grazing. In 1994, the Humboldt National Forest slightly

increased the permitted livestock grazing to 261,006 AUMs, but only authorized 221,803 AUMs. Thus, between 1987 and 1994, the Forest Service reduced grazing on the Humboldt by 38,994 AUMs. In terms of the loss of ranchers, in 1987, there were 160 individual livestock grazing permittees on the Humboldt National Forest. In 1994, only 135 livestock grazing permittees remained. In other words, 25 grazing permittees have ceased grazing on the federal lands since the implementation of the Humboldt National Forest LRMP. See attachments 1 and 2.

The Forest Service stated in the Humboldt LRMP that it would further evaluate or change direction with respect to livestock grazing management if the record of actual livestock grazing use varied by ten (10) percent or more. In a letter dated October 30, 1995, the Nevada Land Action Association (NLAA) representing the Humboldt National Forest permittees requested the Humboldt Forest Supervisor to evaluate why livestock grazing has been substantially reduced over what was projected in the Humboldt LRMP and to amend the Humboldt LRMP in a manner which will correct the inequity between the livestock grazing program and the Humboldt LRMP. The Forest Service responded on December 6, 1995, admitting that the livestock grazing program has been reduced, but denying to amend the Humboldt LRMP. This same information regarding the severe reduction in livestock grazing was presented to the Forest Supervisor again on February 6, 1997. On March 24, 1997, the Forest Service responded by stating that it would continue to monitor the goals and outputs of the Humboldt LRMP and that the Plan would be "revised and amended as part of an [sic] continuous planning process." The letter contained neither a time frame for the start or completion of the "continuous planning process," nor a recognition of the fact that since 1987, livestock grazing on the Humboldt National Forest has been systematically reduced by almost 39,000 AUMs.

2. Toiyabe National Forest

The Toiyabe National Forest is located in the western portion of Nevada and encompasses over 3,000,000 acres. In 1986, the Forest Service promulgated the Toiyabe LRMP. The Toiyabe LRMP projected that between the years 1991 and 2000, permitted grazing use for domestic livestock would be 98,000 AUMs per year.

In 1985, livestock grazing permits existed for over 105,000 AUMs on the Toiyabe National Forest, although the Forest Service actually authorized only 88,824 AUMs. Except for the year 1991, the Toiyabe National Forest has steadily reduced both the AUMs permitted and the AUMs actually authorized. By 1994, the permitted number of AUMs on the Toiyabe National Forest was 69,346 AUMs, and the number of AUMs authorized was only 56,062 AUMs, or 57 percent of the yearly amount projected in the Toiyabe LRMP. In terms of human impact, in 1985, there were 75 individual livestock grazing permittees on the Toiyabe National Forest. In 1994, only 44 livestock grazing permittees remained. See attachments 1 and 2.

Like the Humboldt Forest Plan, the Forest Service in the Toiyabe LRMP agreed that it would further evaluate or change management direction with respect to livestock grazing if the record of actual livestock grazing use varied by ten (10) percent or more. In contravention of the Toiyabe LRMP and the regulations, the Forest Service has never monitored and identified the reasons why

the actual livestock grazing use has remained at less than sixty (60) percent of the AUMs projected in the Toiyabe LRMP. The Forest Service also has never examined methods or alternatives which would bring the livestock grazing program into compliance with the Toiyabe LRMP. Furthermore, the Forest Service has never examined possible amendments to the LRMP which will return livestock grazing outputs on the Toiyabe National Forest to the 98,000 AUM level projected in the LRMP.

In a letter dated October 30, 1995, the NLAA requested that the Toiyabe Forest Supervisor to evaluate why livestock grazing is less than projected in the Toiyabe LRMP and to amend the Toiyabe LRMP in a manner which will correct the inequity between the livestock grazing program and the Toiyabe LRMP. The Forest Service responded to the NLAA's request on December 6, 1995 by stating that although the livestock grazing program has been reduced, the Forest Service would not consider review of the Toiyabe LRMP. This same information regarding the severe reduction in livestock grazing was presented to the Forest Supervisor on February 6, 1997. On March 24, 1997, the Forest Service responded by stating that it would continue to monitor the goals and outputs of the Toiyabe LRMP and that the Plan would be "revised and amended as part of an [sic] continuous planning process." The letter contained neither a time frame for the start or completion of the "continuous planning process," nor a recognition of the fact that since 1991, livestock grazing on the Toiyabe National Forest has been systematically reduced by 35,654 AUMs.

B. Statutory Violations

One of the primary statutes governing management of national forest system land is the National Forest Management Act (NFMA) which requires that the national forests be managed for outdoor recreation, range, timber, watershed, wildlife and fish. 16 U.S.C. § 1604(g)(3)(A). Under the requirements of NFMA, the Forest Service must complete LRMPs or forest plans for each national forest. The LRMPs guide all natural resource management activities, establish management standards and guidelines and describe resource management practices, levels of resource production and management, and the availability and suitability of lands for the activities to occur in each national forest. Livestock grazing permits, wildlife management plans and other authorized activities must comply with the direction contained in the applicable forest plan.

The Forest Service is also required to monitor and evaluate, on a periodic basis, whether the goals and objectives stated in the governing LRMP on a particular forest are being met. 36 C.F.R. § 219.12(k). Forest Service regulations state that if the evaluation shows that the goals and objectives are not being attained, the Forest Supervisor must examine changes in management direction, revisions or amendments to the LRMP to either meet the goals and objectives of the LRMP, or the Forest Supervisor must revise the goals and objectives of the LRMP so that they are attainable. 36 C.F.R. § 219.12(k).

Consistent with the regulations, the Humboldt and Toiyabe LRMPs themselves also require the Forest Service to reevaluate or change the management direction of the livestock grazing program if actual livestock grazing use is more than ten (10) percent less than the amount predicted

in the LRMPs. As stated above, data collected from the Forest Service show that on the Humboldt and the Toiyabe National Forests, actual livestock grazing use is over ten percent (10%) less than predicted in the LRMPs. However, the agency has refused to evaluate the reasons for this deviation from the objectives of the LRMPs, and has refused to amend or revise the LRMPs. Consequently, the Forest Service has violated the NFMA, the accompanying regulations, the Humboldt LRMP and the Toiyabe LRMP. The Forest Service's violations of the NFMA, the accompanying regulations, the Humboldt LRMP and the Toiyabe LRMP constitute agency action unlawfully withheld as prohibited by the APA. 5 U.S.C. § 706(1).

Although there have been claims that market forces, the lack of suitable grazing allotments, the conflict between livestock grazing and resource preservation are the cause of the substantial decline in grazing on the Humboldt and Toiyabe, the experiences of the individual affected permittee do not support these contentions. Resource Concepts, Inc., (RCI) an independent consulting firm in Carson City, Nevada, took on the task of reviewing each decision from the Humboldt and Toiyabe National Forest eliminating or reducing livestock grazing to determine the reasons for the individual reduction. The significant majority of reductions occurred because the grazing permittee could not comply with the standards and guidelines in the Humboldt and Toiyabe LRMPs. The standard and guideline causing the most problems were the forage utilization standards. Under the LRMPs as written, once the specified utilization for an area is reached, such as a 35 percent utilization standard in a riparian area, livestock must be removed from the area. There is no determination of whether livestock or other wildlife (elk) caused the utilization standard to be met, no quanitification of the amount of forage remaining on the riparian area or the rest of the allotment, no determination of whether the utilization standard is an appropriate measure of the health of that particular area on the allotment. The standard is rigid and once met, livestock grazing is eliminated or the rancher can face a penalty including permanent or temporary, cancellation or suspension of all or part of his grazing permit. Because of the Uniform Action Guide for the Humboldt provides little flexibility in how penalties for violation of utilization standards are administered, many grazing permittees "voluntarily" relinquish their grazing permits simply because they cannot meet the standards set by the agency.

II. Apache-Sitgreaves National Forest

A. General Description of the Problem

Prior to 1995, the Forest Service held the position that the reissuance of regularly-expiring livestock grazing ten year term permits did not require analysis pursuant to the National Environmental Policy Act (NEPA). 42 U.S.C. §§ 4321, *et seq.* However, without the benefit of rulemaking or other formal decision making process, in 1995, the Forest Service changed its policy to one that mandates that term grazing permit reissuance be allowed only upon the completion of NEPA analysis.

In 1995, the ten year term livestock grazing permits for 13 permittees covering 20 grazing allotments on the Apache-Sitgreaves (A-S) National Forests were set to expire. Pursuant to the new

agency policy, the Forest Service completed its alleged NEPA process and reissued the permits. The problem is that none of the new permits were reissued for the same terms and conditions as the expiring permits; rather every permit which was evaluated received a direct reduction in livestock grazing of between 40 percent and 85 percent as well as an indirect reduction in livestock grazing mandated by a new terms and conditions with which the permittees will never be able to comply. These severe reductions in permitted grazing numbers and seasons of use, and the host of new terms and conditions will severely impact the economic viability of the permittees' ranches in Arizona and New Mexico.

B. Statutory Violations

1. National Environmental Policy Act

Contrary to what the Forest Service may assert, there is no court decision or other legal requirement that the agency complete NEPA documentation prior to grazing permit renewal. In fact, prior to 1995, the agency took the position that livestock grazing was an ongoing activity and that NEPA compliance was not necessary when the agency issued yearly grazing authorizations, term grazing permits, or allotment management plans (AMPs). However, the agency has abandoned this position, without the benefit (or burden) of a judicial ruling.

Even, assuming *arguendo* that NEPA is necessary, the decisions issued to the 13 permittees on the A-S violated NEPA. Consider the following examples:

a. The NEPA documents issued to the A-S permittees stated that the "no-action" alternative was a "no grazing" alternative. This statement is in error because (1) NEPA regulations state that the no action alternative is maintenance of the *status quo*; in this case, the *status quo* is continuation of grazing pursuant to the terms and conditions of the expiring ten year term grazing permits; (2) the grazing allotments had been determined to be suitable for grazing under the currently existing LRMP; and (3) the elimination of grazing violates the multiple use mandates of the Multiple Use and Sustained Yield Act (MUSYA), 16 U.S.C. 528 *et. seq.*, the National Forest Management Act (NFMA), 16 U.S.C. § 1604 *et. seq.*, and the Federal Lands Policy and Management Act (FLPMA), 43 U.S.C. § 1701 *et seq.*

b. The decisions also failed to adequately analyze cumulative impacts and connected actions such as (1) the economic impacts to the local economy with the elimination of 40 percent to 85 percent of the grazing on the federal lands; (2) the possibility that reduction of livestock numbers will cause fuel loading, which could lead to catastrophic fires with severe impacts on wildlife, fish, and forest ecosystems, and (3) the loss of the range and water improvements currently maintained by the ranchers, particularly since many of these improvements are decades old, and wildlife populations have grown dependent upon these developed water sources.

c. The decisions also failed to adequately consider opportunities for mitigation such as offering additional grazing elsewhere on the National Forest System or considering other livestock

management tactics such as changes in the grazing system or improvement of the forage base on the allotment by chaining and burning of pinyon-juniper areas, and timber harvest or thinning.[1]

2. Violation of Agency Regulations

a. Like the problems on the Humboldt, Toiyabe and Sawtooth National Forests, the Forest Service in this case also used the forest plan standards and guidelines to unnecessarily eliminate livestock grazing. For example, the A-S decisions imposed terms and conditions on the allotments that are not authorized by the Forest Plan, such as utilization standards. In fact, the agency admits that it ignored the current vegetative and range condition on these allotments when it calculated the forage utilization standards. The decisions issued to the A-S permittees do not state the biological or scientific basis for the utilization standards, nor are the utilization standards supported by adequate range trend/condition or production/utilization studies.

b. Additionally, the utilization levels established for Northern goshawk territories are based upon a Forest Service document entitled *"Management Recommendations for the Northern Goshawk in the Southwestern United States"* (hereinafter Goshawk Recommendations). This document is based upon questionable scientific tactics and theories.[2] The utilization levels

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[1] Assuming for the purpose of argument that current grazing on the allotments exceeded capacity, it should be noted that excess forage utilization will not cease unless alternatives such as developments of alternate water, fencing, changes in pasture rotation or timing, etc., are implemented. Mere removal of a pre-determined number of livestock will never achieve desired utilization unless distribution of the remaining numbers is improved and wildlife (elk) impacts are lessened. None of these improvements were considered in any of the A-S decisions.

[2] The Goshawk Recommendations allege that a minimum stubble height is required on National Forest allotments to protect the habitat of the prey species upon which the Northern goshawk depends. This assertion may be accurate in the case of species that were analyzed, such as the vole. However, numerous other Northern goshawk prey species, such as the jackrabbit, do not require excessive stubble heights. In fact, some prey species, such as various ground squirrels and deer mice, actually thrive better in habitats with lesser stubble heights. The Goshawk Recommendations failed to take these simple biological principles into consideration. Moreover, the Goshawk document fails to incorporate two basic scientific facts about the goshawk: a major portion of the goshawk's diet consists of songbirds, hunting for which takes place almost exclusively in dense, forested areas, areas typically not known for "stubble height." This is just a small sampling of the inadequate scientific extrapolations and concoctions used by the Forest Service in developing the Goshawk Recommendations. However, it is a good example of why the agency must go back and use the proper procedures, both legal and scientific, to ground-truth these guidelines before it can force untried and unproven restrictions upon livestock producers and rural communities throughout the Southwest.

recommended to "protect" the Mexican spotted owl were based on draft documents that had not completed the public comment requirements.

An additional problem is the complete lack of monitoring data on any of the allotments. An agency decision to change a grazing allotments' management regime must be supported by scientific data; a change that is not based on adequate monitoring data is arbitrary and capricious under the APA and must be set aside as unlawful. 5 U.S.C. § 706(2). Moreover, Forest Service policy in Region 3 requires at least three years of production and utilization studies before an adjustment in livestock rates can be imposed. Finally, the Apache-Sitgreaves Forest Plan requires the agency to monitor capacity (and adjust it accordingly) with production/utilization and trend/condition studies. For example, most of the utilization studies on the A-S allotments were between 20 to 30 years old. There were also no current trend or condition studies conducted on the allotments. Rather, most of the data used to support the decisions was taken from satellite imagery which was not ground-truthed. The Forest Service also used several "scientific" studies to support its conclusions that livestock grazing should be reduced on the allotments. However, reliance on these studies was also misplaced. For example, the Forest Service cited studies from Montana to indicate that the suitability of these allotments for grazing was questionable. Montana is not Arizona. As such, the "scientific" information and monitoring supplied by the agency to support its reductions was clearly suspect.

d. The NEPA documents also ignored the impact of grazing by elk on the A-S allotments. Given that elk herds in the area have increased dramatically in the last decade, they utilize a significant portion of the forage available on this allotment. It is arbitrary and capricious for the agency to ignore elk impact on these allotments. Moreover, assuming *arguendo* that the range is in poor condition (as the EA suggests), the agency acted arbitrarily and capriciously by failing to consider the possibility that such condition is attributable to impact by elk. The agency contended that considering elk impact was beyond the scope of analysis for these decisions. The agency also assumes that the impacts from elk are at a constant baseline level throughout all alternatives. The agency position is absolutely wrong. The agency cannot reduce grazing on these allotments based on its suggestion that the riparian and other vegetative conditions of the allotments are poor, without considering the possibility that such conditions might be attributable to other ungulates. Moreover, it is absurd to assume that elk use will remain constant throughout varying livestock use levels. The agency abused its discretion by narrowing its decision so far as to ignore verifiable on-the-ground environmental conditions.

III. Conclusion

Although some may claim that these case examples show that national forest system lands are not conducive to livestock grazing, I disagree. I believe that the reason forest plan standards and guidelines are eliminating livestock grazing is the fact that the permittees are being regulated off the federal lands. Just using my father as an example, if we had been the poor stewards of the federal lands as claimed, we would have run ourselves out of business four generations ago. With good management, the federal lands can sustain viable livestock grazing. Creating standards and

guidelines that are not based upon on-the-ground conditions of each individual allotment or area in the allotment is not good management.

I also believe that there are solutions to these problems. First, management on the federal lands must be tailored on an allotment-by-allotment basis. For example, most of the data on the A-S was "gathered" through satellite imagery; there was no ground truthing or individual allotment monitoring to determine the individual carrying capacity of each individual piece of land. On the Humboldt and Toiyabe National Forests, utilizations standards are imposed and enforced, not because there are proven to be beneficial in a given situation but because that is what the plan says. Flexibility has been eliminated and rigid standards govern; the resources are suffering from this mind-set.

When presented with the concept of the need for increased monitoring and flexibility, the Forest Service is likely to claim a lack of manpower and funding for the task. However, I personally know of local governments and ranchers who have offered to participate in a partnership with the federal agencies to monitor allotments and develop flexible standards and guidelines tailored to each individual situation. These offers are always met with resistance.

Second, Congress should mandate that grazing permittees on Forest Service land have the right to due process in administrative appeals. Under the current system, Forest Service appeals are heard by "the next higher line officer." There is no right to cross examine the decision maker, no right to present evidence regarding the use of the allotment, no right to present your case to an independent decision maker. The Department of Agriculture already has an administrative body in place to hear administrative appeals from other agencies with in the Department; Forest Service permittees are just not allowed to access those judges. Until there is independent review of agency decisions, there will never be accountability in the decision making process on grazing on federal lands.

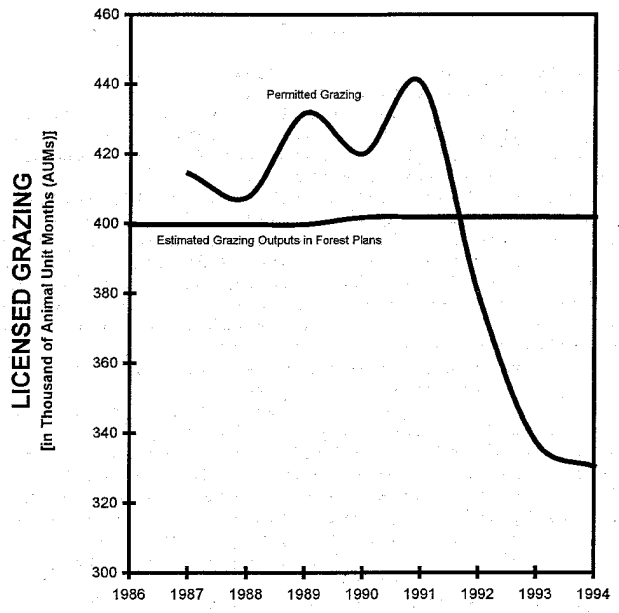
COMPARISON OF LICENSED LIVESTOCK USE WITH PROJECTIONS CONTAINED IN THE HUMBOLDT TOIYABE FOREST PLANS

	AVERAGE ANNUAL OUPUTS (AUMs)				
YEAR/ INTERVAL	Projected Use	Permitted Use	Percent Difference	Authorized Use	Percent Difference
HUMBOLDT NATIONAL FOREST					
1986	301,690				
1987	301,690	309,531	3%	222,562	-26%
1988	301,690	307,341	2%	292,368	-3%
1989	301,690	317,393	5%	212,793	-29%
1986-89 Average	301,690	311,422	3%	242,574	-20%
1990	303,706	317,906	5%	174,531	-43%
1991	303,706	314,009	3%	199,935	-34%
1992	303,706	300,203	-1%	207,700	-32%
1993	303,706	241,296	-21%	198,930	-34%
1994	303,706	261,006	-14%	221,803	-27%
1990-94 Average	303,706	286,884	-6%	200,580	-34%
TOIYABE NATIONAL FOREST					
1986	98,000				
1987	98,000	104,735	7%	90,014	-8%
1988	98,000	100,078	2%	95,953	-2%
1989	98,000	114,355	17%	73,340	-25%
1990	98,000	102,032	4%	83,978	-14%
1986-90 Average	98,000	105,300	7%	85,821	-12%
1991	98,100	126,323	29%		
1992	98,100	79,373	-19%	81,876	-17%
1993	98,100	96,143	-2%		
1994	98,100	69,346	-29%	56,062	-43%
1991-94 Average	98,100	92,796	-5%	68,969	-30%

NOTE: Spaces not containing data indicate incomplete data sets. Incomplete data sets were not included in the averages calculated in this analysis.

ATTACHMENT 1

Chart 1 NLAAGRAZ Charts 4/1/97



Combined Livestock Grazing Trends on the Toiyabe and Humboldt National Forests Compared to Grazing Outputs Projected in the Respective Forest Plans

Source: USDA Forest Service annual statistical grazing reports

ATTACHMENT 2

STATEMENT OF KARL HESS, JR., SENIOR ASSOCIATE
THOREAU INSTITUTE

Before the

Committee on Resources Subcommittee on Forests and Forest Health

Concerning Livestock Grazing Policies on National Forests

8 April 1997

Ronald Reagan was a man with a message: Government is the problem, not the solution. Few of us, whether Democrat or Republican, would argue to the contrary. It is a message of intuitive appeal, one that makes sense in a society that is downscaling the role of big government and upscaling the role of the individual, the family, and the community. It is also a message of environmental urgency, one that speaks to the predicament of our federal grazing lands and to the all-too-long conflict between environmentalists and ranchers.

Simply put, public policy--the polite term for big government--has failed our national forests; it has failed the thousands of families who ranch on them and it has failed the millions of people who depend on them for recreation, inspiration, and spiritual renewal. Whether the issue dividing Americans hinges on the number of cows or sheep or on the ecological state of forest ranges, the problem behind the issue is more often the excesses, not the restraints, of government.

The Diamond Bar allotment in the Gila National Forest is a case in point--and a case in general of the failure of public grazing policy. It tells the near-universal story of how government has taken a good idea--*private use of public lands*--and transformed that idea into a many-headed Hydra of fiscal waste, perverse incentives, regulatory nonsense, social inequities, ecological misfires, enviro-political conflicts, and bureaucratic excesses.

In the late-1980s, I became acquainted with the Diamond Bar and its permittee, Kit and Sherry Laney, in my capacity as range policy analyst for the New Mexico Department of Agriculture. At the time, I had only a vague notion of the complex issues involved in the Diamond Bar and no idea of the strident symbol it would become to ranchers, environmentalists, and the Forest Service in the years ahead. It all seemed so straight forward. In 1986 the Laneys, using their family's life savings, took over the Diamond Bar, assumed its sizeable mortgage (around $775,000), and made plans to fully stock its 1,188 head permit. The Forest Service approved the restocking at the time of the sale, contingent only on the Laney's developing a series of range improvements, including upland earthen tanks.

When environmentalists challenged the placement of those tanks in the Gila and Leopold wilderness areas--which comprise about 85 percent of the Diamond Bar allotment--I was angry. When the Forest Service waffled on its commitment to the Laneys to authorize the earthen water tanks, I was enraged. It was, to me, as clear as night and day: the bad guys were green--the Forest Service with its sylvan-colored uniforms and environmentalists with their sylvan-tainted visions.

After a six year absence, I returned to the Diamond Bar and to the riparian area known as Black Canyon. By then--early 1996--the Laneys, the environmentalists, and the Forest Service were beyond reconciliation. Kit and Sherry were in open defiance of federal authority, refusing to either pay grazing fees or to reduce stocking as ordered. Environmentalists were going for the

jugular by seeking a court order to permanently reduce stocking on the Diamond Bar to 300 head or less, effectively putting the Laneys out of business. And the Forest Service, caught in the middle of what it feared could become another Waco, simply waited on the sidelines.

That day when I walked the river of Black Canyon, as part of a Forest Service tour, I witnessed a scale of riparian devastation that I had not imagined--one that seemed so incongruous given the decent people and good managers I had known the Laneys to be. I listened to the Forest Service relate their side of the story, just as I had earlier listened and considered the anger and passion of environmentalists set on protecting the nation's first wilderness area--the namesake of America's most renowned and beloved naturalist, Aldo Leopold.

It struck me that I had been wrong in my first analysis of the Diamond Bar. The Forest Service and the environmentalists were not the problem--nor, I concluded, were the Laneys. What ailed the Diamond Bar were not greedy ranchers, demon preservationists, or overzealous forest rangers. All three had simply followed the rules of the game; they had stuck faithfully to the script of public land policy--a script that contained within it the seeds of financial calamity for Kit and Sherry, frustration for environmentalists, perverse incentives for the Forest Service, and unintended ecological consequences for the land.

Kit and Sherry responded as any of us would have to the cues of public policy. They played by the rules; they paid market value for the Diamond Bar's base property and its 1,188 head permit. They believed they possessed a use-right to the Diamond Bar's forage, one that had been assured to them by the Forest Service. When the rules of the game changed, the Laneys fought to defend their interest--an interest which, by dint of public policy, lay more in the preservation of government ordained preference than in the care of Diamond Bar lands. How they later fought for that interest was neither prudent not legal. But that is not surprising given the ideologically-charged air of Catron County and the paucity of options available to them.

Environmentalists acted no less predictably. They also claimed an interest in the Diamond Bar, one paid for in taxes and earned as a birthright of citizenship. To them, the Diamond Bar was more than a forage use right; it was a spectacular high desert landscape of pinyon and pondersosa pine woodlands, steep canyons, and life-giving ribbons of riparian waterways. It was a large chunk of two of the most symbolic wilderness areas in America. It was, in a sense, the logical place to make a stand against grazing policies that had created two tiers of citizenship: ranchers with special use rights and the general public disenfranchised from those rights. Unable to buy a grazing permit from a willing rancher and then to permanently retire the permit from livestock use (without forfeiting the permit and seeing it reassigned to a rancher), environmentalists pursued the only option open to them in public policy: appeal, litigate, and appeal.

The Forest Service acted rationally, too. It did what it was supposed to do. It looked at the Diamond Bar and saw multiple-use land, to be managed under the combined dictates of wilderness law and authorized livestock grazing. As the manager of the land, its duty was to plan the most efficacious mix of wilderness and cows, and to allocate that mix in the public's best interest. But playing God in such a fashion, in a world of conflicting resource visions and sharply partisan politics, is not easy--even for men and women who are among the best trained and publicly-devoted managers, technicians, and scientists that America has. No matter what decision *it made*, that decision raised the ire first of environmentalists and then later of ranchers.

Making matters worse, the array of laws, policies, and incentives that bind the Forest Service blinded it to the one possible solution that could have unraveled the Diamond Bar

Gordian Knot When approached by the Leopold Foundation with an interest to buy the Diamond Bar--at a price that would have returned the Laney's investment--and then to destock the ranch, the Forest Service made it clear that permanent voluntary nonuse was not an option. Its mandate was to graze cows. Its range budget was predicated on having cows to manage, not cow-free ranges to set aside at the whim of some green foundation. Moreover, the removal of cows from the Diamond bar would hit the Forest Service where it hurt most--in the agency's pocketbook. No more grazing would mean the loss of as much as $10,000 a year--the percentum of the Laney's maximum grazing fee bill that by law would have been returned to the Forest Service for on-the-ground range management.

Yes, everyone played by the script of public land policy; the ledger of outcomes shows just that. The Laneys will soon loose the Diamond Bar, forfeiting a decade of hard work and a lifetime of family savings. Environmentalists will have to live with a court decision that keeps the Diamond Bar open to grazing. Yet 300 head in Gila Country won't pay a rancher's bills and won't provide the means or incentives for the kind of stewardship the land needs most--which is rest. And the Forest Service is stuck with a $2 million management, planning, and litigation bill that exceeds the market value of the Diamond Bar by threefold--and which, over a ten-year period, produced little more than degraded streamsides. Lastly, the land and the public come out worst of all; the former politicized to the hilt and the latter the fiscal victim of rangeland conflict.

What lessons can and should we learn from the Diamond Bar? The first lesson is simple: here, government is the problem, not the solution. Yet as clear as that lesson should be, I know that some ranchers and some environmentalists will seek to fine-tune the current system of public land grazing to make it more friendly to their particular vision of how the federal estate should look and be used. I fear that ranchers and their supporters may seek a revived Domenici grazing bill to shore up their status on forest ranges with federal dollars and muscle. I am no less fearful that environmentalists and their supporters may misread the Diamond Bar debacle and call for more regulations and bigger agency budgets to give more muscle to federal micro-management of the western range. But both solutions would be a tragedy, for both would simply perpetuate the public polices--the big government--that gave us the Diamond Bar and that gives us every day hundreds of diamond bars across the width and breadth of the American West.

Rather than fine-tune public grazing policy to this or that group's special interest, we need to overhaul the system of public land grazing on our forests and public domain lands. We need to keep the baby--the *principal* of private use of public lands--but toss out the bath water that is polluted with antiquated laws and regulations. We need to revamp federal policy along the lines Ronald Reagan sought: less government and more individual responsibility.

There is a relatively painless way to this. It was suggested when the Leopold Foundation approached the Forest Service with an idea to buy the Diamond Bar. It is a private sector--not a government--solution that lets the individual and the market decide who posses a federal grazing permit and whether, in fact, the grazing privileges attached to that permit are exercised or not.

In 1963, in the *Journal of Farm Economics,* Professor Del Gardner, of Brigham Young University, came up with a simple idea: why not make grazing permits fully marketable by removing the legal constraints of base property and mandatory livestock use? Why not let the rancher, not the government, determine what type of base property, if any, is needed and whether the allotment should be grazed as authorized or simply left unused? Why not open the market to federal rangelands to all Americans, and let them, through voluntary transactions, negotiate land-

use allocations that until now have been left to the discretion of federal agencies? Why not create an even playing field where all Americans are treated equally and are equally able to acquire and use public forest and range allotments for purposes that include but are not limited to livestock?

A few years later, the 1970 Public Land Law Review Commission, in its report to the President, declared that the federal government should get out of the business of prescribing numbers of livestock to be grazed. It recommended that the "rangeland should be allocated on an area basis to a permittee, and he should be required to maintain a specific range condition regardless of the number of animals grazed."

Today, these ideas are gaining global credence. From Australia to Southeast Asia to Southern Africa to the European Union, markets and deregulation, hitched to robust systems of accountability, are reconfiguring public policy as we know it. And it is infectious. The FCC chairman Reed Hundt, for example, is advocating "spectrum flexibility"--letting radio spectrum users, not government prescription, decide how best to use that spectrum in accordance with market demand and the demands of new technology. Echoing that sentiment, President Clinton is on record in support of using markets to hone resource allocation on federal lands. In his recent *Economic Report* to Congress, the President endorses fully marketable grazing permits, stating that "such voluntary transactions can provide value to the seller as well as to the buyer, and thereby maximize the value received by all elements of society from the stock of public land."

Significantly, neither Clinton nor his FCC chairman are alone in their advocacy of markets. The Competitive Enterprise Institute, a prominent conservative think-tank in Washington, D.C., released in December a report urging the creation of a market in federal forage rights--a market unencumbered by laws and policies that mandate grazing, that make grazing permits conditional on base property, and that require permit holders to be qualified livestock operators. And the 104th Congress took the bold step to free agriculture of a 50-year legacy of command and control prescription and to turn decision-making over to the individual farmer and the marketplace.

Imagine the consequences of this idea for public land policy--and for places like the Diamond Bar. What would have happened, for example, if market options had been available to the Laneys, the environmentalists, and the Forest Service before the conflict had passed the point of no return? The Laneys might have negotiated a sale with an environmental group and then used the proceeds to buy a non-federal ranch. The environmental group, in turn, could have permanetly destocked the Diamond Bar and dedicated it--*through private action*--to the values of wilderness and preservation. At the same time, the Forest Service could have saved taxpayers a $2 million dollar tab and, in the process, saved Black Canyon from becoming sacrificial land to battling ideologies.

Fully transferable grazing permits are not a panacea; they are merely small policy steps toward less government. Nonetheless, they are symbolic of what has made America great--its commitment to breaking down the barriers that stand between private citizens and their pursuits of happiness. Even so, the greatest barrier to an even playing field remains government and its propensity to favor a few to the disadvantage of the many. Government policies--not ranchers, environmentalists, or Forest Service employees--are what now kindle the flames of conflict at the Diamond Bar and the hundreds of diamond bars that dot the national forest landscape. They are the barriers that stand between Americans and their public lands, that separate the promise of the market from the dismal reality of command/control prescription, and that remind us daily that more government is not a universal solution.

TESTIMONY OF NEIL OLDRIDGE
FOR THE OVERSIGHT HEARING ON LIVESTOCK GRAZING
POLICIES ON PUBLIC DOMAIN NATIONAL FORESTS

PRESENTED BEFORE THE HOUSE RESOURCES
SUBCOMMITTEE ON FOREST AND FOREST HEALTH

APRIL 8, 1997

TESTIMONY OF NEIL OLDRIDGE FOR THE AMERICAN SPORTFISHING ASSOCIATION

Ms. Chairman and members of the subcommittee, I thank you for the opportunity to appear before you today to present the views of the American Sportfishing Association regarding livestock grazing on the National Forests. As a resident of Idaho and owner of a small cattle operation in Montana myself, I am very familiar with livestock grazing and the cattle industry. As the former Director of Sales for DuPont's Sporting Goods Division, The Remington Arms Company and before that as Group Manager for the Fishing Products Division of DuPont, my roots also run deep in the hunting and sport fishing industries. My testimony today will address livestock grazing practices on National Forest lands with a special emphasis on the economic and social values to the estimated 2.7 million adult sport anglers who fish on National Forest lands annually. Let me note at the outset that, the American Sportfishing Association, for very sound reasons, opposes overgrazing on public lands and does not oppose responsible grazing on public lands. Properly managed grazing is one of the many legitimate uses of our National Forests.

SIZE AND IMPORTANCE OF SPORTFISHING INDUSTRY

An Industry at Risk: While ranching is clearly recognized as an important industry in the U.S., less clearly understood is the magnitude of the Nation's sportfishing industry. Overall, sportfishing is a $70 billion industry that encompasses the tourism, recreational equipment and transportation sectors of our economy. Expenditures from the 50 million Americans who fish each year supports 1 million full-time jobs, generates $1.1 billion in sales taxes, and $2.3 billion in income taxes.

Importance of Forest Service Lands: Forest Service lands include over 233,000 miles of fishable streams and approximately 2.2 million acres of lakes, ponds, and reservoirs. In 1994, these resources provided 37 million days of fishing for U.S. anglers. The demand for sport fishing opportunities on these public resources is expected to grow in the future as more private land owners restrict public access to their property.

Economic activity resulting from recreational fishing on our National Forests supports a wide variety of businesses which are central to the economic health and growth of many rural community economies. During 1994, it was estimated that anglers spent $1.8 billion on a variety of goods and services to participate in recreational fishing on the National Forest lands. These expenditures reached down to support manufacturers and their suppliers resulting in a total economic output of $5.3 billion. Angler spending on the National Forests also caused a ripple effect throughout

local, state and the national economies, generating 65,000 full-time American jobs and $1.3 billion in wages. These employment effects gave rise to $17.3 million in state income taxes, and $160.3 million in federal taxes. Also, during 1994, $82.2 million in state sales tax revenue was collected as a result of angler retail purchases of goods and services for fishing within our National Forests.

HOW OVERGRAZING DAMAGES SPORTFISHING

There are no mysteries to proper range and riparian area management. Ranchers, biologists and fisheries professionals know what to do and what not to do. We have the knowledge and we have the tools to manage both grazing and sportfishing. Most Western ranchers with National Forest grazing allotments are responsible stewards of our National lands. Unfortunately, some operators do not share this commitment of stewardship and cause damage to sensitive areas through overgrazing. It is those careless operators and the damage their livestock does that is at the root of this question.

The riparian areas along streams truly reflect the overall health of watersheds and are critical to the social and economic well-being of communities dependent on the land for multiple benefits. Poor grazing practices can, and have, seriously damaged sport fishing resources on public lands. Livestock overgrazing degrades the habitat and water quality of streams, rivers and lakes. Livestock overgrazing in riparian areas in the West is unquestionably a significant factor in the health of streams and stream fisheries. In 1994, the professional fisheries scientific association, the American Fisheries Society, cited overgrazing as one of the most serious threats to recreational fisheries in the Western U.S., and conservatively estimated that more than 50 percent of some habitats are damaged.

Overgrazing negatively impacts streamside vegetation. Maintaining high quality vegetation or riparian corridors along streams is probably the single most important factor governing the health of fish populations in our National Forests. Healthy riparian areas stabilize water temperatures and keep stream water cooler in summer. Cool water is essential to sport fish such as trout, salmon, and grayling. Overgrazing can also degrade the fish bearing habitat of streams, rivers and lakes through widening of stream channels, lowering stream levels in summer and causing excessive sedimentation.

In Big Creek, Utah, a comparison of two stream reaches clearly demonstrates the substantial impacts overgrazing can have on fish populations. Fish population density was measured at 130 fish per mile along an overgrazed section of Big Creek.

Just upstream of this overgrazed area, fish population density was estimated at 470 fish per mile. This latter section had recovered from the effects of overgrazing through good management practices over a period of four years.

WHAT ASA RECOMMENDS

All of us with a vested interest in the public forests, including the Congress, the ranching industry, the sportfishing and tourism industry, and the public beneficiaries of quality beef products and healthy streams and rivers and lakes, must recognize that if grazing is not well managed, aquatic populations, including recreational fisheries can be seriously impacted. The American Sportfishing Association advocates the protection and improvement of our Nation's public sport fishing resources through proper livestock management practices and a vigorous program to see that they are implemented on all federal lands. Recognizing that some local areas may require different techniques, ASA recommends a host of management prescriptions including:

1. Establishment of riparian zones along streams and rivers as separate pastures and then controlling the use of these zones by grazing.

2. Excluding livestock from riparian zones during certain time periods of the year when streambanks are most vulnerable, while recognizing the need for stock to have access to water.

3. If riparian zones are used as pasture, resting the areas for appropriate time periods between grazings.

4. Reducing the number of livestock that use an allotment if necessary.

5. Permanently fence off sensitive or badly damaged riparian zones from all livestock use if appropriate in a local management plan.

We recognize that to achieve the above sound management practices, cooperative efforts between ranchers and the Forest Service should be the highest priority. Indeed, many cattlemen want to cooperatively ensure that waters that flow through their grazing lands and allotments are restored to fully functional conditions. Encouragingly, the required technical expertise and a collaborative process exist to accomplish this shared goal. A new approach, called the Cooperative Riparian Management Program, brings ranchers and riparian management experts together to develop practical, local approaches to improving streamside conditions through appropriate grazing practices. This process, led by the Agriculture Department's Forest Service and Natural Resources Conservation Service and the Interior Department's Bureau of Land Management, provides a very promising means for achieving

successful fisheries restoration and management. For this collaborative approach to work, we hope members of Congress will support the Cooperative Riparian Management Program's interdisciplinary training, technical support and field review components.

Summary: The National Forests possess the potential to provide sustained benefits to many industries and interest groups. Confrontational politics, pitting one National Forest lands user group or industry against another, creating winners and losers, has not served us well in the past and will not serve us well in the future. This has been particularly true in the conflicts between healthy riparian habitats and livestock overgrazing, particularly on the lands in the West. We are at a cross roads. The time is right to collectively refocus our energies, rancher, sporting goods industry, fishermen, conservationist and all affected interest groups. We have the skills and technical expertise to collaboratively work on the ground, channel reach by channel reach, allotment by allotment. We can and must use the best interdisciplinary expertise to design management practices on the ground at the local level. America's sportfishing community stands ready to work in this cooperative construct to restore our public waterways to fully functional condition while continuing the maximum possible use by the grazing industry.

Thank you Ms. Chairman for allowing me the opportunity to provide ASA's views on this very important public land management issue.

Testimony before the Committee on Resources
U.S. House of Representatives
Washington DC
April 8, 1997

Presented by
Linn Kincannon
Public Lands Associate
Idaho Conservation League

IDAHO CONSERVATION LEAGUE

Congressman Chenoweth and members of the sub-committee. I am Linn Kincannon, from Ketchum, Idaho. I moved to Idaho 22 years ago. I was visiting from Texas and I stayed because I fell in love with the beauty and wide open spaces of Idaho and the West. I appreciate the opportunity to appear before you today.

I work for the Idaho Conservation League, Idaho's oldest and largest statewide, grassroots conservation group. The Idaho Conservation League is deeply involved in livestock grazing issues on BLM and Forest Service lands, through participation in land management decisions and through collaborative efforts such as the BLM's Resource Advisory Councils. I am a member of the Upper Snake Resource Advisory Council. ICL is not seeking the end of public land ranching. We are working to bring about changes that are desperately needed.

I am also lucky to be the mother of 2 great kids and because of them I have a very personal interest in the future of our public lands which are an important and priceless part of our national heritage. As parents and citizens we are responsible for caring for those lands so that our children and grandchildren can enjoy the benefits that they offer. We owe future generations the right to drink and swim in clean water, to fish and picnic along shady streams, to listen to birds sing on a summer day, and to view and hunt a variety of wild game animals and birds.

But those rights have been lost or are at risk in many places. Ranchers often say, "Why would I harm the land when I depend on it for my livelihood?" In my experience, ranchers know a lot about cows and the cattle business, they know about grass that's good forage for cattle. They often don't know what native species are missing because of past overgrazing and they often don't know that a stream is not functioning or what the negative results of livestock grazing can be.

Please take a look at the photos I have included with my testimony. These photos were taken on the Sawtooth and Payette National Forests in Idaho and on the Salmon District of the BLM. We have 100's of photos of different locations that show the same sad story.

Photo #1 is Trout Creek on the Sawtooth National Forest. This healthy, functioning stream is in a fenced area, called an exclosure, where cattle have not grazed for 5 years. The banks are covered with deep-rooted plants that hold the banks in place. Tall grasses catch sediment during floods, keeping the water clean. The stream is narrow and deep, providing cool water for fish habitat. Willows are regenerating, providing habitat for birds. Photo #2 is upstream from the Trout Creek exclosure and shows the opposite of photo #1 - the obvious effects overgrazing.

In photo #3 of Big Cottonwood Creek in the Sawtooth Forest, there is a complete lack of cottonwood seedlings. Only old trees remain, with no young ones to replace them when they die. Cattle eat all the seedlings when they are allowed to graze too often and for too long. Photo #4 is taken in the same place 4 years later after a riparian pasture was created to strictly control grazing. The large conifer on the left of photo 3 and in the

[illegible]

center of photo 4 identifies the spot. The photographer had to move to the left to take the photo because of all the young cottonwoods growing.

Photo #5 is a section of Shoshone Creek with season long cattle grazing year after year. The banks are barren and broken from severe overuse. Photo #6 is taken slightly downstream 3 years after changing the season of grazing use. Recovery is slow, but plants are beginning to come back and a new flood plain is forming next to the downcut stream.

Photo #7 is an aerial view of the upper East Fork of the Salmon River in the Sawtooth National Recreation Area. Steep terrain forces cows to stay in the narrow valley bottoms until all the forage is gone, damaging streams. This is typical central Idaho terrain with high recreation values and use. Photo #8 is a close-up of that area. Bowery Creek has many of the signs of over-grazing: Broken banks and a widened stream bed which increases water temperatures, adversely affecting fish habitat. No deep-rooted plants at the stream edge to hold banks in place. No overhanging banks and woody plants to shade the stream. No young willows because the cows eat them as soon as they come up, if they are allowed to graze for too long.

Photo #9 is Lost Creek in the Payette National Forest. This fenced area which keeps cows out (exclosure) shows deep rooted vegetation holding stream banks in place. Meanders in the stream channel slow the water down, allowing sediment to be trapped by vegetation covering the stream banks, keeping the water clean and clear. Photo #10 is taken downstream from the exclosure. The stream is much wider and shallower here. Some vegetation is growing, but stream banks have eroded due to the loss of vegetation from overgrazing.

Photo #11 is of an upland spring on the Salmon District of the BLM. The hills and mountains of Idaho are dotted with springs which provide critical habitat for big game as well as game birds and migratory songbirds. The conditions at this spring are typical of the many I've seen. The loss of grasses and young willows as well as the trampling are the result of overgrazing.

And in spite of all the controversy over the last few years, in spite of new range reform regulations by the BLM, in spite of public pressure, there have been almost no changes or improvements on the ground. Why?

For one thing, enforcement of terms and conditions of grazing permits related to unauthorized use; maintenance of fences and water developments; and utilization standards has been very poor by both the Forest Service and the BLM. The results of the failure to enforce those terms and conditions can be seen in some of the photos I've included. Leaving cows behind when it's time to move, allowing them to drift back because of the terrain or because fences are not maintained or water troughs are empty, often results in overuse of the vegetation, with terrible results. How can enforcement improve to help ensure that the kind of damage we see in these pictures becomes a thing of the past?

The problem of enforcement is made worse by a shortage of funds. There is also the need for funding to study conditions on the land so that we know whether management

is helping or hurting. There must be monitoring of conditions; cows must be moved to other units before they overgraze plants and trample stream banks; and cows need to be kept where they are supposed to be. Assuming agencies will not have enough funding to do all of these things, can permittees assume these responsibilities, so that conditions will improve?

Improved enforcement will benefit ranchers who are doing a good job. They see the problems caused by their neighbors' bad management and they suffer from it when cows trespass onto their allotments or when overgrazing upstream causes problems downstream. I have heard ranchers ask the BLM and the Forest Service to enforce trespass regulations and those which require fence and water development maintenance. They don't want someone else's cattle causing problems for them and for their allotments. The ranchers say that they cannot and will not embarrass their neighbors or fight with them about trespass and maintenance problems, but they were very clear that they want the agencies to enforce them.

But enforcement and accountability are not the whole answer. There's a real question whether the standards are good enough to protect fish populations, recreation and wildlife. The problems on public land are not all caused by bad operators. Management changes are needed which incorporate scientific knowledge that has been gained over the years and acknowledges the increasing importance of those lands for recreation. Enforcement of current standards will help determine whether they are adequate.

Fortunately, there is plenty of information available on how to graze with fewer long term adverse effects. Wayne Elmore of the BLM and professors like Fred Hall, Bill Krueger and John Buckhouse from Oregon State University have done numerous experiments that have improved stream conditions without closing them to grazing. Changes in management are required to get those improvements, and the sooner those changes begin, the more time will be available to make them.

Supervisor LeVere is attempting to address these problems by requiring ranchers to abide by the terms and conditions of their grazing permits, contracts they signed with the Forest Service. Some members of the committee have questions and concerns about this policy. But something must be done and this is a good place to start. A Custer County commissioner and rancher was quoted in the Wood River Journal saying "If you sign your permit and agree to do something, then ... do what you agree to. Otherwise don't sign it." There are serious problems to be solved on the land and we need to begin to solve them. If you are troubled by Bill LeVere's action, then suggest something else.

No one is doing ranchers a favor by maintaining grazing management exactly as it has been in the past. More and more people are coming to the west to enjoy the opportunities offered by our public lands. Secretary of Agriculture Dan Glickman has has said that by 2000, $130 billion gross domestic product will come from our national forests. Of that, $98 billion will come from recreation. With $ and public input, those folks will demand that livestock grazing no longer be allowed to damage our natural resources. Help ranchers get their ecological houses in order so that in the future they may point to healthy streams and wildlife populations instead of to the kind of damage we see today.

Sawtooth National Forest

Photo #1 is [illegible] of the Sawtooth National Forest. [illegible] functioning [illegible] fenced area [illegible] exclosure, where [illegible] have not grazed [illegible] years. The [illegible] covered with [illegible] plants that hold the banks in place. [illegible] sediment [illegible] keeping the water [illegible]. The stream is [illegible] and deep, providing [illegible] water for fish habitat. Willows are regenerating providing habitat for birds.

Photo #2 is upstream from the Trout Creek exclosure and shows the opposite of photo #1 - the obvious effects overgrazing

Sawtooth National Forest

In photo #3 of Big Cottonwood Creek in the Sawtooth Forest, there is a complete lack of cottonwood seedlings. Only old trees remain, with no young ones to replace them when they die. Cattle eat all the seedlings when they are allowed to graze too often and for too long.

Photo #4 is taken in the same place 4 years after a riparian pasture was created to strictly control grazing. The large conifer on the left of photo 3 and in the center of photo 4 identifies the spot. The photographer had to move to the left to take the photo because of all the young cottonwoods growing.

Sawtooth National Forest

Photo #1 is a section of Stanfield Creek with season long cattle grazing year after year. The banks are barren and broken from severe overuse.

Photo #6 is taken slightly downstream 3 years after changing the season of grazing use. Recovery is slow, but plants are beginning to come back and a new flood plain is forming next to the down-cut stream.

Sawtooth National Recreation Area

Photo #7 is an aerial view of the upper East Fork of the Salmon River in the Sawtooth National Recreation Area. Steep terrain forces cows to stay in the narrow valley bottoms until all the forage is gone, damaging streams. This is typical central Idaho terrain with high recreation values and use.

Photo #8 is a close-up of that area. Bowery Creek has many of the signs of over-grazing. Broken banks and a widened stream bed which increases water temperatures adversely affecting fish habitat. No deep-rooted plants at the stream edge to hold banks in place. No overhanging banks and woody plants to shade the stream. No young willows because the cows eat them as soon as they come up, if they are allowed to graze for too long.

Payette National Forest

[illegible] #9 is Lost Creek in the [illegible] National Forest. This fenced area which keeps cows out (exclosure) shows deep rooted vegetation holding stream banks in place. Meandering in the stream channel slow the water down, allowing sediment to be trapped by vegetation covering the stream banks, keeping the water clean and clear.

Photo #10 is taken downstream from the exclosure. The stream is much wider and shallower here. Some vegetation is growing, but stream banks have eroded due to the loss of deep-rooted [illegible] from overgrazing.

Photo #11 is an [illegible] on the Salmon [illegible] the BLM. The [illegible] mountains of Idaho are dotted with springs which provide critical habitat for [illegible] as well as [illegible] and migratory songbirds. The conditions at the spring are typical of the many [illegible] seen. The loss of [illegible] and young willows as well as the trampling are the result of overgrazing.

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OUR VIEW

Sawtooth penalty policy good for land, taxpayers, ranchers

The U.S. Forest Service's tougher policy with ranchers in the Sawtooth National Forest is appropriate and necessary. The land, taxpayers and law-abiding ranchers all are winners.

Ranchers who hold federal permits to graze livestock in the Sawtooth National Forest now face stiffer penalties for violating rules the protect land and water in the area.

Instead of five gradually escalating sets of penalties, there are now just two.

The initial penalty is tougher and the intermediate steps were eliminated.

As federal budgets continue to shrink, resulting in less money and fewer employees, it just makes sense that the agency will get meaner as it gets leaner. Tough times require tough calls, as any corporate CEO will tell you.

Fewer, clearer penalties for violations also ought to cut down on the amount of bureaucratic red tape required to bring ranchers into compliance, saving tax money in the long run.

But it's more than about money.

There also is the question of fairness to all parties.

Today's environmental realities mean that federal permitees face increasingly stringent regulations in the name of cleaner water and improved habitat for wildlife and recreation. The new penalty policy is no worse than what many other permitees already face every day.

The Forest Service says it wants to work with permit holders so nobody loses a grazing right.

The forest supervisor says the changes will allow rangers more time to work with ranchers who follow the rules.

That's good, because the good ranchers deserve the Forest Service's time and attention, not the handful who now take up too much of the agency's limited resources.

Ranchers ought to take the agency up on its offer to keep the doors open.

As long as communication goes both ways, there is no reason anyone should be driven off the land.

EDITORIAL

Tighter rules prepare forest for future

Pam Houston's hit novel "Cowboys Are My Weakness" was published about four years ago. However, it was just last week that Idaho Congresswoman Helen Chenoweth apparently joined the Stetson following.

Chenoweth is at odds with Sawtooth Forest Supervisor Bill LaVere over new grazing regulations now in effect on federal land in Central Idaho. Billed as some of the stiffest grazing regulations in the nation, the new policy takes a two-strikes-and-you're-out policy toward ranchers who violate the terms of their federal grazing permits.

It allows range managers to cancel grazing permits after two violations of 14 different rules, including grazing excess livestock, grazing in the wrong season and failure to maintain improvements. In the past, ranchers were allowed up to four violations.

Last year 64 grazing permitees were the subject of some sort of disciplinary action out of a field of 195 permit holders who graze 42,000 sheep and 26,000 cattle on the two million acre forest. In other words, about two-thirds of the ranchers now using these public lands follow the rules.

Despite that super majority, Chenoweth says the rule change is a threat to ranchers and their way of life. "I am concerned that these rules deviate from the goal of establishing a healthy, multiple-use forest," said Chenoweth.

As chairperson of the House Subcommittee on Forests and Forest Health, Chenoweth has planned an April 8 hearing on the enforcement policy. Though the Sawtooth National Forest is outside of her congressional district, Chenoweth appears intent on trying to rewrite the rules to satisfy the grazing practices of a few outlaws.

We're also in favor of having a healthy multiple-use forest. Within that context, the new grazing policy dovetails with other steps the Sawtooth Forest has taken in the past year with regard to rafting, camping and horseback riding. In all cases, the primary objective was protection of forest resources from overuse.

Despite Chenoweth's concern, it doesn't appear to us that ranchers and cowboys are being singled out by federal bureaucrats. On the contrary, land managers on the Sawtooth Forest appear to be taking a consistent position on preparing the forest for the challenges ahead. In the words of Gifford Pinchot, the father of the U.S. Forest Service, the national forests are lands set aside "for the greatest good for the the greatest number."

As the millennium nears, however, it is the recreationist that represents the user group that is expected to prevail. Not because of battles to be won in Washington, but because of demographics: As urban centers spread throughout the West, more people are seeking solace in the nation's natural treasures.

In a little-reported speech delivered last September, Agriculture Secretary Dan Glickman told an audience in Lake Tahoe that by 2000, more than $130 billion in gross domestic product will come from national forests, and nearly $98 billion of that will come from recreation. Fish and wildlife, by contrast, will generate $12.9 billion, mining will generate $10.1 billion, and timber harvesting will generate only $3.5 billion.

Like Chenoweth, we want Idaho to maintain its rich ranching history. However, as users of public land, the livestock industry must also play by the rules. If indeed the most valuable commodity in our national forests is recreational opportunity, land managers are correct in implementing new rules which guard against environmental degradation.

From the Sawtooth National Recreation Area Stanley Basin C&H Allotment Management Plan Draft Environmental Impact Statement, 1990

Land management activities and/or catastrophic flood events alter stream sides and affect the composition of the green line. (Vegetation along the stream bank.) Desirable green line hydric species cannot tolerate heavy grazing use, are often replaced by other less desirable species that respond to grazing, and are less affective at protecting the stream banks from erosion (Platts, 1978). Soil and vegetation comprising the green line are removed when stream banks erode or channels degrade. If erosion persists, the streamside water table lowers and less desirable "mesic" plants replace the hydric species. Once erosion begins, cattle prevent the re-establishment of the more desirable species along the stream sides. Generally, when the water table is re-established and grazing pressure is reduced, the hydric species green line will recover.

Cattle directly influence stream channel morphology, a dominant factor affecting aquatic habitat quality (Platts and Raleigh, 1984; Kauffman and Krueger, 1984). Streambank vegetation influences channel morphology by enhancing streambank stability. Stable banks provide overhanging bank cover and maintain smaller width/depth ratios (Figure II-B-4). Cattle grazing in riparian areas concentrate along streamsides, impacting streambanks and streamside vegetation as evidenced by the OEA inventory and other studies. Fish do not respond well to increased sediment and losses of streambank vegetation, undercut banks, and pool cover (Prichard and Upham, 1986). Platts and Nelson (1985) showed that grazed stream reaches in Utah were widened 40 percent, and their habitat rating decreased dramatically following very large flooding. An ungrazed reach with vigorous riparian vegetation survived the flooding with only minor widening while experiencing a beneficial increase in bank undercutting.

Park Creek Non-grazed since 1968, 2:1 width-depth ratio of wetted area.

Park Creek grazed, 16:1 width-depth ratio of wetted area.

Figure II-B-4

Stable streambanks provide overhanging bank cover, undercut banks, and maintain smaller width/depth ratios, which support more fish than grazed, unstable streambanks.

These photos are from a Forest Service publication: "Herbaceous Stubble Height as a Warning of Impending Cattle Grazing Damage Riparian Areas" by Frederick C Hall and Larry Bryant. 1995

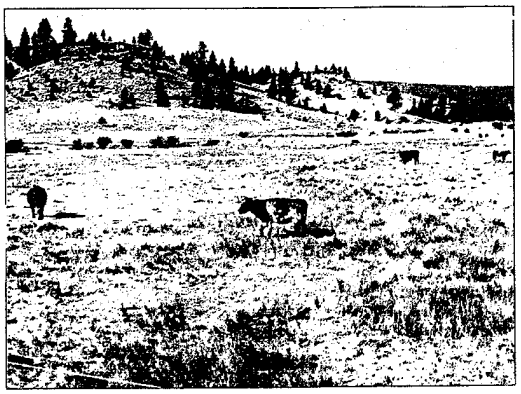

Figure 2 --Pattern of cattle use in a meadow of Kentucky bluegrass and sedges. Kentucky bluegrass is grazed to 1 1/2 inch stubble while the less palatable sedges are essentially ungrazed. At this level of use, when bluegrass is still green, no damage has been done to the shrubs or stream edge (line of low shrubs near bottom of hill)

4

Figure 4 --Kentucky bluegrass after 2 weeks at a 3/4-inch stubble level. Less palatable sedges have been grazed to 4 inches and willows have been heavily browsed. Two weeks of use at 3/4-inch stubble was too long and resulted in the unwanted browsing of the willows

5

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Testimony includes 11 photographs with explanations and descriptions. Short discussion of why these conditions exist: lack of enforcement and funding, inadequate standards in some cases. Recommendations: require enforcement of grazing permit terms and conditions; and monitor and study the effects of livestock grazing management; or the committee should suggest other ways to address the serious problems which exist on our national forests and public land.

TESTIMONY PRESENTED AT THE

HEARING OF THE HOUSE COMMITTEE ON RESOURCES

WASHINGTON D.C. 04-08-97

J. WAYNE BURKHARDT

LESSONS FROM THE PAST: HERBIVORY IN THE INTERMOUNTAIN WEST

BIOLOGY VERSUS POLITICS OF GRAZING

Traditional consumptive uses of renewable natural resources are coming under increasing scrutiny, especially on public lands. Certainly a major part of these land use concerns focuses on livestock grazing. While livestock grazing may be one of humankind's oldest endeavors, second to hunting or food gathering, its environmental sustainability is being questioned.

The biota of Intermountain rangelands evolved over several million years as a natural grazing ecosystem. The fossil record indicates that this herbivory exceeded the modern Serengeti for faunal diversity. Between 10,500 and 7,000 years ago massive extinctions removed most of the larger bodied fauna from the system. There are indications that these extinctions were related to the arrival of humans to North America.

At the time of European contact with North America, the biologic system was in flux. Evolution and species immigration had not yet filled the vacant herbivore niches. The science of ecology, largely unaware of the fossil record, assumed that the biologic conditions at the time of European contact were pristine or climax. This view has shaped the development of range science and land management profoundly. The underlying assumption has been that the Intermountain biome was largely unadapted to large herbivore grazing. Consequently, livestock grazing management largely

focused on minimizing and mitigating the negative impacts to the natural system.

Perhaps the interpretations of our historic experience in the region suffer as a result of narrow temporal limits. Certainly the historic record regarding an obvious paucity of large ungulates is convincing. However, whether ecological conditions at the time of initial European contact in the far West were normal, "natural" and stable remains largely unquestioned. Plant ecologists and range scientists have generally assumed that ecological conditions immediately prior to European settlement of the West represent the climax or pristine natural state.

Departure from those conditions is viewed as human disturbances of the natural system. We now know that herbivory, including large grazers, is part of the natural biologic system on terrestrial landscapes, the Intermountain region included. Herbivory is a functional process that serves both flora and fauna. Grazing management should be designed to assure that our livestock grazing is functional within the parameters of the biologic system. Characterization of the Pleistocene herbivory provides a potential model for functional livestock grazing.

In the emotionally-driven debate about livestock grazing on public lands, grazing has been continually viewed as simply a negative impact on the biologic rangeland system. It would appear that the sum-total of our human understanding of herbivory is capsulized in the term "overgrazing". We seem to be saying that, at best, grazing is an unnatural invention of man or, at worst, we imply that herbivory was a divine mistake-

"Wait a minute, God, I have a better idea"

In reality grazing is a natural biologic process, fundamental to life on earth. Herbivory and predation are the processes by which this planet's faunal life, including humans, is sustained. Fossil records suggest that herbivory has been a biologic process on this planet for perhaps 2.5 billion years. Herbivory, like weather, is a complex process and cannot adequately be described in such simplistic terms as good and bad or as "overgrazing". The fact is, rangelands evolved to be grazed. The absence of herbivory, rather than being the normal and our point of reference, is more likely unusual in the biologic world.

I am dismayed by the recent tendency in the land management agencies to reduce grazing management on public lands to simply enforcing conservative use standards on riparian areas. Basically this is a non-management approach that can be effectively used as a powerful anti-grazing political tool.

Use limits (either utilization or stubble heights) are only some of several grazing management tools. Ironically, use limits are the least effective tool available to the manager if reasonable and proper grazing is the goal. The concept of use limits are not a functional part of any natural herbivory but rather an invention of man. There are (or were) no range managers enforcing utilization standards or stubble heights on the multitude of wildebeest in the Serengeti, the bison of the Plains nor the Pleistocene megafauna. Natural herbivories or grazing systems all function on the based on timing

of grazing and rest periods. Human conventions such as range readiness, use limits or drought response are not functional components of the rangeland grazing ecosystem.

The heavy reliance on use limits by land management agencies may be politically correct but is technically wrong. The entire range management science community is on record in opposition to this simplistic and artificial approach as being bad science. The only scientific community support comes from biologists and ecologists who largely have an agenda against livestock grazing and no expertise or experience in proper management of grazing.

There is no simple, single definitive index for proper management of livestock grazing. Degree of defoliation is not singularly and linearly related to plant health. The interaction of intensity, timing, duration and rest determine the grazing impacts on vegetation. Utilization standards are not an appropriate substitute for "on the ground management" combined with objective monitoring of resource trends. The current agency approach to grazing management is in reality a non-management scheme. By rigorous and subjective application of utilization standards livestock grazing is reduced to a token activity which no longer causes administrative or political headaches.

The across-the-board application of conservative use standards to public land grazing is damn poor resource management, but effectively politically. It puts the public land grazing permittee in an impossible position, reduces management agencies to policing operations and gives the radical environmentalists a wonderful tool to beat up the

agencies and the ranchers. I do not understand the wisdom of putting renewable resources off limits to the production of food and fiber and then having to make up that production with non-renewable resource based technology

Mint Wash
Prescott National Forest
January 1990

Testimony of Leslie Glustrom
Member Prescott National Forest Friends
Before the Subcommittee on Forests and Forest Health
U.S. House of Representatives Committee on Resources
Hearing on Livestock Grazing Policies
April 8, 1997

Mint Wash Grazing Exclosure
October 1995
After less than 5 years of protection from grazing.
(Note location of large juniper in each photo)

Livestock Grazing Management on the Public Lands: A Vision for the Future

Testimony of Leslie Glustrom
Member, Prescott National Forest Friends
Before the Resources Committee, Subcommittee on Forests and Forest Health
April 8, 1997

Chairman Chenoweth and Members of the Subcommittee, thank you for the opportunity to testify. My name is Leslie Glustrom. I am a member of Prescott National Forest Friends and a biochemist by training. I have a long standing interest in the health of the public lands of the west and over 10 years experience in the livestock grazing decisions of the Prescott National Forest, in west central Arizona.

The purpose of my testimony today is to share a vision for livestock management on the public lands--a vision that includes healthy soils and native grasses, vigorous populations of wildlife, functioning riparian areas, watersheds that absorb water, minimizing flooding and maximizing year round flow in streams and responsible livestock permittees managing ranches that use the suitable livestock grazing areas of the public lands.

While I believe that this vision is attainable, we are certainly a long way from attaining it presently. While we do have livestock permittees over large areas of the public's lands, we do not, over entirely too many acres, have healthy soils and native grasses, vigorous wildlife populations, and functioning riparian areas and watersheds. Yet, I believe that all of these things are achievable while still maintaining livestock grazing in those areas that are suitable for it.

One of the natural outcomes of my proposal is that public lands management will be put on grounds that are defensible both ecologically and economically--a situation that is not presently true. Before proceeding with my proposal, I would like to address each of these points.

Current Public Land Grazing Management is Not Ecologically Defensible

As it is presently, while there are some well-managed public lands grazing allotments, they are, unfortunately, more the exception than the rule. Over vast acreages, livestock grazing on the public land is not well managed and therefore not defensible ecologically.

Dozens, and perhaps hundreds, of studies exist detailing the ecological costs of poorly managed livestock grazing. Attachment 1 to my testimony is a review of the scientific literature entitled, "Ecological Costs of Livestock Grazing in Western North America," by Thomas L. Fleischner, published in the September 1994 issue of Conservation Biology. This review summarizes the extensive literature on the ecological costs of poorly managed livestock grazing, including degradation of habitat, loss of species diversity and disruption of ecosystem functions.

The pictures I have included with this testimony illustrate the ecological costs of livestock grazing on the Prescott National Forest in Arizona. I would like to take a few minutes to review some of these pictures. The top photo on the cover shows a typical "riparian area" on the Prescott National Forest. As you can see it is a long way from being the "lush green streamside oasis" offered by a healthy riparian area. Unfortunately, most of the riparian areas on the Prescott National Forest are either broad sandy washes like this or barren rocky drainages like the one shown in the middle picture on page 2.

A riparian area that has been devastated by livestock grazing. This area should support grasses above the water, a canopy forest of riparian trees such as willow, cottonwood and ash—and all the species that depend on these all important streamside areas in the west.

Another riparian area that has been destroyed by livestock grazing. In the foreground is an older tree that has been continually grazed for many growing seasons. In the background, is an exclosure fence with grasses above the water and a canopy forest of ungrazed older trees.

Another grazing exclosure next to a riparian area. To the left of the fence there is essentially no grass left, due to excessive use by cattle. Just to the right of the fence, cattle have reduced the grasses to a stubble by reaching through the fence while to the far right can be seen the potential of these grasses. The vast majority of the Prescott National Forest looks like the grazed areas in this photo—causing serious ecological damage to wildlife habitat and watershed functioning.

2

Indeed, when the Prescott National Forest (PNF) issued it's Forest Plan in 1987, the accompanying Environmental Impact Statement(EIS) indicated that more than 99% of the riparian areas on the Prescott National Forest were in poor or very poor condition and moreover that this could be "attributed to livestock grazing and the corresponding watershed condition." (p.165, EIS for the PNF Plan)

Given the ecological importance of riparian areas, a Forest having 99% of it's riparian areas in poor or very poor condition is a little like an individual having 99% of his or her arteries in poor or very poor condition. In both cases, the consequences will undoubtedly be severe.

Many people believe that broad, barren sandy (or rocky) washes is "just the way it is" in the arid Southwest. When barren washes are all that you see (since most of Arizona has been grazed for over 100 years), it is hard to know that anything else is possible. Yet, as has been shown time and time again throughout the West, reducing grazing pressure either through exclusion or improved livestock management often has dramatic results.

The picture at the bottom of the cover sheet for my testimony shows the absolutely dramatic results that have been obtained in this area in less than five years of protection from livestock grazing. As you can see, there are abundant cottonwood and willow trees, with the willows well over 10 feet tall. Moreover, the grasses that should line the stream bank are starting to come back and the stream channel is beginning to narrow and deepen--as it should.

While these areas may never recover their original health and all the species they supported, it is clear that the conditions shown in the bottom photo are vastly superior to those in the top photo. Unfortunately, the Prescott National Forest located this riparian demonstration area in a very inaccessible place and I am one of the few individuals that has been lucky enough to see it.

Glancing at the photo at the bottom of page 2 gives another example of the severe impact that poorly managed livestock grazing can have. On the left side of the picture, one sees the barren, rocky soil that typifies so much of the Prescott National Forest, as also shown in the pictures on page 4. Then, just to the right of the fenceline of this grazing exclosure one sees grass eaten down to the last quarter inch by hungry cattle sticking their heads as far as possible through the fence.

Perennial grasses eaten down to the last quarter inch is the norm over large stretches of the Prescott National Forest. Yet, on the right of the photo, one can see grass that is chest high--a sight that not many Arizonans have seen on their public lands. Once again, these vigorous grasses will certainly support many more species and contribute much more to healthy watershed function than the conditions on the left of the photo.

I will discuss the pictures on page 4 later, as part of my proposal for the future.

As you can see from both the scientific literature and my pictures of conditions on the Prescott National Forest, poorly managed livestock grazing on the public's land has had severe ecological consequences. I have many, many more pictures of the damage that has been done on the Prescott National Forest that I would be happy to share. In addition, scientists and activists from around the West have similar pictures and experiences from dozens of other National Forests illustrating the ecologically indefensible conditions that have been created by poorly managed livestock grazing on the public lands.

A general view of the grazing allotments of the Bradshaw District of the Prescott National Forest.

Note the steep slopes and general lack of grasses.

A general view of the Maverick Allotment on the Prescott National Forest.

Note the almost complete lack of forage in the foreground, middle ground and background.

A close up of what happens to the few perennial grasses that do exist on the allotments of the Prescott National Forest.

This picture is from the Maverick Allotment. I have similar pictures from many other allotments.

Pictures taken by Leslie Kiestine
Prescott National Forest Friends

Current Public Lands Grazing Management is Not Defensible Economically

Poorly managed public land grazing has had a damaging impact on federal resources. This grazing is too-often "justified" by the claim that *public lands* livestock grazing makes a large and irreplaceable economic contribution to the industry, the region, and the nation. While grazing can and does play an important role in many rural economies, the facts do not support the notion that *public lands* grazing is fundamentally important to the western United States or to the livestock industry as a whole.

Attachment 2 to my testimony is page 3-66 from the Environmental Impact Statement for the Department of Interior's Range Reform '94 program. The circled numbers indicate that (according to the National Agricultural Statistical Survey and the federal land management agencies) only 3% of the nation's beef cattle producers (and 5% of the nation's sheep producers) have permits to use the public lands. Since the public lands support less than 5% of the nation's livestock producers, it cannot be argued that the public lands make a significant contribution to the health of the nation's livestock industry.

Moreover, contrary to popular conception, the western states are not where most of the nation's beef cattle are produced. As shown in Attachment 2, only 18% of the nation's beef cattle are produced in the 11-state western region and the vast majority of these are not raised on the public lands. Indeed, only 22% of the beef cattle producers in the 11-state western region relay on the public lands. In the case of sheep, only 19% of the sheep producers in the west depend on the public lands. In other words, even in the west, only about one out of five beef and sheep producers really use the public lands.

These statistics make it clear that the public lands are-- despite the 104th Congress' attempt to declare them so--in no way necessary for the "stabilization of the western livestock industry." Most of the nation's cattle are produced east of the 100th meridian--not in the west which only produces less than 20% of the nation's beef cattle. Moreover, even in the west, most of the livestock producers (i.e. about 80%) operate totally independently of the public lands. Clearly, excessive public lands livestock grazing is not defensible economically, given statistics like these.

Another commonly held perception about public lands livestock grazing does not always hold true. In Arizona, a growing number of public lands grazing permittees are not old time ranchers. Rather the permittees are wealthy urbanites--doctors, lawyers and businessmen. For example, Attachment 3 is a Forbes article (from August 14, 1995) describing one of the permittees on the Prescott National Forest--a wealthy Phoenix businessman named Rex Maughan who, according to Forbes, earns tens of millions of dollars a year in his pyramidal marketing scheme for aloe vera products. Mr. Maughan has bought up many of the public lands grazing permits south of Prescott and has built a very impressive and expensive headquarters behind stone gates that are approximately six feet thick and 20 feet tall.

According to Forest Service statistics, over 98% of the allotments Mr. Maughan has on the Prescott National Forest (the Crooks/Maverick allotments)are in poor or very poor condition. Page 4 of my testimony includes pictures of these allotments and the excessive utilization that occurs on the few perennial grass plants that do exist on these allotments.

The question I am often asked is this, "Does it really make sense for the American taxpayer to subsidize a multimillionaire to graze cattle on public lands that are in terrible condition?" In addition, I

have over 10 years worth of stories like the story of Rex Maughan--all variations on the same theme of wealthy permittees holding the permits to graze cattle (at a very low rate) on allotments in terrible shape.

As it is presently, over vast acreages of the public lands, livestock grazing is poorly managed and not defensible ecologically or economically. For too long, poorly managed public lands livestock grazing has been defended politically or culturally, even through intimidation. This does nothing to address the real problems that exist on the public lands. Indeed, it only serves to postpone efforts to bring reasonable reforms--efforts that will begin to put public land management on sound economic and ecological grounds.

The risk of postponing reasonable reform is that when the political and cultural defenses no longer work, many public lands livestock grazing permittees will be in an indefensible position. Yet, there are good permittees grazing the public lands responsibly and supporting themselves and their families. If we are to avoid having the good permittees suffer because of the bad, it is imperative that actions be taken soon to put federal lands grazing management on a foundation that is defensible.

A Vision for the Future: Starting the Public Lands on the Road Back to Ecological Health and Putting Public Lands Range Management on a Defensible Basis

I began my testimony with a vision for the future of public lands management--a vision that includes healthy soils and native grasses, vigorous wildlife populations, functioning riparian areas and watersheds and responsible livestock grazing permittees using the suitable public lands.

While we have a long way to go to see this vision realized--as with any long journey, the only way to get there is to get started. My vision for improving the health of the public lands involves three major components--**1) identifying the truly suitable livestock grazing lands, 2) preparing careful management plans for these areas, and 3) engaging in a consistent monitoring, implementation and enforcement program.** I will describe each of these briefly.

1. Identifying the Truly Suitable Lands

First, the truly suitable lands that can support livestock grazing without undue impacts on the environment or other public land values should be identified. This should involve a careful consideration of ecological and economic factors as well as the other resources of the public lands. This "suitability analysis" is necessary because, almost by definition, the public lands do not naturally lend themselves to profitable, ecologically healthy livestock operations. If these lands had naturally been able to support viable livestock operations they probably would have been homesteaded 100 years ago and turned into deeded, private lands. Generally speaking, they are public lands precisely because they could not be successfully homesteaded.

The goal of the process is to identify those areas of the public lands where it makes sense to manage the lands for livestock grazing and where the grazing can take place without excessive adverse ecological effects. The agency must also take a look at the wide range of public land values and uses (including recreation, hunting, fishing, etc.) and decide if grazing is appropriate in the context of these land use opportunities and values. The specific factors to consider will vary with every region,

national forest, and allotment--but they should always include consideration of ecological, economic and other resource values. I have written a fuller account of how this process could take place and would be happy to provide it to the Committee.

While a true suitability analysis should include a careful consideration of the ecological, economic and other resource factors, you can get a feel for the kinds of decisions that should be made by glancing at the pictures on page 4 of grazing allotments on the Bradshaw District of the Prescott National Forest. Clearly these lands are not suited to grazing as it is currently managed on the Prescott.

For those that are concerned about the economic effects of suitability determinations, I have proposed a grandfather clause for any permittee that totally depends on public lands ranching for his or her income, but who is operating on lands that are determined to be unsuitable. Such individuals would have their grazing permit extended to the age of 65 or until they decide to stop grazing on the public lands--whichever comes first. For those that are partially dependent on their public lands permit, I have proposed a "sliding scale." The more dependent the permittee is on the public lands operation, the longer the grandfather clause.

While I am proposing this grandfather clause to help diffuse the emotion that surrounds this issue, I would remind you that every month, thousands of American workers lose jobs at which they may have worked for many years, often with only a couple of weeks notice. Unlike public lands permittees, these Americans typically don't get much relief from Congress. They have no choice but to pick up the pieces and start over.

2. Developing Careful Management Plans for the Suitable Lands

After the suitable lands have been identified, the staff of the federal land management agencies can focus on developing appropriate management plans, standards, and guidelines for the truly suitable lands. These plans and guidelines are essential if our public lands are to be managed in such a way as to promote overall rangeland health and support the full array of multiple-uses we value as a nation: water, wildlife, fish, forage, recreation, and other.

As it is presently the agency staffs are spread woefully thin over the present lands. Each range conservationist typically has many allotments and tens of thousands of acres -- if not more -- to oversee. As a result, the range conservationists do not have adequate time to devote to any one allotment or to the overall range condition on the forest. Forage conditions, water quality, fish and wildlife habitat and other forest resources suffer as a result.

If the range staff does focus on an allotment for a while, the rest of the allotments on the District will receive very little attention that year. Then, experience has shown over and over again, that as soon as the District staff switches its focus to another allotment, the allotment that is no longer being focused on too often begins to go downhill again. After a century of inadequate attention and management, all too many acres of the public's land are not providing the multiple use benefits that Congress and the public have identified for these lands.

By being able to focus on the truly suitable lands, the agency staffs can develop plans that pay careful attention to soil conditions, the vigor of native grasses, the status of wildlife habitat, the health of riparian areas, and the functioning of watersheds, in addition to the grazing of livestock.

3. Undertaking Consistent Monitoring, Implementation and Enforcement Actions to Ensure Rangelands are in a Healthy Condition

After the suitable lands have been identified and appropriate management plans, standards, and guidelines have been developed, the land management agencies need to undertake consistent and thorough monitoring programs and, where necessary, appropriate enforcement actions.

Even the best laws and management plans can accomplish nothing if they are not faithfully implemented and enforced by the federal agencies involved. Yet, once again, the agencies are so underfunded and understaffed that they never seem to get to the monitoring that they keep saying they will do. And then, even when they do the necessary monitoring, they often don't have the staff or the support to take the appropriate management or enforcement actions.

Conclusion

When these three steps have been completed--identifying the suitable lands, developing careful management schemes and undertaking the necessary monitoring and enforcement actions--then the public lands will begin to regain their ecological health.

In summary, the public lands livestock industry has been playing an "all or none" game for the best part of the century. They have insisted on resisting reform efforts and on maintaining the status quo, no matter how indefensible the status quo is. All or none games can be fun as long as you think you are winning--but, of course, not so fun when you realize that you are not. Those that are serious about protecting the public rangelands and the responsible permittees grazing livestock on suitable lands should support a rational approach to public lands range reform. To do anything less is not productive for anyone in the long-term. Irrational insistence on maintaining the status quo is no way to protect our nation's natural heritage or to "defend" the industry. Rather, maintaining the status quo has lead to the degradation of public rangelands and left the industry on indefensible and seriously vulnerable ground--a position it is unlikely to be able to maintain for long into the next century.

I thank you for the opportunity to testify before you today.

Attachment 1

Reviews

Ecological Costs of Livestock Grazing in Western North America

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Abstract: *Livestock grazing is the most widespread land management practice in western North America. Seventy percent of the western United States is grazed, including wilderness areas, wildlife refuges, national forests, and even some national parks. The ecological costs of this nearly ubiquitous form of land use can be dramatic. Examples of such costs include loss of biodiversity; lowering of population densities for a wide variety of taxa; disruption of ecosystem functions, including nutrient cycling and succession; change in community organization; and change in the physical characteristics of both terrestrial and aquatic habitats. Because livestock congregate in riparian ecosystems, which are among the biologically richest habitats in arid and semiarid regions, the ecological costs of grazing are magnified in these sites. Range science has traditionally been laden with economic assumptions favoring resource use. Conservation biologists are encouraged to contribute to the ongoing social and scientific dialogue on grazing issues.*

Costos ecológicos del pastoreo de ganado en el oeste de Estados Unidos

Resumen: *El pastoreo de ganado es la práctica de manejo de la tierra más ampliamente utilizada en el oeste de Norte América. El setenta por ciento del oeste de Estados Unidos se utiliza para pastoreo, incluyendo áreas silvestres, refugios de vida silvestre, bosques nacionales e inclusive algunos parques nacionales. El costo ecológico de esta forma ubicua de uso de la tierra puede ser dramático. Ejemplos de este costo incluyen pérdida de la biodiversidad; decrecimiento de las densidades de población para una amplia variedad de taxones; alteraciones en las funciones del ecosistem, incluyendo ciclos de nutrientes y sucesiones; cambios en la organización de la comunidad y cambios en las características físicas de hábitas terrestres y acuáticos. Dado que el ganado se congrega en ecosistemas ribereños, los cuales están entre los hábitas biológicamente más ricos dentro de las regiones áridas y semi-áridas, los costos ecológicos del pastoreo se magnifican en estos sitios. Tradicionalmente, la ciencia de pastizales, ha estado cargada de suposiciones económicas que favorecen el uso del recurso. Se alienta a los biólogos conservacionistas a contribuir al diálogo social y científico en los problemas del pastoreo.*

Introduction

Aldo Leopold (1953) once said that to be an ecologist is to live "alone in a world of wounds." The spectacular groundswell of interest in conservation biology is heartening evidence that we no longer work alone. But what about a world of wounds? The wounding of natural processes accelerates, but some wounds are more conspicuous than others. Recognizing a clearcut forest is easy, but it often takes a trained eye to comprehend damage to rangelands. The destruction caused by livestock grazing is so pervasive and has existed for so long that it frequently goes unnoticed. Livestock grazing has re-

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ceived far less attention from conservation biologists than its widespread influence would suggest is appropriate. When I recently surveyed the first six volumes of this journal, for example, I found almost three times as many articles on deforestation as on grazing-related topics.

Livestock grazing is the most widespread influence on native ecosystems of western North America (Wagner 1978; Crumpacker 1984). Grazing by livestock, primarily cattle, is nearly ubiquitous throughout this region. Approximately 70% of the 11 western states of the United States (Montana, Wyoming, Colorado, New Mexico, and westward) is grazed by livestock (Council for Agricultural Science and Technology 1974; Longhurst et al. 1984; Crumpacker 1984), including a broad diversity of ecosystem types and virtually all types of land management designations. Grazing occurs in creosotebush deserts, blackbrush deserts, slickrock mesas, sagebrush flats, pinyon-juniper woodlands, chaparral, ponderosa pine forests, and alpine meadows above timberline.

Grazing occurs on the majority of federal lands in the West, including most of the domains of the U.S. Bureau of Land Management (BLM) and the U.S. Forest Service, as well as in many national wildlife refuges, federal wilderness areas, and even some national parks. In 16 western states, approximately 165 million acres of BLM land and 103 million acres of Forest Service land are grazed by 7 million head of livestock, primarily cattle (U.S. General Accounting Office 1988*a*). Of the BLM lands in these states, 94% is grazed. Of federal wilderness areas, 35% have active livestock grazing allotments (Reed et al. 1989; this figure is from a nationwide survey—the percentage for the West is probably higher). Urbanized areas, some dense coniferous forests, and a few rock-and-ice peaks are about all that is free from the influence of livestock. Given the ubiquity of livestock, it behooves us to understand the consequences of its presence on the Western landscape.

Understanding the influence of domestic livestock upon native ecosystems is a problematic process. Ascertaining the potential natural vegetation of most Western ecosystems is difficult because ungrazed land is extremely rare. Ecologists have gained insight into the effects of grazing primarily in three ways: (1) Historic records provide perspective on the dramatic changes that have transpired since the introduction of livestock to the West (see Cooper 1960). As Hastings (1959) pointed out, however, one must be cautious in interpreting historical records, due to the subjectivity of different observers. Historic photographs have also been used in an attempt to recreate an ecological baseline (see Hastings & Turner 1965); Bahre (1991) reviewed the necessary cautions in interpreting historic photographs. (2) Areas excluded from grazing through serendipity, such as isolated mesa tops, provide startling contrast to adjacent areas that have been continuously grazed (see Rummell 1951). (3) Areas that intentionally exclude livestock (exclosures) provide a before-grazing and after-grazing comparison. Exclosures can be monitored as they recover from the effects of grazing and can be compared with adjacent grazed sites. Almost all exclosures share two characteristics: (1) their areas are usually quite small (Bock et al. 1993*a*), often less than 50 ha; and (2) they have been grazed prior to exclosure. In other words, very few studies of truly ungrazed landscapes exist. Most recreational impact studies concur that the original impact upon a pristine site is the most severe (Cole 1981; Cole & Marion 1986); thus, exclosure studies probably underestimate the true extent of grazing effects because they cannot monitor the most drastic damage, which occurred long ago. In addition, virtually all exclosure studies examine areas too small to encompass landscape-level diversity. In summary, we lack a clear ecological benchmark for determining the effects of grazing.

Attempts to discern grazing effects are also hampered by the difficulty in distinguishing between different range management practices. Management variables include grazing intensity ("stocking rate"), livestock species, seasonality of grazing, and degree of active management, such as movement of livestock between pastures. Unfortunately, the management history of many sites is unknown. Many studies do not describe grazing intensity (see, for example, Glinski 1977; Reynolds & Trost 1980; Crouch 1982). Furthermore, standardized terminology is lacking for different grazing intensities. Relative terms, such as "heavy," "moderate," and "light" grazing, may be undefined (see Jeffries & Klopatek 1987) or qualitatively defined in very different ways. Among the criteria used are presence of livestock, presence of trails, range condition (see Jones 1981), and amount of herbage remaining after a grazing season (see Welch et al. 1991). Studies that have quantified grazing intensity have do so inconsistently. For example, two studies (Mosconi & Hutto 1982; Baker & Guthery 1990) analyzing the effect of "heavy" grazing differed in their definition by a factor of seven. The much-used term "overgrazing" is wrought with controversy and lack of clarity; even specific discussions of overgrazing fail to define it (see Menke & Bradford 1992). This rudimentary state of knowledge interferes with analysis of the role of different grazing practices on biodiversity.

Available evidence indicates that livestock grazing has profound ecological costs. Autecological, synecological, and geomorphological studies have confirmed that native ecosystems pay a steep price for the presence of livestock. Three primary attributes of ecosystems have been elucidated: composition, function, and structure (Franklin et al. 1981). Livestock grazing has a profound impact on all three. The ecological costs of livestock grazing can be summarized as follows:

(1) *Alteration of species composition of communities*, including decreases in density and biomass of individual species, reduction of species richness, and changing community organization.
(2) *Disruption of ecosystem functioning*, including interference in nutrient cycling and ecological succession.
(3) *Alteration of ecosystem structure*, including changing vegetation stratification, contributing to soil erosion, and decreasing availability of water to biotic communities.

Alteration of Species Composition of Communities

That the introduction of a large-bodied herbivore should have dramatic effects on the species composition of plant communities in arid and semiarid regions should not be surprising. Congressional investigation into rangeland conditions on BLM and Forest Service lands showed that over 50% of public rangelands administered by these two agencies were in "poor" or "fair" condition, meaning that less than half the range was 50% similar to the presumed climax community (U.S. General Accounting Office 1988*a*, 1991*a*). Grazing affects the species composition of plant communities in essentially two ways: (1) active selection by herbivores for or against a specific plant taxon, and (2) differential vulnerability of plant taxa to grazing (Szaro 1989). Decreases in density of native plant species and diversity of native plant communities as a result of livestock grazing activity have been observed in a wide variety of western ecosystems (Table 1).

Grazing also can exert a great impact on animal populations, usually due to indirect effects on habitat structure and prey availability (Wagner 1978; Jones 1981; Mosconi & Hutto 1982; Szaro et al. 1985; Quinn & Walgenbach 1990). The deleterious effects of grazing have been observed in all vertebrate classes (Table 2). The response of native wildlife to grazing varies by habitat. Bock et al. (1993*b*) reviewed the effect of grazing on Neotropical migratory landbirds in three ecosystem types and found an increasingly negative effect on abundances of bird species in grassland, riparian woodland, and intermountain shrubsteppe (almost equal numbers of species with positive and negative responses to grazing in grassland; six times as many with negative as positive responses in shrubsteppe). Due to their mobility and visual orientation, birds may be better able to cope with grazed landscapes than mammals are (Bock et al. 1984). Platts (1979, 1981) reviewed the interaction of biological and geomorphological factors that degrade fish habitat.

The relationship of grazing to insect populations is unclear (Table 3). Studies of grasshoppers (Acrididae) on rangelands have yielded contradictory results: some report an increase in grasshopper densities on heavily grazed lands, and others report a decrease (summarized in Welch et al. 1991). Recent research has clarified that duration of grazing, seasonal differences in plant and insect communities, and plant community architecture

Table 1. Deleterious effects of livestock grazing on plant communities in western North America.

Habitat	*Location*	*Effect*	*Authority*
Sonoran Desertscrub	Arizona	Perennial grasses and *Krameria* (palatable shrub) showed dramatic density decreases with grazing	Blydenstein et al. (1957)
Mojave Desertscrub	California	60% reduction in above-ground biomass of annuals, 16–29% decrease in cover of perennial shrubs with grazing	Webb & Stielstra (1979)
Sagebrush Desert	Idaho	Grazed site had ⅓ species richness of ungrazed site	Reynolds & Trost (1980)
Desert Grassland	New Mexico	Grass density increased by 110% after 30 years of protection from grazing	Gardner (1950)
Semidesert Grassland	Arizona	Species richness increased, as did canopy cover for midgrass, shortgrass, shrub, and forb groups, after removal of livestock	Brady et al. (1989)
Semidesert Grassland	Arizona	Woody plants significantly more abundant after removal of livestock	Bock et al. (1984)
Ponderosa Pine Forest	Washington	Decreased species richness on grazed sites	Rummell (1951)
Mountain Canyon	Utah	Absence or near absence of 10 grass species on grazed sites	Cottam & Evans (1945)
Riparian	Oregon	Species richness increased from 17 to 45 species nine years after removal of livestock	Winegar (1977)
Riparian	Arizona	Herbaceous cover of grazed plot less than half that of ungrazed plot	Szaro & Pase (1983)
Riparian	Colorado	Shrub canopy coverage increased 5.5 times, willow canopy coverage 8 times after removal of livestock	Schulz & Leininger (1990)

Table 2. Deleterious effects of livestock grazing on vertebrate animals in western North America.

Organism(s)	*Location*	*Effect*	*Authority*
Small Mammals	Idaho	Density and diversity reduced on grazed sites	Reynolds & Trost (1980)
Small Mammals	Nevada	Density over one-third lower, diversity almost half on grazed sites	Medin & Clary (1989)
Songbirds, Raptors, and Small Mammals	Utah	350% increase in use and diversity after 8 years rest from grazing	Duff (1979)
Ducks and all Terrestrial Nongame Birds	Colorado	All more abundant in ungrazed habitat	Crouch (1982)
Upland Sandpiper (*Bartramia longicauda*)	North Dakota	Nest density reduced on grazed sites	Bowen & Kruse (1993)
Riparian Birds	Montana	Species composition altered by grazing; densities of ⅓ of species differed significantly between heavily and lightly grazed sites—⅓ of these were higher on lightly grazed sites	Mosconi & Hutto (1982)
Riparian Passerines	Southeastern Oregon	Species richness decreased on grazed sites	Taylor (1986)
Willow Flycatcher (*Empidonax traillii*)	Southeastern Oregon	Abundance increased from 0 to 30 when grazing intensity reduced by 4 times	Taylor & Littlefield (1986)
Yellow Warbler (*Dendroica petechia*)	Southeastern Oregon	Abundance increased by 8 times when grazing intensity reduced by 4 times	Taylor & Littlefield (1986)
Dickcissel (*Spiza americana*) and Bell's Vireo (*Vireo bellii*)	Oklahoma	Populations 50% lower on grazed sites	Overmire (1963)
Lizards	California	Abundance 2 times and biomass 3.7 times higher on ungrazed site	Busack & Bury (1974)
Lizards	Arizona	Abundance and diversity higher on ungrazed site in 4 of 5 vegetation types	Jones (1981, 1988)
Wandering Garter Snake (*Thamnophis elegans vagrans*)	New Mexico	5 times more abundant in ungrazed sites	Szaro et al. (1985)
Desert Tortoise (*Gopherus agassizi*)	Western U.S.A.	Livestock trample young tortoises, damage burrows and shrubs used for shelter, and remove critical forage	Berry (1978); Campbell (1988)
Trout (Salmonidae)	Great Basin	Average increase in production of 184% when grazing reduced or eliminated	Bowers et al. (1979)
Trout (Salmonidae)	Idaho	More abundant, larger fish after removal of livestock	Keller & Burnham (1982)
Trout (Salmonidae)	Colorado	Standing crop doubled after removal of livestock	Stuber (1985)

are important factors in determining the effect of grazing on grasshopper populations.

Grazing-induced changes in particular species translate into major conversions of community organization. Grazing is credited with transforming southern New Mexico from grassland to creosotebush (*Larrea*) desert (Whitfield & Anderson 1938; York & Dick-Peddie 1969). Kennedy (1977) noted that grazing thoroughly changed the primary plant species in most Southwest riparian zones. He referred to these changes as "com-

Table 3. Effects of livestock grazing on insects.

Location	*Effect*	*Authority*
Arizona	Grasshopper density 3.7 times greater on protected site in summer, 3.8 times greater on grazed site in fall (different subfamilies, with different food preferences dominant in each season)	Jepson-Innes & Bock (1989)
Australia	Ant abundance increased as sheep density increased; all other groups reduced substantially at highest livestock density	Hutchinson & King (1980)
Colorado	Grasshoppers significantly more abundant on a lightly grazed site than on a heavily grazed site; because there was no difference between the same sites 19 years earlier, a long-term effect of grazing is indicated	Welch et al. (1991)
Oklahoma	Decreases in abundance of most insect groups, dramatic increase in grasshoppers	Smith (1940)
South Dakota	Plant community architecture changed from midgrass/tallgrass to shortgrass, which changed grasshopper species composition	Quinn & Walgenbach (1990)

plete type conversions." Grazing can eliminate a willow stand within 30 years (Kovalchik & Elmore 1992). In Oregon, grazing delayed plant phenology two weeks (Kauffman et al. 1983*b*); such changes could have dramatic effects on communities of pollinators and dispersers. Grazing has also been observed to alter animal foraging guilds (Table 4).

Grazing destabilizes plant communities by aiding the spread and establishment of exotic species, such as tamarisk (*Tamarix*) (Ohmart & Anderson 1982; Hobbs & Huenneke 1992). Livestock help spread exotic plant species by (1) dispersing seeds in fur and dung; (2) opening up habitat for weedy species, such as cheatgrass (*Bromus tectorum*; Gould 1951; Mack 1981), which thrive in disturbed areas; and (3) reducing competition from native species by eating them. As D'Antonio and Vitousek (1992) pointed out, alien grass invasions in North America have been most severe in the arid and semiarid West, where invasion by many species (including *Bromus tectorum, B. rubens, B. mollis, B. diandrus, Taeniatherum asperum,* and *Avena* spp.) was associated with grazing.

Disruption of Ecosystem Functioning

The deleterious effects of livestock on native ecosystems are not limited to changes in species composition. Grazing also disrupts the fundamental ecosystem functions of nutrient cycling and succession.

An often overlooked characteristic of arid and semiarid ecosystems is the presence of microbiotic (or cryptogamic) soil crusts, delicate symbioses of cyanobacteria, lichens, and mosses from a variety of taxa. The essential role of these microbiotic crusts in nutrient cycling of arid ecosystems has been increasingly appreciated. Crusts perform the major share of nitrogen fixation in desert ecosystems (Rychert et al. 1978). The availability of nitrogen in the soil is a primary limiting factor on biomass production in deserts. In the Great Basin Desert, at least, it is second in importance only to the lack of moisture (James & Jurinak 1978). Microbiotic crusts in arid ecosystems have been correlated with increased organic matter and available phosphorus (Kleiner & Harper 1977), increased soil stability (Kleiner & Harper 1972; Rychert et al. 1978), and increased soil water infiltration (Loope & Gifford 1972; Rychert et al. 1978). Crusts also play an important role in ecological succession because they provide favorable sites for the germination of vascular plants (St. Clair et al. 1984).

Given the fragile nature of microbiotic crusts, it follows that they are easily damaged by livestock grazing. In numerous studies, grazing has been correlated with the loss of microbiotic cover (Wullstein 1973; Johansen et al. 1981; Anderson et al. 1982; Jeffries & Klopatek 1987). Crusts can be severely disrupted even while they (Belnap 1993) and the more conspicuous vascular plant communities (Kleiner & Harper 1972; Cole 1990) appear healthy. Microbiotic species richness has also been shown to decrease under grazing pressure (Anderson et al. 1982). Recent studies on the Colorado Plateau have dramatically demonstrated that soil surface disturbances can virtually stop nitrogen fixation. Nitrogenase activity was reduced 80–100% in the microbiotic crust under a single human footprint, as well as under vehicle tracks (Belnap, personal communication; Belnap 1994; Belnap et al. 1994), and nitrogen content in the leaves of dominant plant species was lower in trampled than untrampled areas (Belnap, personal communication; Harper & Pendleton 1993). If a single footprint can bring a local nitrogen cycle almost to a halt, the impact of a century's work of livestock hoofprints can easily be imagined.

Grazing also can disrupt ecological succession. The cumulative impact of long-term livestock use has produced and maintained early seral vegetation throughout much of the West (Longhurst et al. 1982). Glinski (1977) demonstrated that cattle grazing of small seedlings prevented cottonwood (*Populus fremontii*) regeneration in a southern Arizona riparian zone. He concluded that long-term grazing could eliminate or reduce the upper canopy by preventing the establishment of saplings. Carothers et al. (1974) noted the lack of cottonwood regeneration in grazed areas along the Verde River, Arizona. Prevention of seedling establishment due to grazing and trampling by livestock has transformed a variety of Southwest riparian systems into even-aged,

Table 4. Effects of livestock grazing on animal foraging guilds in western North America.

Organisms	*Location*	*Effect*	*Authority*
Riparian Birds	Montana	Flycatching guild, ground-foraging thrush guild and foliage-gleaning insectivore guild affected; bark-foraging guild unaffected	Mosconi & Hutto (1982)
Riparian Birds	Oregon	Grazed sites preferred by insectivores, ungrazed sites by herbivores and granivores	Kauffman et al. (1982)
Lizards	Arizona	More sit-and-wait lizards on grazed sites; open-space foragers and wide-ranging foragers decreased on grazed sites	Jones (1981)
Grasshoppers	South Dakota	Obligate grass-feeders dominated on grazed sites, mixed-forb-and-grass-feeders on ungrazed sites	Quinn & Walgenbach (1990)

nonreproducing vegetative communities (Carothers 1977; Szaro 1989). In Oregon, grazing retarded succession in the willow-black cottonwood (*Salix-Populus trichocarpa*) community, and there was little if any regeneration of alders (*Alnus*) or cottonwoods (Kauffman et al. 1983*b*). Davis (1977) concluded that livestock grazing was "probably the major factor contributing to the failure of riparian communities to propagate themselves."

Ascertaining patterns of ecological succession in xeric rangelands is not easy; thus, the effect of livestock on successional processes is unclear. Traditionally, range management was based upon Clements' (1916) classic model of ecological succession, where seral stages lead to a stable climax. Early on, this concept of predictable, directional succession was applied to range ecosystems (Sampson 1919). This "range succession model" eventually formed the basis of range condition classification, as exemplified by government manuals and early range management textbooks (Stoddart & Smith 1943), and summarized in an extensive review by Ellison (1960). In the arid West, however, vegetation change due to grazing has not followed the prediction of this linear model. Recent evidence suggests that range ecosystems have not evolved as well-balanced communities with stable species compositions (Johnson & Mayeux 1992).

More recently, a less Clementsian view of xeric rangeland succession, referred to as the "state-and-transition model," has been proposed (Westoby et al. 1989). According to this model, relatively stable, discrete vegetation states go through transitions induced by natural episodic events such as fire or by management actions such as grazing (Laycock 1991). As Friedel (1991), Laycock (1991), and others have discussed, transitions between states sometimes cross successional "thresholds." Once certain thresholds have been crossed, as in severe soil erosion, succession may not be reversible except by strong, active management. Although this model is in its infancy, it may someday provide a means to predict if grazing can cause long-term degradation by inducing irreversible succession across thresholds.

Alteration of Ecosystem Structure

The physical structure of ecosystems, including vegetation stratification, is often changed by livestock grazing. In central Washington, grazing was responsible for changing the physical structure of ponderosa pine forest from an open, park-like tree overstory with dense grass cover to a community characterized by dense pine reproduction and lack of grasses (Rummell 1951). Grazing was at least partially responsible for similar structural changes in ponderosa pine forests of northern Arizona (Cooper 1960). Historic records indicate that extensive willow stands once occurred throughout the rangelands of the Intermountain West, which are now almost completely absent (Kovalchik & Elmore 1992). Grazing structurally changed habitat for the wandering garter snake (*Thamnophis elegans vagrans*) through the loss of small trees and shrubs (Szaro et al. 1985). In central Arizona, lizard habitat was changed when livestock reduced low-height vegetation by totally consuming perennial grasses and severely reducing palatable shrubs (Jones 1981). In Oregon, Taylor (1986) noted that lower vegetative strata were affected by grazing. In blackbrush (*Coleogyne ramosissima*) desert habitat, ungrazed sites had significantly more shrub and herbaceous cover (Jeffries & Klopatek 1987). In a high-altitude willow riparian community in Colorado, grazing influenced the spacing of plants and the width of the riparian zone (Knopf & Cannon 1982).

Grazing removes soil litter, which can have both physical and biological effects. Schulz and Leininger (1990) observed twice as much litter in an exclosure as in surrounding grazed habitat. In Oregon, removal of soil litter was thought to be the cause of delayed plant phenology (Kauffman et al. 1983*b*), which in turn could affect communities of animal pollinators.

Researchers have long recognized that grazing contributes to the deterioration of soil stability and porosity and increases erosion and soil compaction. Seventy years ago, Aldo Leopold (1924) declared that "grazing is the prime factor in destroying watershed values" in Arizona. Grazing reduces the roughness coefficient of watersheds, resulting in more surface runoff, more soil erosion, and massive flooding (Ohmart & Anderson 1982). Grazing in the upper Rio Grande changed plant cover, thus increasing flash floods and, consequently, erosion (Cooperrider & Hendricks 1937). As grazing-induced gullying lowered the stream channel along an Oregon stream, associated plant communities changed from wet meadow to the more xeric sagebrush-rabbitbrush (*Chrysothamnos*) type (Winegar 1977). Davis (1977) concluded that removal of upland vegetation by livestock was a major factor in the increase in devastating floods. Numerous authors have noted extreme erosion and gullying when comparing heavily grazed to ungrazed sites (see Cottam & Evans 1945; Gardner 1950; Kauffman et al. 1983*a*). Ellison (1960) concluded that "as a result of some degree of denudation, accelerated soil erosion is inseparably linked with overgrazing on arid lands the world over."

Grazing has also repeatedly been shown to increase soil compaction and thus decrease water infiltration (Alderfer & Robinson 1949; Orr 1960; Rauzi & Hanson 1966; Bryant et al. 1972; Rauzi & Smith 1973; Kauffman & Krueger 1984; Abdel-Magid et al. 1987; Orodho et al. 1990). In arid and semiarid lands where water is the primary ecological limiting factor, major losses of water from ecosystems can lead to severe desertification. Some controversy exists as to whether livestock grazing

was the *cause* of increased flooding and erosion or whether the synchrony of increased channel trenching and the introduction of vast livestock herds during the last century was coincidental. Episodes of channel trenching certainly occurred prior to the introduction of livestock (Bryan 1925; Karlstrom & Karlstrom 1987). Most reviewers, however, conclude that, at the least, livestock have been a contributing factor to the entrenching of stream channels in the Southwest (Bryan 1925; Leopold 1951; Hereford & Webb 1992; Betancourt 1992). This interaction of climatic, geomorphic, and biological factors has been summarized as a "trigger-pull": long-term climatic trends were already underway when cattle arrived to serve "as the trigger-pull that set off an already loaded weapon" (Hastings 1959).

Costs of Grazing Magnified: Riparian Habitats in the Arid West

Livestock, like humans, are adapted to mesic habitats, and they select riparian areas for the same reasons we do: shade, cooler temperatures, and water. In addition, riparian areas offer an abundance of food. Many observers have noted that cattle spend a disproportionate amount of their time in riparian zones (Ames 1977; Kennedy 1977; Thomas et al. 1979; Roath & Krueger 1982; Van Vuren 1982; Gillen et al. 1984). That livestock actively select riparian habitats, however, is a cause for ecological concern because these habitats are among the biologically richest in many arid and semi-arid regions and are easily damaged. Because livestock spend much of their time in riparian communities, and because the ecological stakes are highest here, many of the adverse impacts of grazing are magnified in these habitats.

Western riparian zones are the most productive habitats in North America (Johnson et al. 1977), providing essential wildlife habitat for breeding, wintering, and migration (Gaines 1977; Stevens et al. 1977; Brode & Bury 1984; Laymon 1984; Lowe 1985). Riparian habitats in the Southwest are home to the North American continent's highest density of breeding birds (Carothers et al. 1974; Carothers & Johnson 1975), rarest forest type, and more than 100 state and federally listed threatened and endangered species (Johnson 1989). Approximately three-quarters of the vertebrate species in Arizona and New Mexico depend on riparian habitat for at least a portion of their life cycles (Johnson et al. 1977; Johnson 1989). Even xeroriparian habitats—normally dry corridors that intermittently carry floodwaters through low deserts—support five to ten times the bird densities and species diversity of surrounding desert uplands (Johnson & Haight 1985).

Sadly, these biological treasures are in extreme danger. The Environmental Protection Agency concluded that riparian conditions throughout the West are now the worst in American history (Chaney et al. 1990). Over 90% of Arizona's original riparian habitat is gone (Johnson 1989). Less than 5% of the riparian habitat in California's Central Valley remains; 85% of that is in disturbed or degraded condition (Franzreb 1987). The degradation of Western riparian habitats began with severe overgrazing in the late Nineteenth Century (Chaney et al. 1990), and grazing remains "the most insidious threat to the riparian habitat type today" (Carothers 1977). An extensive survey of Southwest riparian community types concluded that "livestock may be the major cause of excessive habitat disturbance in most western riparian communities" (Szaro 1989). The Oregon-Washington Interagency Wildlife Committee (1979), composed of biologists from several government agencies, concluded that grazing is the most important factor in degrading wildlife and fisheries habitat throughout the 11 western states. Likewise, ecologists in Montana suggested that livestock grazing is the major cause of habitat disturbance in most western riparian communities (Mosconi & Hutto 1982).

Livestock affect four general component of riparian systems: (1) streamside vegetation, (2) stream channel morphology, (3) shape and quality of the water column, and (4) structure of streambank soil (Platts 1979, 1981, 1983; Kauffman & Krueger 1984; Platts & Nelson 1989). As summarized by Platts (1981), "Grazing can affect the streamside environment by changing, reducing, or eliminating vegetation bordering the stream. Channel morphology can be changed by accrual of sediment, alteration of channel substrate, disruption of the relation of pools to riffles, and widening of the channel. The water column can be altered by increasing water temperature, nutrients, suspended sediment, bacterial populations, and in the timing and volume of streamflow. Livestock can trample streambanks, causing banks to slough off, creating false setback banks, and exposing banks to accelerated soil erosion."

Riparian vegetation is altered by livestock in several ways: (1) compaction of soil, which increases runoff and decreases water availability to plants; (2) herbage removal, which allows soil temperatures to rise, thereby increasing evaporation; (3) physical damage to vegetation by rubbing, trampling, and browsing; and 4) altering the growth form of plants by removing terminal buds and stimulating lateral branching (Kauffman & Krueger 1984; Szaro 1989). Livestock grazing is one of the principal factors contributing to the decline of native trout in the West. Cattle activities especially deleterious to fish are the removal of vegetative cover and the trampling of over-hanging streambanks (Behnke & Zarn 1976). Livestock have been shown to decrease water quality of streams (Diesch 1970; Buckhouse & Gifford 1976). Changes in water chemistry (Jeffries & Klopatek 1987) and temperature (Van Velson 1979), in

effect, create an entirely new aquatic ecosystem (Kennedy 1977; Kauffman & Krueger 1984). Insights such as these led the American Fisheries Society to issue a formal position statement calling for an overhaul of riparian zone management (Armour et al. 1991).

Historical and Management Considerations

By virtually any measure, livestock grazing has serious ecological costs in western North America. Grazing has reduced the density and biomass of many plant and animal species, reduced biodiversity, aided the spread of exotic species, interrupted ecological succession, impeded the cycling of the most important limiting nutrient (nitrogen), changed habitat structure, disturbed community organization, and has been the most severe impact on one of the biologically richest habitats in the region. While undoubtedly there are exceptions to this theme of destruction, clearly much of the ecological integrity of a variety of North American habitats is at risk from this land management practice.

In addition to grazing per se, the industry of livestock production entails a number of indirect costs to native biodiversity. Livestock compete with native herbivores for forage ("usurpation") and often consume the most nutritive species ("highgrading"). Fencing, which is a fundamental livestock management tool, creates obstacles for many native wildlife species, such as the pronghorn (*Antilocapra americana*). The livestock industry has played a large role in the elimination of native predators; some of the most vehement opposition to predator reintroduction continues to come from livestock interests. Exotic species, such as crested wheatgrass (*Agropyron cristatum*), are planted as "range improvements." In addition, livestock can transmit disease to native animals (Mackie 1978; Longhurst et al. 1983; Menke & Bradford 1992).

Agency management priorities often overemphasize livestock needs at the expense of wildlife. A recent Congressional study of BLM and Forest Service management confirmed that wildlife receives only a small percentage of available staffing and funding. During fiscal years 1985–1989 the BLM directed only 3% of its total appropriation toward wildlife habitat management, while 34% of its budget went to its three consumptive programs: range, timber, and energy and minerals (U.S. General Accounting Office 1991*b*). Wildlife at national wildlife refuges also suffers from management emphasis on livestock. Cattle grazing and haying occur at 123 refuges; at any given site these activities occupy up to 50% of refuge funds and 55% of staff time. Field studies indicated that these livestock-related activities directly impeded wildlife conservation (Strassman 1987). Strong agency bias in favor of grazing often leads to contradictory management decisions. A recent Forest Service analysis of sensitive vertebrate species identified livestock grazing as one of five factors jeopardizing the northern goshawk (*Accipiter gentilis*) in the Southwest (Finch 1992). Yet the goshawk management recommendations (Reynolds et al. 1992), released by the same office in the same year, did not even mention grazing. Such predilections by agencies reflect similar biases within the range management discipline: a recent 500-page textbook on range management (Holechek et al. 1989) devotes one paragraph to nongame wildlife.

A variety of justifications are heard for grazing in the West. Because livestock has been such a prominent component of Euro-American settlement of the West, some observers see it as a traditional pastime and assume it is appropriate for the land. Some range managers maintain that livestock are actually *necessary* for ecosystem health, that "grass needs grazing" (Chase 1988; Savory 1988). Popular claims such as these are rooted in a scientific debate on the consequences of herbivory on grassland ecosystems. As the "herbivore optimization" hypothesis goes, loss of tissue to herbivores can actually increase total productivity of the grazed plant. Such a response to herbivory is referred to as "overcompensation" by the plant (Owen & Wiegart 1976; Dyer et al. 1982). When different levels of ecological hierarchy (individual, population, community; Belsky 1987) and a wide diversity of ecosystem types, geographic settings, and degrees of management intensity are lumped together into one generalized theory, clarity is lost. Much of the evidence for overcompensation comes from highly productive and intensively managed systems, not from arid rangelands (Bartolome 1993). Few studies have demonstrated overcompensation in western North America (Painter & Belsky 1993), where much of the rangeland resource is not grassland. Observations of native herbivores lend no support to the idea that compensatory growth has any relevance at the community level in western rangelands (Patten 1993). According to Vicari and Bazely (1993), "there is little evidence that the act of grazing per se increases the fitness of grasses, or any other plant species, except under highly specific circumstances."

Other scientists and range managers suggest that livestock, given their capacity for altering so many aspects of ecological organization, could be used as a wildlife management tool (Bokdam & Wallis de Vries 1992; Hobbs & Huenneke 1992). In summarizing a symposium on the topic, Severson (1990) clarified that such applications may be very limited, and that what benefits one species may prove detrimental to another. Because two species in the same community may vary in their response to grazing (Hobbs & Huenneke 1992), determination of its success or failure as a management practice depends on which species is used as a criterion. On many national wildlife refuges, grazing and haying occur with the rationale that these practices will benefit wild-

life. Upon review of 123 refuges, Strassman (1987) concluded that "although in theory cattle grazing and haying can be wildlife management tools, as implemented they are tools that do more harm than good."

It is often stated that livestock have merely taken the place of large native herbivores, particularly bison (*Bison bison*). The presettlement abundance of bison on the Great Plains is legendary. West of the Rocky Mountains, however, bison were rare or absent in Holocene times. The species was present in the northern Rockies region, marginally present along the northern and western perimeter of the Great Basin (Hall 1981; Mack & Thompson 1982; Zeveloff 1988; Van Vuren & Deitz 1993) and absent altogether from Arizona (Cockrum 1960; Hoffmeister 1986), western New Mexico (Bailey 1971), as well as most of California (Jameson & Peeters 1988), and Nevada (Hall 1946). The native steppe vegetation of much of the Intermountain West, characterized by caespitose bunchgrasses and a prominent microbiotic crust, reflects the absence of large numbers of large-hooved, congregating mammals. These steppe ecosystems have been particularly susceptible to the introduction of livestock; microbiotic crusts, as mentioned earlier, are easily damaged by trampling. In contrast, the slightly wetter Great Plains grasslands, characterized by rhizomatous grasses and a lack of microbiotic crusts, were well-adapted to withstand herbivory by large ungulates (Stebbins 1981; Mack & Thompson 1982). Theoretically, then, the Great Plains should be better suited to livestock grazing than the arid and semiarid ecosystems west of the Rockies. It should also be noted that the ecological analogy between cattle and bison is incomplete. Cattle, unlike bison, spend a disproportionate amount of time in riparian habitats. In a comparative study of cattle and bison feeding ecology in the Henry Mountains, Utah, Van Vuren (1982) noted that cattle distribution was limited to gentle slopes near water, regardless of forage, while bison roamed widely, seemingly unaffected by slope or proximity to water.

The controversy about flood cycles and arroyo-cutting, discussed earlier, is but one part of a larger controversy concerning the respective roles of climate change and human land use—including livestock grazing—in changing the vegetation of western North America. The international borderlands of southern Arizona and northern Sonora, Mexico, have been the site of the most intensive study of this issue. The appearance of *The Changing Mile* (Hastings & Turner 1985) almost three decades ago promoted the then new idea that the region's dramatic vegetation change during the previous century was due to increasing aridity—to natural climate change—and not to human land-use patterns. Using pairs of photographs, one historic and one recent, *The Changing Mile* visually documented vegetation change and concluded that its cause was an increasingly arid climate. As for livestock, these authors felt the evidence was somewhat ambiguous and concluded that livestock may have contributed to vegetation change in the region "but have not been the primary agent of change" (Hastings & Turner 1965). This work has since been widely quoted by livestock interests to support the idea that historic overgrazing was overstated and, therefore, to justify the continuation of grazing in the region.

Recently vegetation change along the Arizona borderlands has received renewed scholarly attention. This new work reached a very different conclusion: "probably no single land use has had a greater effect on the vegetation of southeastern Arizona or has led to more changes in the landscape than livestock grazing range management programs. Undoubtedly, grazing since the 1870s has led to soil erosion, destruction of those plants most palatable to livestock, changes in regional fire ecology, the spread of both native and alien plants, and changes in the age structure of evergreen woodlands and riparian forests" (Bahre 1991). Moreover, the new analysis (Bahre 1991) states that "the present historic evidence ... casts serious doubt on the hypothesis that a shift toward greater aridity is the primary factor for regional vegetation changes." Bahre (1991) agrees that climatic oscillations since 1870 have resulted in short-term fluctuations in vegetation but insists that long-term directional changes, including degradation of riparian habitats and spread of exotic species, have resulted from human disturbances, including overgrazing by cattle. Bahre challenges the conclusions of *The Changing Mile* on the basis of several factors, including lack of historic evidence to support several key assumptions in the earlier work (for example, that overgrazing had been practiced since the time of the Mexican occupation), and that the majority of historic photographs were taken *after* the worst grazing damage had already occurred. In other words, *The Changing Mile* made comparisons to the wrong baseline data. For now, the best historic evidence seems to support the idea that livestock grazing, interacting with fluctuations in climatic cycles, has been a primary factor in altering ecosystems of the Southwest.

Human intervention is needed to restore the West to ecological health. According to the BLM's own definition, over 68% of its lands are in "unsatisfactory" condition (Wald & Alberswerth 1989; U.S. General Accounting Office 1991*a*). Approximately 464 million acres of American rangeland have undergone some degree of desertification (Dregne 1983). Attempts at restoration of livestock-damaged ecosystems have offered both good and bad news: riparian areas often show rapid recovery upon removal of livestock, but more xeric uplands demonstrate little inherent capacity for healing.

Riparian areas appear to be relatively resilient. At a Sonoran Desert spring, Warren and Anderson (1987) documented dramatic recovery of marsh and riparian vegetation within five years of livestock removal. All nine aspects of trout habitat studied along Summit

Creek, Idaho, improved within two years of livestock removal (Keller et al. 1979). Mahogany Creek, Nevada, also showed major improvement in fisheries habitat after only two years of exclosure (Dahlem 1979). Beaver and waterfowl returned to Camp Creek, Oregon, within nine years of cattle exclosure (Winegar 1977). However, the aquatic component of riparian systems often is the quickest to show improvement. Szaro and Pase (1983) observed extremely limited recovery of a cottonwood-ash-willow association in Arizona after four years. Knopf and Cannon (1982) noted that a willow community was slower to heal than the adjacent stream: 10–12 years was insufficient for recovery of the former.

The U.S. General Accounting Office (1988*b*) recently reviewed riparian restoration efforts on BLM and Forest Service lands in the West and concluded (1) that even severely degraded habitats can be successfully restored and (2) that successful restoration to date represents only a small fraction of the work that needs to be done. They noted that successful techniques varied considerably from site to site, and that many sites could repair themselves, given respite from livestock. Successful riparian restoration efforts are summarized by the U.S. General Accounting Office (1988*b*) and Chaney et al. (1990).

In numerous studies of riparian grazing impact, investigators concluded that total removal of livestock was necessary to restore ecosystem health. Along Mahogany Creek, Nevada, reduction in grazing had little benefit; only a complete removal brought about habitat improvement (Dahlem 1979; Chaney et al. 1990). Ames (1977) found that even short-term or seasonal use is too much and compared mere reductions in livestock numbers to letting "the milk cow get in the garden for one night." In a recent comparison of 11 grazing systems, total exclusion of livestock offered the strongest ecosystem protection (Kovalchik & Elmore 1992). As Davis (1982) put it, "If the overgrazing by livestock is one of the main factors contributing to the destruction of the habitat, then the solution would be to ... remove the cause of the problem."

The vast majority of damaged rangeland acreage is on arid and semiarid lands, where the prognosis for restoration is poor (Allen & Jackson 1992). To rehabilitate arid lands is somewhat analogous to trying to grow a garden without water. Perhaps because there is little chance of rapid success, land managers have been slow to take up the challenge of restoring arid rangelands. Cooperrider (1991) noted that "the principal purpose of most rangeland rehabilitation projects has been restoration of livestock forage. Such projects typically end up reducing plant and animal species diversity." Some dryland restoration projects touted as success stories (such as the Vale project in southeastern Oregon; Menke & Bradford 1992), actually have entailed large-scale plantings of exotic species. Such activities restore livestock forage, not native ecosystems.

Is there an ecologically sustainable future for livestock grazing in western North America? This ultimately is a question of human values, not of science. We must decide how much we really care about native diversity and ecosystem processes and what we are willing to do to sustain them. Ecological science and conservation biology have a key role to play in helping society make a wise decision. Scientific input into grazing issues has come laden with resource extraction assumptions: one of the primary goals of range management is to maximize livestock production (Stoddart & Smith 1943; Bell 1973; Menke & Bradford 1992) or to "improve the output of consumable range products" (Holechek et al. 1989). Given this economic underpinning, the ecological merit of livestock in the West has generally gone unchallenged. It is time that conservation biologists take a careful look at the most pervasive land use in western North America and scrutinize the practice described as "the single most important factor limiting wildlife production in the West" (Smith 1977) and "one of the primary threats to biological diversity" (Cooperrider 1991). Whatever decision society reaches, it will be a wiser, more informed one if the conservation biology community contributes its insights to the debate.

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Attachment 2

Table 3-15: Beef Cattle and Beef Cattle Producers in the United States in 1993

Region	Beef Cattle [1]	Producers [1]	Producers with Federal Permits and Leases [2]	Percent of Producers with Federal Grazing Permits
11-State Western Region	(≈ 18%) 16,020,000	96,700	21,132	22.0
5-State Central West Region	(41%) 22,090,000	137,500	952	0.7
Texas	13,820,000	125,000	163	0.1
Totals: 17 Western States	**51,930,000**	**359,200**	**22,247**	**6.0**
Eastern Region	(≈ 40%) 34,724,000	547,500	570 [3]	0.1
Totals: 48 Contiguous States	**86,654,000**	**906,700**	**22,817**	**3.0**

[1] NASS 1993a. Includes cattle on feed.

[2] Forest Service 1993a; BLM 1993d. Number of producers includes cattle producers who also run sheep.

[3] These are Forest Service permits, which would not be affected by the fee alternatives in this EIS; however, they would be affected by portions of the management alternatives specific to the Forest Service.

Table 3-16: Sheep and Sheep Producers in the United States in 1993

Region	Sheep and Lambs [1]	Producers [1]	Producers with Federal Permits and Leases [2]	Percent of Producers with Federal Grazing Permits
11-State Western Region	(≈ 47%) 5,010,000	23,300	4,502	19
5-State Central West Region	(32%) 1,237,000	13,400	147	1
Texas	2,000,000	8,000	0	0
Totals: 17 Western States	**8,247,000**	**44,700**	**4,649**	**10**
Eastern Region	(19%) 1,942,000	56,300	N/A [3]	N/A [3]
Totals: 48 Contiguous States	**10,189,000**	**101,000**	**4,649**	**5**

[1] NASS 1993b.

[2] Forest Service 1993a; BLM 1993d. Many producers do not exclusively raise sheep but also run cattle.

[3] The number of sheep operators is not in the data base, but in fiscal year 1992 about 750 sheep were permitted to graze on National Forest System lands in the entire eastern U.S.

Attachment 3

United Dominion Industries

Jan Ver Hagen, UDI's chief operating officer
"I'll be like Pac-Man, nibbling at costs."

Bridge. After years of losses, Dominion Bridge brought in somewhat less than $20 million; Holland used the proceeds to help keep debt down to a minimum.

While Holland, now 56, restructures the corporation, Chief Operating Officer Jan Ver Hagen looks after the daily operations. Hired away last year from Emerson Electric, where he was vice chairman, Ver Hagen, 57, says his goal is to increase United Dominion's 8.5% operating margin to 11.5% in 1997 and its 12.7% return on equity to 15% by 1999. Grins Ver Hagen: "I plan to be like Pac-Man—endlessly nibbling away at costs."

The results show. Last year United Dominion's sales rose 11%, to $2 billion, and such is the operating leverage in the company that net income jumped 56%, to $62 million, $1.55 a share.

With the sale of its service businesses, United Dominion's revenues will probably remain around $2 billion this year; but earnings may climb another 23%, to around $1.90 a share.

The folks who run United Dominion have no regrets about having pulled out of Canada's stagnant economy, but they do wish they hadn't lost Giddings & Lewis along the way. The moral of this story is: It's not enough to know where you're going. You'd better have a good plan for getting there, too.

Unless you're a constipated horse, aloe juice probably won't cure your ailments. But a lot of people don't know that, and this has made Rex Maughan very rich.

The aloe juice man

By Christopher Palmeri

According to Phoenix businessman Rex Maughan, Alexander the Great conquered the East African island of Socotra to obtain its aloe plants to soothe his soldiers' wounds. Never mind that Socotra is 1,500 miles southeast of the southernmost point of Alexander's conquests. History isn't Rex Maughan's business. Peddling products with supposed medicinal qualities is his business.

Maughan, who is in his late 50s, is founder and sole owner of Phoenix-based Forever Living Products International. Forever Living sells deodorants, toothpaste, laundry detergent and three dozen other products, nearly all of which contain extract of aloe, a cactuslike succulent plant common to some desert areas. Half his business comes from a single product, drinkable aloe gel, a tart extract that looks like pineapple juice and tastes like turpentine. A quart of this stuff retails for $14.95. People drink it straight or mixed with fruit juices. Forever Living also does a big business in bee pollen, which some people are persuaded cures hay fever (Forbes, *Apr. 24*).

Forever Living is one of what are called multilevel sales organizations—or pyramids. These outfits recruit armies of full-time and part-time salespeople, who instead of working on commission typically buy the products and then sell them at a profit. A characteristic of such outfits is that more money works its way to the top of the pyramid than stays at the bottom. The big money is not in selling the stuff, but in recruiting people to sell the stuff.

A new salesperson at Forever Living

Forever Living's products
Rex Maughan says his distributors moved close to $2 billion worth.

Forever Living Products International founder Rex Maughan, with aloe plants
His wrist slapped, Maughan is careful to be vague on aloe's health benefits.

keeps 48% of the $14.95 retail price of an aloe gel jug. The manager who recruited her gets a bonus of 13% of the retail price from the company. The manager's percentage shrinks as the salesperson sells more cases; however, the salesperson and manager also get bonuses based on sales from any new recruits brought in by the salesperson.

But Maughan adds yet more layers of profit. The stuff Forever Living sells is processed and packaged by Aloe Vera of America, a second Maughan company. This in turn buys all of its raw material from Maughan's own aloe vera plantations, which cover 5,000 acres in south Texas, Mexico and the Dominican Republic.

Maughan claims he moved close to $1 billion (retail value) worth of these supposedly therapeutic products last year. His personal take must have been in the tens of millions of dollars.

Seventeen years ago Rex Maughan was an executive at Del Webb Corp., the Phoenix-based real estate developer, when friends dragged him to seminars pitching multilevel marketing schemes. Converted, Maughan became a multilevel distributor of gasoline additives but shifted gears when a friend told him about a firm that sold aloe juice door-to-door. Maughan found a company to make an aloe juice product and invited friends and business contacts to a series of weekly organizational meetings to start building up a sales force.

Noticing that Latin and Asian immigrants were among Forever Living's best customers and salespeople, Maughan took his products overseas. The company entered Japan and Australia in 1983, Hong Kong, Taiwan and Mexico soon after. The *South China Morning Post* newspaper recently reported that a Forever Living distribution point in Hong Kong was so crowded police had to line up distributors on fire escapes. Forever Living now sells its products in 40 countries.

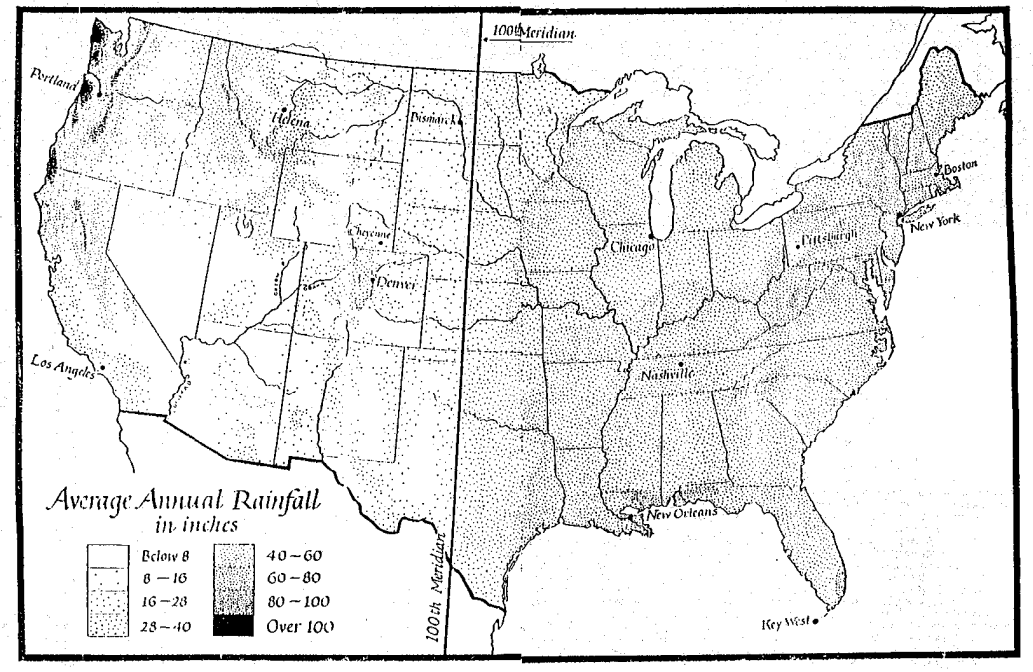
He has parlayed the cash flood from Forever Living into a pile of assets that includes a 120,000-acre ranch north of Phoenix and a string of hotels and resort properties—one is Southfork Ranch, setting for the TV show *Dallas*. Maughan bought Southfork three years ago and operates it as a catering hall and tourist attraction. He spent $2 million restoring Robert Louis Stevenson's home in Western Samoa, where Maughan served as a Mormon missionary in the early 1960s. The house is run by a foundation created by Maughan and friends.

That aloe has been good to Maughan is beyond dispute. How good is it for the people who pay $5.95 for a tube of his toothpaste?

In 1992 Forever Living settled charges brought by the Texas state attorney general's office and took off the air a Spanish-language infomercial that claimed aloe products could control diabetes. His wrist slapped, Maughan is careful to avoid specific health claims in promotion. Yet in a recent interview he recited anecdotes about the supposed therapeutic effects of drinking aloe, about relief for ulcer sufferers and for kidney patients who needed fewer dialysis treatments. "Our doctors," says Maughan, "tell us aloe vera helps our bodies perform like they are supposed to."

Maughan is vague about the health benefits of aloe, but Dr. Victor Herbert is not. A professor of medicine at New York's Mount Sinai School of Medicine and coauthor of the recent book *The Vitamin Pushers*, Herbert says of aloe: "It's a pure scam. Drinking aloe gel accomplishes nothing. It is used by veterinarians to induce diarrhea in severely constipated horses, but there is no reason for humans to drink it." Bee pollen? "It's dangerous," Dr. Herbert says. "It can kill people who are allergic to it."

Other doctors FORBES talked with were less emphatic about aloe, most conceding there were no studies that would definitively prove or disprove some of the claims made for it. Th there are no such reputable studies is not a problem for Rex Maughan.



Source: Beyond the hundredth Meridian: John Wesley Powell and the Second Opening of the West, by Wallace Stegner, University of Nebrask Press (1954)

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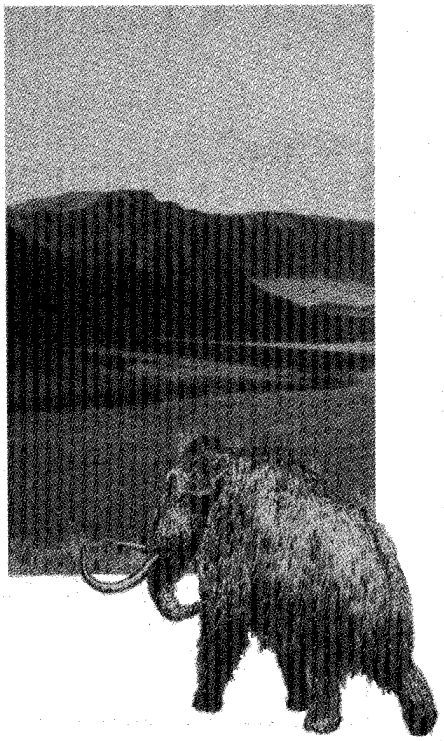
Herbivory in the Intermountain West

An Overview of Evolutionary History, Historic Cultural Impacts and Lessons From the Past

by Dr. J. Wayne Burkhardt



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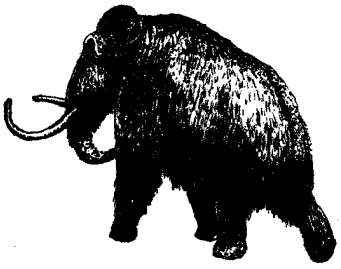

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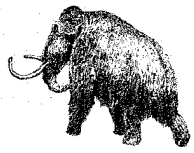
INTRODUCTION

There has been increasing interest in environmental issues related to land use in the western U.S. over the past decade. Traditional consumptive uses of renewable natural resources are coming under increasing scrutiny, especially on public lands. Certainly a major part of these land use concerns focuses on livestock grazing on public lands. While livestock grazing may be one of humankind's oldest endeavors, second to hunting or food gathering, (Towne and Wentworth 1951) its environmental sustainability is being questioned.

Our experience with historic livestock grazing in western North America provides a mixed track record. While most rangelands remain productive and stable after more than a century of livestock grazing, problems with altered plant communities and eroding streams abound. As a response to those problems there is a questioning of the ecological sustainability of livestock grazing. This paper is a review of the scientific literature relating to prehistoric and historic herbivory on the Intermountain West of North America. This characterization of the nature and role of prehistoric herbivory in comparison to our historic domestic grazing experience can provide useful insight to future management of livestock grazing.



HYPOTHESES

Existing scientific literature in plant ecology and range management, either by omission, implication, or assertion, indicates that large- bodied herbivores were not naturally part of the Intermountain West of North America (Young *et al.* 1976, Reveal 1979, Mack and Thompson 1982, Daubenmire 1985). The historical record from early European contact with the Intermountain West indicates a landscape largely devoid of large ungulates (Ewers 1959; Kline 1963; Haines 1940, 1967 and 1955; Schroedl 1973). From this experience rangeland managers, plant ecologists and environmentalists have generally assumed that the flora and fauna of the Intermountain West evolved without significant influence of large herbivores. Indeed the most frequently used reference point in matters of plant community ecology is the plant community protected from herbivores (exclosures). The underlying assumption apparently is that large herbivore grazing is an unnatural impact on the plant community.

There is reason to question the assumption that large herbivores were not a functional component in the formative evolution of intermountain rangelands. Herbivories which include large-bodied grazers are indeed common to terrestrial systems in other parts of the planet. The most notable intact natural system today is in the Serengeti of Africa (McNaughton 1976, 1979, 1988). However, in historic times the plains region of North America sustained a vast natural herbivory characterized by millions of large-bodied grazers. Such natural herbivories, composed of bovids, equids, camelids, proboscideans, and other large herbivores, have developed in mesic as well as arid landscapes and in environments ranging from deserts to grasslands to shrub/woodlands. That the Intermountain West did not evolve a similar natural herbivory, as our post European contact experience suggests, should certainly arouse scientific curiosity. Is the region a biologic anomaly?

"There is reason to question the assumption that large herbivores were not a functional component in the formative evolution of intermountain rangelands."

Interpretations of our historic experience in the region appears to suffer as a result of narrow temporal limits of post-European contact. Certainly the historic record regarding an obvious paucity of large ungulates is convincing. However, whether ecological conditions at the time of initial European contact in the Intermountain West were normal, "natural", and stable remains largely unquestioned. Plant ecologists and range scientists have generally assumed that ecological conditions immediately prior to European settlement of the West represented the climax or pristine natural state. Departures from those conditions are viewed as human disturbances of the natural system (Young *et al.* 1976).

Certainly determining the normal natural state requires tapping the scientific knowledge of disciplines other than ecology or range science. Archeology, paleontology, and geology provide an opportunity to extend the timeframe of consideration well beyond the historic record. A cursory review of the archaeological literature suggests a fertile opportunity to extend our ecological understanding of the Intermountain Region back into the Pleistocene Era. The fossil record would indicate that for several million years the North American continent, including the Intermountain Region, supported a wealth of large ungulates and only relatively recently (the past 10,500 to 7000 years) did that herbivory disappear (Fleharty and Hunlett 1977, Butler 1976 and 1978, Agenbroad 1978, and Martin 1986). There is increasing evidence that these late Pleistocene extinctions in North America are not adequately explained by climatic shifts (Wigand, Nowak 1992; and Owen-Smith 1987). These findings suggest that the biological conditions in the West at the time of European contact may have been abnormal and unusual (Wagner and Kay 1993).

The issues in question here are of fundamental importance to scientific understanding of western rangeland ecosystems and sustainable land management practices. These issues logically lead to the formulation of several hypotheses which can be tested against the available scientific data in ecology, archeology, paleoecology and paleoclimatology.

HYPOTHESES:

Biotic conditions and relationships of the Intermountain West at the time of European contact represented the pristine, stable state ecology of the region

Rangeland biota of the intermountain region evolved in the absence of large-bodied herbivores and is unadapted to such grazers

Domestic livestock (horses and cattle) introductions to the intermountain region represent a partial replacement of the extinct Pleistocene megafauna

Domestic livestock introductions to the intermountain rangelands has resulted in significant destabilizing impacts to the system

Characterization of Pleistocene herbivory in the intermountain region would provide a model for management of domestic livestock grazing

"The fossil record would indicate that for several million years the North American continent, including the intermountain region, supported a wealth of large ungulates and only relatively recently...did that herbivory disappear."

EVOLUTIONARY HISTORY

The co-evolution of warmblooded animals and the flora appears to have begun about 60 million years ago with the extinction of the dinosaurs. However, the origins of current intermountain flora date back to the late Miocene, 12-20 million years before present (BP). Prior to the uplift of the Cascade-Sierra Cordillera the Great Basin and Columbia Plateau were vegetated by hardwood-deciduous and coniferous forests (Tidwell *et al.* 1972, Axlerod 1966). Such temperate flora probably flourished in a mild climate of 35-50 inches of rainfall with little seasonality.

By late Miocene, as the Cascade-Sierra uplift began to impede the Pacific storm track, the landscape to the east became progressively more xeric and precipitation more seasonal (Tidwell *et al.* 1972). The temperate forests were slowly being replaced by shrubland and deserts. Regional pollen records indicate a distinct increase in herbaceous angiosperms during the Miocene (Gray 1964 and Gray and Kittleman 1967). These include species from such plant families as *Chenopodiaceae*, *Gramineae* and *Compositae*, all important plant families in the deserts and shrublands of the intermountain region today. Gray (1964) reported the earliest fossil pollen record of *Artemisia* (sagebrush) to be in late Miocene deposits in northeastern Nevada. By the end of the Miocene (about 12 million years B.P.) much of the Intermountain West had become distinctly more arid and was vegetated by xeric woodlands (Tidwell *et al.* 1972).

During the Pliocene (2.5-10 million years BP) the Cascade-Sierra underwent the greatest uplift, rising as much as 5,000-6,000 feet in the Cascades and more in the Sierra (Tidwell *et al.* 1972). This active mountain building also accelerated desertification by intensifying the rain shadow on the leeward side of the mountains. Precipitation decreased to levels similar to historic times and with a similar seasonality (Tidwell *et al.* 1972). With substantially less growing season moisture the intermountain flora increasingly shifted toward shrub lands at the lower elevations and coniferous forests in the mountains. The fossil record indicates that by the beginning of the Pleistocene Ice Ages (2.5 million years BP) the flora of the intermountain region was essentially the same as our modern flora (Tidwell *et al.* 1972, Barnosky *et al.* 1987). During the climatic fluctuations associated with the glacial-interglacial periods plant species migrated longitudinally and elevationally in a compensatory action (Nowak *et al.* 1994, Tidwell *et al.* 1972).

Concurrent with this floral evolution was the appearance of a myriad of new animal species (Kurtin and Anderson 1980, Martin 1990). The neotropical forest-dwelling creatures of the early to mid-Cenozoic era

slowly evolved into the rich faunal assemblage. This fauna has come to be known by scientists as the Pleistocene megafauna. Common Pliestocene fossil genera and species found in the intermountain region include *Mammuthus columbi* and *M. primigenius* (Columbian and woolly mammoths; *Equus* (various species of horses and burros); *Camelops* (yesterday's camel); *Megalonyx* (Jefferson's ground sloth); *Bison antiquus* and *B. latifrons* (extinct bison); and at least a dozen other genera of large mammals, both herbivores and carnivores. The family *Bovidae* was represented by four genera, *Boatherium* and *Symbos* (woodland musk oxen); *Eucerantherium* (brush oxen) and *Bison* (Kurtin and Anderson 1980, Grayson 1982 and 1993, Webb 1977, Martin 1986, Martin and Klein 1984, Mead *et al.* 1986, Guthrie 1990). This faunal assemblage of grazers and browsers roamed throughout North America for several million years. The fossil record of these herbivores and the associated predators (sabre-tooth tigers, short-faced bears, and dire wolves) have been found from Mexico to Alaska in environments ranging from the hot and cold desert systems through the shrub steppe and woodlands to the forest and tundra.

The Pleistocene megafauna shaped the coevolution of flora and fauna over several million years. This biotic complex successfully existed throughout North America despite numerous major climatic fluctuations (Martin 1984, 1986). Glacial and interglacial climatic pulses may have effected local or regional and seasonal grazing habits of these herbivores. Compensatory action analogous to changes in plant species distribution may have occurred (Edwards 1992, Fleharty and Hulett 1977). Martin (1970) stated that "based on the sizeable biomass of elephants, bovines and zebra in protected parts of Africa ... plus the great number of mammoth, mastodon, bison and horse teeth found in the fossil deposits of North America, it seems fair to assume that...the natural Pleistocene vertebrate fauna on this continent (North America) was also abundant." Martin (1970) also stated, "The Pleistocene game-carrying capacity of western North America must have equaled and very likely exceeded, the 40 million units of livestock which it now supports."

"Martin (1970) also stated, 'The Pleistocene game-carrying capacity of western North America must have equaled and very likely exceeded, the 40 million units of livestock which it now supports.'"

Just as the fossil record reveals the coevolution of the Pleistocene flora and fauna and the existence of these widespread natural herbivories on each continent, the fossils also record the demise of the megafauna (Martin 1986, Fleharty and Hulett 1977, Owen-Smith 1982, and Grayson 1991). In western North America the radiocarbon dates of most common genera found in the fossil record indicates that the majority of large herbivores and their associated predators became extinct between 12,000 and 10,000 BP. This massive extinction over an extremely short time period removed over 70% of the Pleistocene megafauna in North America (Martin 1986). Similar extinction occurred on other continents but at somewhat different times. North America lost 33 out of 45 genera of large mammals during this late Pleistocene extinction (Martin 1986,

1990). From 7,000 years BP to the present the depauperate remnants of the Pleistocene megafauna include bison, elk, moose, deer, pronghorn, and bighorn sheep and mountain goats. To date, neither evolutionary substitution (for which there has been far too little time) nor immigration have filled the empty niches in this natural herbivory (Martin 1970).

The unrecognized implications of the Pleistocene extinctions on current efforts to comprehend our western ecosystems is tremendous. Underlying nearly all aspects of land management is the assumption that the fauna and flora of North America at the time of European contact was in a pristine natural state of balance. Largely unaware of the fossil record, many ecologists, range scientists, land managers and environmentalists have assumed that this so called pristine balance was the end product of millions of years of coevolution of plants and animals. The concepts of climax pristine and natural have pervaded all facets of land management and ecology in the U.S.

When the system is in balance, i.e. all the available niches occupied, extinctions and evolution of new forms occur somewhat equally. The late Pleistocene extinction far exceeded replacement and it affected only the larger fauna. Smaller creatures and the habitat remained. Immigration or ecological substitution has not yet replaced what was lost. This hardly appears to have been a common evolutionary event.

The demise of the Pleistocene megafauna has perplexed scientists for many years. Climatic change during the last major deglaciation period which would have caused environmental stress for the "ice-age" fauna has commonly been advanced as the driving force behind the Pleistocene extinctions (Martin 1986, Grayson 1987 and 1991). However, certain features of the extinction are not well explained by the climatic theory. Differential timing of the extinction between continents and the apparent lack of effects on small fauna and flora are difficult to explain under the climatic theory. Equally troublesome are some of the most recent interpretations of past climatic fluctuations which suggest that the Pleistocene megafauna survived several early periods of glacial and interglacial climatic pulses which were more severe than that of 10,000 years ago (Grayson 1991).

More recently the theory that the Pleistocene extinctions were primarily driven by human predation is gaining scientific proponents (Fleharty and Hulett 1977, Denevan 1992, Martin 1970, 1986, 1990, Diamond 1992, Wilson 1992, Alcock 1993, Burney 1993, Owen-Smith 1987). It appears that the first humans immigrated to North America from Asia, crossing the Bering Straits land bridge during a glacial period at least 12,000-15,000 years BP. Apparently after about 1500 to a few thousand years this new predator, hunter man, populated the new lands and began to dramatically impact the megafauna. An interesting aspect of this extinction theory is that the chronology of Pleistocene extinctions on each of the

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world continents and major islands occurs shortly after the arrival of man (Martin 1990, Steadman 1995). Whatever the cause, the extinction by 10,000 years BP of most large herbivores and predators left a natural rangeland grazing ecosystem which had existed for several million years, with many vacant niches for large herbivores.

Bison was one of the few really large herbivores to survive the Pleistocene extinctions and vast herds of these animals roamed the American prairies at the time of European contact (Roe 1970). It is ironic that within slightly less than 400 years after Columbus landed in the Western Hemisphere, Europeans all but hunted the North American bison to extinction. At the time Europeans began exploring and settling the intermountain region, bison numbered in the millions east of the Rocky Mountains and were almost nonexistent to the west (Haines 1967, Kingston 1932, Christman 1971). Some ecologists and biologists attributed the scarcity of bison in the intermountain region to environmental constraints of a shrub-steppe which could not sustain vast bison herds (Mack and Thompson 1982, Daubenmire 1985, Johnson 1951). This viewpoint, while consistent with historic conditions of the early 1800's, stands in stark contrast to the Pleistocene fossil record of the intermountain region (Schroedl 1973, Grayson 1982). Bison and the other members of the Pleistocene megafauna roamed the intermountain region at least until the extinction of 10,000 BP, with bison surviving much longer.

Evidence indicates that bison survived the Pleistocene extinctions and continued to exist in the intermountain region as well as the prairies until just prior to the European explorers of 1800-1830. Agenbroad (1978) reported an extensive buffalo jump site on the Owyhee River of southwestern Idaho which yielded evidence of use for 7,000 years up to the Indian acquisition of the horse and rifle. Butler (1976, 1978) discussed evidence of abundant bison in eastern Idaho from the late Pleistocene to historic times. In the Great Basin, Grayson (1982) concluded that bison were widespread until historic times. And Bray (1985) presented evidence that bison were widely distributed over eastern Oregon and abundant in at least one locale from the late Pleistocene until shortly after 1800 when they became regionally extinct. Schroedl (1973) reported that bison remains recovered from 22 archaeological sites in the Columbia Basin provide evidence of bison presence from the late Pleistocene until just prior to historic times.

" This has been the conventional wisdom. Virtually all undesirable changes in the plant communities of the intermountain region are considered the result of livestock grazing in an environment not adapted to large herbivores. "

Based on the fossil record it is evident that bison survived the Pleistocene extinctions of 10,000 BP and continued to populate the shrub-steppe landscapes of the entire intermountain region until the late 1700s or early 1800s. The regional extinction of bison at this time may well have been in part related to native hunting made more effective with the availability of horses.

HISTORIC PERCEPTIONS

At the time of European man's arrival (ca.1800) the Intermountain West was a vast region vegetated largely by open shrub stands with an abundant perennial grass understory. Climatically, the shrubs and junipers could dominate the herbaceous species creating dense shrub or woodland stands with meager understory. Periodic lightning and Indian-set fires shifted the vegetation back to a perennial grassland and kept the adjacent juniper woodland largely restricted to the more rocky, fire-safe sites (Burkhardt and Tisdale 1976). The landscape of the early 1800s supported scattered herds of bighorn sheep, pronghorn, and some deer and elk (Rickard *et al.* 1977). In parts of the intermountain region game animals were scarce enough that early explorers sometimes had difficulty acquiring sufficient food (Young and Sparks 1985).

It is on the basis of this historical experience that we have formulated many of the concepts which underlie the sciences of ecology and range management. The conditions encountered at the time of European exploration and settlement have been considered the pristine natural state. Frequently scientists and land managers have related the apparent adverse impacts of livestock grazing in the intermountain region to the obvious absence of large herbivores in the region prior to settlement (Daubenmire 1970, Tisdale 1961, Mack and Thompson 1982, Young and Sparks 1985). The scientists reasoned that the intermountain region apparently evolved without an abundance of large herbivores and the native plant communities were not adapted to support such grazers in the form of cattle, horses, and sheep. This has been the conventional wisdom. Virtually all undesirable changes in the plant communities of the intermountain region are considered the result of livestock grazing in an environment not adapted to large herbivores.

There is no question that substantial modifications of the historic plant communities of intermountain rangelands have occurred since European settlement (Mack 1984, Young, *et al.* 1987, Burkhardt and Tisdale 1976). But it is still an open question as to whether these changes are the direct consequence of large herbivore grazing in an unadapted ecosystem. From a theoretical perspective, and given what is now known of the evolutionary history of the intermountain region, a more critical analysis of cause and effect would seem appropriate.

The evolutionary history of western North America, as indicated by what is now known of the fossil record, raises fundamental questions about at least two common ecological assumptions. First, did biologic conditions of the Intermountain West at the time of European contact (ca

1800) represent the stable natural state? That is, were the existing plant communities the end product of evolutionary and ecological adjustments (i.e. climax)? Considered in the context of the Pleistocene extinctions and the continually changing climatic conditions (Eddy 1991, Nowak *et al.* 1994 a & b) of the Quaternary period (the past 2 million years), the concept of climax or pristine biotic communities hardly seems valid and some ecologists are already questioning this concept (Tausch *et al.* 1993, Johnson and Mayeux 1992, Laycock 1991, Denevan 1992, Sousa 1984, Sprugel 1991, Box 1992). Certainly vegetation has been in a state of flux over the past 30,000 years in the western U.S. if woodrat middens are indicative (Betancourt *et al.* 1990, Nowak 1994 a & b). The current effort toward ecosystem management, if it is to have more than just political significance, must consider these issues. The hypothesis that biotic conditions and relationships of the Intermountain West at the time of European contact represented the pristine, stable state ecology of the region-certainly no longer are acceptable (Wagner and Kay 1993). A more appropriate paradigm is needed.

Implicit in our vegetation concepts such as "pristine" or "climax" is the "natural" world untouched by man. Aside from the issue that man, too, is a part of the "natural" world, there are other problems when we apply those concepts to the North American landscapes and biotic conditions prior to European contact. For example Savage (1991) and Denevan (1992) detailed evidence of major human impacts upon the North American landscape pre-European contact. Denevan referred to the pre-1492 landscape as "humanized" by a population much greater than that encountered 200-300 years later during the colonization of North America.

A second questionable assumption common to ecology and range management is that the lack of large herbivores in the intermountain region at the time of European contact is evidence that the region's evolutionary history and ecology did not include and therefor has no adaptation to large animal grazing. Again the fossil record, as we currently understand it, stands in direct contradiction to this assumption. The record indicates that for several million years North American rangelands, including the Intermountain West, sustained a faunal assemblage equal to the African Serengeti (Martin 1970). Only for the past 10,000 years have the large-bodied herbivores and predators not been part of the intermountain region's native biota. Furthermore, there is increasing evidence that the extinction of these large animals was related to human predation rather than evolutionary and ecological accommodation to environmental conditions.

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Regarding the plant species and plant community adaptations to herbivory, the several million years in which large herbivores were present on the landscape would seem more formative than the 10,000

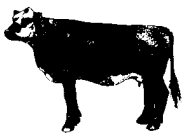
years in which they were absent. If one would equate the two million years of the Pleistocene in which large herbivores influenced plant adaptation to one calendar year, then the adaptive time period without large herbivores is about thirty-one hours or less than two days out of that year. While management decisions are made in decades and centuries (ecological time), the adaptive characteristics and coevolution aspects of biota were shaped over millions of years (evolutionary time).

As previously noted, the Pleistocene extinction of the mega- fauna did not completely remove herbivores from the landscape or herbivory from the plant community. Medium-sized grazers such as pronghorn and bighorn sheep, as well as bison, continued to graze the western landscape including the intermountain region until at least the late 1700s. From this perspective it hardly seems plausible that the intermountain flora would have lost its adaptation to herbivory and become intolerant of large herbivores.

Herbivory is a fundamental biologic process in aquatic and terrestrial ecosystems and is basic to biologic diversity and energy flow in these systems. In grasslands, shrub steppes, savanna woodlands, and arctic tundra throughout the world, complex herbivories evolved that are characterized by a diversity of floral and faunal species. Typically the variety of environmental niches are occupied by a diverse array of minor and mega herbivores and their associated predators. These function in a complex biologic web involving mutualism, facilitation, competition, and optimization (MacNaughton 1976, 1979 and 1985, Owen and Weigert 1981, Sinclair 1982). It would seem unusual and abnormal for the intermountain biome to have evolved differently. Nature abhors a vacuum.

The intermountain flora evolved over millions of years with large herbivores until, in recent time, those animals became extinct. Is it possible that livestock could now represent a potentially functional replacement for the megafauna? It appears that since the continental extinction of most megafauna by 10,000 BP and the regional extinction of bison in the late 1700s, unoccupied large herbivore niches would remain. Cattle and horses are large-bodied herding animals with generalist foraging habits that can complement more selective browsers and grazers such as pronghorn, deer, elk, and bighorn sheep. Cattle could closely occupy the bison niche and horses were part of the original megafauna. Perhaps exotic grazers from other continents could be imported to fill vacant niches as has been done in Texas (Demario *et al.* 1990). The idea of surrogate herbivores (Martin 1970, Fleharty and Hulett 1977) has left aghast some ecologists and environmentalists who may have been unaware of the fossil record.

" Is it possible that livestock could now represent a potentially functional replacement for the megafauna?"



After something more than a century of experience with livestock grazing in the intermountain region, it should be possible to judge the functionality of these surrogate grazers. If we were to do so only on the

basis of the current environmental uproar over livestock grazing on public lands, it would certainly seem that the idea is fatally flawed. However, the emotional environmental debate and some of the scientific discussion have been less than discerning in attributing cause and effect to historic adverse environmental changes. An objective evaluation of the surrogate herbivore hypothesis necessitates closer scrutiny of the historic changes which have occurred on intermountain rangelands.

CULTURAL IMPACTS

European settlement of the intermountain region eventually brought about three ecologically significant changes. These were the introduction of new herbivores in the form of domestic livestock, the subsequent reduction in the role of fire, and the introduction of preadapted exotic flora. Simply filling the vacant large herbivore niche with cattle and horses did not necessarily represent a significant ecological change. However, the intense stocking levels and the shift of foraging patterns from seasonal (native herbivores "followed the green" up the mountain) to season-long use stressed the forage plants and consumed all the annual growth of grasses, thereby fireproofing the sagebrush steppe. The inevitable consequence was an increase in shrubs and woodland at the expense of herbaceous species. In the lower elevation or drier part of the sagebrush steppe the lack of fire and decades of season-long grazing have created sagebrush monocultures.

Additionally, the inadvertent introduction of preadapted exotic plants, especially cheatgrass (Mack 1984), resulted in an irreversible floristic change in the warmer/drier portion of the sagebrush steppe. In those areas of the shrub steppe with mild, wet winters and early hot, dry summers (essentially the Wyoming big sagebrush sites) cheatgrass is better adapted than the native perennials (Melgoza *et al.* 1990). In this environment, regardless of livestock grazing, cheatgrass and other Mediterranean annuals have largely replaced the herbaceous understory. The pelican refuge on the ungrazed Anaho Island in Pyramid Lake is a good example (Svejcar and Tausch 1990, Tausch *et al.* 1994).

Consequently in the lower elevation portion of the sagebrush steppe, due to the nearly continuous carpet of fine-stemmed annual grass, flammability is now higher and fire frequency in recent years has increased (Bunting 1987). With more frequent fires the shrub overstory has been eliminated and prevented from reestablishing, thereby creating an annual grassland (Young *et al.* 1987). This change from sagebrush-bunchgrass to sagebrush-annual grass to annual grassland has occurred widely in the more xeric, lower elevation portion of the sagebrush steppe, especially in loamy/silty soils. Conservative livestock grazing or no livestock grazing does not prevent and cannot reverse this change (Svejcar and Tausch 1990). At higher elevations on more mesic sagebrush sites, such as mountain big sagebrush/Idaho fescue, cheatgrass is not as well adapted. On these sites dominance of cheatgrass occurs only as the result of disturbance, such as poor grazing practices. On nearly all of these sites, "pristine" plant communities currently exist and represent the potential vegetation (Tausch *et al.* 1995).

Juniper has existed in many areas of the intermountain region for thousands of years as the rimrock monarchs. Changes in the extent and distribution of juniper have occurred through geologic time as a response to shifting climatic conditions (Miller and Wigand 1994, Nowak *et al.* 1994). However, significant increases in juniper have more recently been occurring which apparently are not a response to climatic changes. Photographic records and juniper stand age patterns clearly demonstrate that western juniper has been extending its range from the fire safe rimrocks and rock outcroppings into the valley slopes and bottoms since about the 1880s (Burkhardt and Tisdale 1976, Miller and Wigand 1994). This change, while producing an increasingly green landscape, leads to the demise of productive wildlife and livestock habitat. As young juniper stands become dense, understory forage plants (both shrubby and herbaceous) are eliminated. Fire history studies suggest that the encroachment of western juniper onto sagebrush-grass sites is a direct result of the diminished influence of fire on these sagebrush ranges (Burkhardt and Tisdale 1976). Settlement of the West and subsequent heavy livestock grazing essentially fireproofed these ranges thereby creating safe havens for the establishment of juniper seedlings. Fire prevention and control programs in more recent years has assured this continuing vegetational change.

Riparian areas have been heavily impacted, partially by livestock grazing, and also by roadway construction, channelization, reservoirs and diversions, urbanization, and in some situations by natural geomorphic/hydrologic processes (Masters and Burkhardt 1991).

Wildlife have been affected both negatively and positively by a century of livestock grazing. Bighorn sheep populations have declined largely due to "brushing up" of their habitat. However, deer populations have expanded phenomenally as the result of these shrub increases in the sagebrush steppe (Leopold 1950). Populations of pronghorn, elk, and moose have made remarkable increases in the past three decades (USDA-BLM 1990) despite continued urbanization of winter ranges and increasing sport hunting demands. These increases are the result of improved habitat created by more conservative and better managed livestock grazing of the past three decades. Certainly range condition, at least on uplands over much of the intermountain region, has improved over conditions of the early 1900s and this trend continues (USDI-BLM 1990, Burkhardt 1991). Exceptions to this pattern of improvement are for the most part those areas dominated by pre-adapted exotic annual plants and those ranges where juniper or shrub encroachment have eliminated the native herbaceous understory plants (woody plant monoculture). Additionally many riparian areas are in degraded condition.

"Simply filling the vacant large herbivore niche with cattle and horses did not necessarily represent a significant ecological change."

Again consider the hypothesis regarding the suitability of livestock to function as a surrogate for the lost Pleistocene megafauna. At best our livestock experience seems a mixed bag. The one hundred-plus-year

experiment has not been a complete failure or success. The fireproofing of shrub steppe rangelands in which fire previously played a functional role was, at least early on, the result of livestock stocking intensity and season-long grazing. More recently this problem relates to agency fire control programs. Additionally some of the riparian problems result from poor livestock distribution (however watering places in the African Serengeti and elk or buffalo wallows in the West look much like our livestock watering areas).

Application over the past 30-40 years of more conservative stocking levels, range readiness, rotational/deferred grazing, and range revegetation projects have produced some positive changes. However food, fiber, economical, and cultural considerations aside, as surrogate megafauna our livestock grazing experiment leaves much to be desired.

"... as surrogate megafauna our livestock grazing experiment leaves much to be desired."

LESSONS FROM THE PAST

If our livestock grazing experiment has been less than a resounding success, perhaps we should consider why. Conceptually the idea of filling vacant herbivore niches in a natural herbivory with surrogate grazers seems reasonable. Certainly, given sufficient time, that is exactly what the evolutionary and immigration processes would do. To understand why it hasn't worked better, I wish to attempt to characterize functional features of the Pleistocene megafauna herbivory and compare those to our livestock grazing practices. Admittedly the task of functionally characterizing a complex biologic process that is thousands of years extinct is daunting but the temptation is irresistible. My sincere hope is that this effort will stimulate further inquiry and eventually lead to more sustainable and environmentally sensitive grazing practices.

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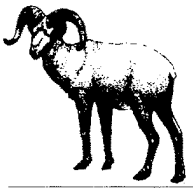


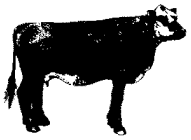
CHARACTERISTICS OF THE PLEISTOCENE HERBIVORY

In several respects the arguments that the intermountain region biota evolved under different conditions than that of the North American prairies are correct (Platou and Tueller 1985). Then, as now, the two regions were very different environmentally by reason of geography and climate. The intermountain region was and is arid due to the Sierra-Cascade rainshadow. Pacific storms are predominantly cold season which support shrub steppe vegetation in the valley and foothills and coniferous forest in the mountains. Cool season bunchgrasses form the understory, and because of the predominantly cold season precipitation, woody species could dominate the herbaceous understory. However, periodic fires favored the understory plants. Due to the winter precipitation pattern, the spring growing season, except for riparian vegetation, was short (about six weeks). As stated by Tidwell *et al.* (1972) the flora of the Pleistocene is essentially the flora of today. The landscapes offered much topographic relief just as today in the form of sheltered valleys and canyons below high mountains and plateaus.

The plains and prairie regions offered the Pleistocene herbivores a very different environment from those the same species encountered west of the Rocky Mountains. The plains which lie east of the Rocky Mountains are arid to mesic and receive some precipitation from the winter storm track off the Pacific Ocean, the Arctic cold fronts. However significant summer moisture comes from cyclonic Gulf of Mexico storm systems. Consequently the plains and prairie regions have a preponderance of spring-summer rainfall when temperatures are warm enough for plant growth. As a result, prairie vegetation is a grassland dominated by rhizomatic/stoloniferous warm season graminoids favored by a long growing season. The prairie landscape is noted for weather extremes and vast expanses with little elevational change or topographic relief and its weather extremes.

The Pleistocene fossil record indicates that these two very different environments were populated by exactly the same set of faunal species. The Pleistocene megafauna was apparently tolerant of a wide range of environments, perhaps more so than some of the large African herbivores today. This faunal assemblage included hoofed, herding herbivores with both grazer and browser species (Hansen 1978, Mead *et al.* 1986). Grazing habits apparently included both selectivists and generalists. The Pleistocene mega fauna was also characterized by a diverse array of large and small herbivores and predators much like the African herbivores of today.

"... The flora of the Pleistocene is essentially the flora of today."



Just as today, there would have been an inherent difference in total productivity, both floral and faunal. The prairie environment is more productive due to growing season precipitation. Annual above-ground plant production in the grasslands (650-2400 lbs/ac) is about double the productive capacity of intermountain rangeland (240-1200 lbs/ac) (Platou and Tueller 1985). Certainly faunal biomass or stocking rates would have reflected this disparity of carrying capacity.

When the differences between the intermountain and prairie environments are considered, it seems certain that the grazing herds would have developed very different grazing strategies in the different environments. Prairie herbivores would likely have been nomadic grazers with little distinctive seasonal patterns or definitive home ranges. The long summer growing season and the mix of cool and warm season grasses would have provided sufficient green forage to assure adequate protein intake necessary for successful reproduction in the large herbivores. The lack of elevational relief and long growing seasons would provide little incentive for the herds to develop seasonal grazing patterns. Forage quantity and predators were the incentives to herd movement. The prairie was likely a vast region of wandering herds of grazers and scattered predators.

This contrasts sharply with the manner in which herbivory likely occurred in the intermountain region. Due to short growing season on intermountain upland ranges this likely would have been a protein-deficient environment for large herbivores as previously suggested by Johnson (1951) as well as Mack and Thompson (1982). Green forage is required to support growth and reproduction in large herbivores. Cured forage protein content provides only maintenance or submaintenance nutrition levels for herbivores, especially the larger ones. Six weeks of growing season is an insufficient green forage period to support late stages of gestation, lactation, and recycling in most herbivores. In the intermountain region the grazing herds would have been forced to extend the green feed period to maintain adequate protein intake. This could easily have been accomplished by "chasing the green up the mountain," by seeking out riparian areas as the summers progressed, and by browsing on the numerous woody plants which retain protein content better than grasses. Probable all three grazing strategies were utilized. Given the mountain valley topography, the shrubby vegetation, and the numerous riparian systems, it would have been possible for herbivores to extend the green feed period available to them throughout the entire summer.

It seems obvious that herbivores in the intermountain region had to develop seasonal grazing patterns. Literally this would have been following the melting snows up the mountains in the spring and beating the drifting snow back down the mountains in the fall. Here forage quality and adverse late fall weather were the incentives that drove herd

migrations. Those migrations were likely definitive and repeatable patterns rather than nomadic wanderings. Seasonal home range behavior probably developed. All of these grazing behavior patterns are certainly displayed by native ungulates that survived the Pleistocene extinctions. In fact even livestock, after centuries of domestication, exhibit these same behavior patterns in mountain/valley landscape if given the opportunity.

It is easy to comprehend the nutritional advantage to an herbivore of seasonal grazing in the intermountain region. However, if particular grazing behaviors are to be sustainable over millions of years as was the Pleistocene herbivory, then those foraging patterns must also functionally benefit the vegetation. Numerous authors have investigated the relationships of herbivory to flora (McNaughton 1976, 1979, 1986, 1988, Holland *et al.* 1992, Belsky 1986, Page and Whitman 1987, Jansen 1982, 1984). The functional relationships between herbivores and plants include influencing interspecies plant competition, seed dispersal and planting, nitrogen mineralization, carbohydrate reallocation, and compensatory growth. Certainly, for as pervasive and enduring as herbivory is in the biologic world, the process must provide positive interactions with forage species and serve a purpose beyond simply filling paunches with grass.

With regard to the seasonal grazing habits of intermountain herbivores this strategy appears advantageous to the plant community in several ways. Early spring grazing where the herds simply followed "green-up" from winter ranges in the valley to summer ranges in the mountains would have allowed the bunchgrasses and forbs of the sagebrush steppe to regrow and set seed after the animals moved on. This would have assured reproduction and carbohydrate storage in bunchgrasses. It also would have allowed for the accumulation of cured grasses on the sagebrush-grass covered uplands to fuel periodic summer fires. These fires would have checked woody plant encroachment and favored the herbaceous understory (Burkhardt and Tisdale 1976).

Fall grazing by the herd returning to lower elevation would also have positively impacted the plant community. Seed dispersal and dormancy release after passage through the animals' digestive tract and seed planting are all byproducts of dormant season foraging (Jansen 1982, 1984). All of these are much more important to the caespitose grasses of the intermountain region which reproduce by seed than they would be to the sodgrasses of the prairie. Additional beneficial effects resulting from herd hoof action during the dormant season would include incorporating litter in the soil and breaking soil surface crusts which are so common to intermountain soils. Additionally, the hoof action of herding animals in arid regions would have improved nutrient and water cycling (Savory 1988).

"Prairie herbivores would likely have been nomadic grazers with little distinctive seasonal patterns...herbivores in the intermountain region had to develop seasonal grazing patterns."

In the sagebrush-bunchgrass uplands of the intermountain region, a seasonal grazing pattern ("following the green") was biologically functional. Perhaps it was even a requisite strategy for sustainability of this arid to semiarid environment. Seasonal grazing provided the nutritional needs of the herbivores, allowed periodic fires to control woody plants and facilitated stand maintenance in bunchgrasses. These three processes are likely the basis for sustainable grazing in the shrub-steppe. The more mesic montane environment of the mountainous summer ranges were perhaps less fragile, more productive, and more tolerant of summer-long grazing (Savory 1988). At these higher elevations summer moisture is more prevalent, thereby supporting a much longer growing season than occurs at lower elevations. Additionally, herbaceous vegetation tends to be composed of more rhizomatic species and perhaps somewhat less dependent on seed reproduction.

Pleistocene predators may also have provided a functional role beyond just herbivore population control and fitness. With the steep terrain of much of the intermountain landscape and the availability of green forage and water in the many riparian corridors, Pleistocene herbivores might have had tendencies to "keg-up" in these favorable environments during the heat of summer much as livestock do today. Yet strong tendencies to do so are not evident in the surviving native grazers such as elk, deer, or pronghorn. Neither are such tendencies evident in African herbivores. Perhaps predators hunting along the densely vegetated stream bottoms discouraged Pleistocene herbivores from using riparian areas as social centers. Similar predator-prey-topofloral relationships have been noted in modern African herbivories (Bell 1971). Predation may well have prevented sedentary herding behavior by the Pleistocene herbivores.

The evolutionary process of functionality between flora and fauna and the physical environment certainly involved a diversity of herbivores and vegetation. Floral or fauna monocultures are unusual and temporal in natural ecosystems. The diversity of Pleistocene herbivores and predators that roamed the intermountain region would seem appropriate to the diversity of the region's vegetation. The array of selective and generalist grazers and browsers would have dispersed the impacts of foraging across virtually all plant species within the shrubby/herbaceous plant communities. Functionally this would have maintained a diversity of plant species within plant communities and optimized herbivore biomass as is evident in Africa today.

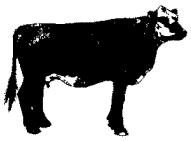
"The diversity of Pleistocene herbivores and predators that roamed the intermountain region would seem appropriate to the diversity of the region's vegetation."

PREHISTORIC vs *HISTORIC GRAZING*

Range livestock grazing has most often been viewed from the animal perspective, i.e. adequate forage quantity and quality. When the plant perspective has been considered grazing has been largely thought of as something that was done to plants (a disturbance). From a management perspective we have simply tried minimize the adverse effects. Given the evolutionary history of the intermountain region it could be argued that grazing and fire, rather than being disturbances to the natural system, are indeed requisite functional processes of a healthy ecosystem. One hundred or more years of experience with livestock grazing in the intermountain region suggests that domestic grazing, as it has been conducted, has not been a completely functional replacement for the Pleistocene herbivory. A comparison of historic grazing strategies with possible features of the prehistoric herbivory is pertinent.

• Multiple Grazers

Livestock grazing has differed from prehistoric grazing in some obvious ways. More often than otherwise livestock grazing tends to be somewhat monocultural. Especially in recent years the conversion from sheep to cattle has resulted in cattle being nearly the sole herbivore. This puts grasses at a disadvantage in the shrub-grass steppe. On other ranges, cattle, wild horses, and deer, elk, or antelope provide some vestige of a diverse ungulate herbivory. An indication of the mutualistic relations between multiple grazers and the plant community can be seen in the grazing history of several state game ranges. After World War II the state game and fish agencies in each of the western states began to purchase private ranches for critical big game ranges. These were operating cattle ranches which biologists deemed critical elk or deer winter range. Upon acquisition of the ranches, the biologists removed livestock to supposedly enhance the respective critical big game range. After 10-20 years it became obvious that big game use of these acquired ranches was shifting to adjacent private ranches where livestock were still grazed. On the supposed critical game ranges the vegetation had become rank and less palatable or nutritious for lack of a generalist herbivore. Eventually "managed" cattle grazing programs were reintroduced to these game ranges. Examples include Sand Creek in Idaho, Bridge Creek in Oregon and Fleecer Mountain, the Blackfoot, the Wall Creek, and the Blacktail in Montana.



• **Sedentary Grazers and Confinement Grazing**

In the interest of developing an animal more efficient at converting forage to meat, we have used genetics, breed selection, and husbandry to create sedentary welfare cattle, square blocks of immobile protein so to speak. Animal scientists and husbandrymen have paid too little attention to "rangeability." While such breed development may have an immediate economic advantage, environmental sustainability as regards rangeland grazing is questionable.

Compounding the problem of breed development has been our tendency to change extensive/open rangeland grazing into an intensive-confinement operation. We have spent forty years fencing the open range in an effort to mitigate adverse impacts of cattle grazing. Range scientists and range managers (this author included) have directed too much attention to mitigating grazing problems (merely treating symptoms) and insufficient effort at understanding the functionality of herbivory in the biologic world. Grazing should be more than just something done to plants. If we manage livestock grazing to more closely emulate the original system there should be less need for such bandage approaches.

• **Season-Long Grazing**

Livestock grazing in the West developed largely as season- long with heavy stocking rates. European experience in mesic herbaceous systems suggested that approach. Congressional land policy during western settlement assured that approach (Young and Sparks 1985). There are two problems here. As discussed previously, prehistoric herbivory was necessarily seasonal (following "greenup" elevationally) in the Intermountain West. Season-long cattle grazing, especially under heavy stocking, interfered with herbaceous perennial plant carbohydrate storage and seed production. Perhaps more significant, this approach fire-proofed the range, thereby greatly favoring woody plants. For example fire chronologies dating back to 1600 from the Owyhee Plateau clearly indicated that subsequent to stocking these ranges with cattle in the 1880s, fires, which frequently burned the area prehistorically, then ceased to burn. Shrubs and juniper then began suppressing herbaceous plants (Burkhardt and Tisdale 1976). Under season-long grazing grasses had no opportunity to provide a standing crop of fine fuel to carry fires.

"There does not appear to have been anything in the Pleistocene herbivory that was analogous to our concept of range readiness."

• **Rotational Grazing**

In recent decades range management strategies have recognized the problems of heavy season-long grazing. Stocking rate reductions averaging over 50% since the 1930's (Wagner 1978) have occurred and rotational/deferred grazing has become common. The stocking reductions were largely appropriate and likely have contributed to improving range

conditions over the past couple of decades. Rotational/deferred grazing, while helpful, is probably little more than a bandage. There does not appear to be any prehistoric analogue to rotational or deferred grazing strategies in the intermountain region as there may have been in the prairie system.

• Range Readiness

Another widely applied management practice intended to correct livestock grazing problems has been the concept of "range readiness." Public land agencies, especially the Forest Service, have fought many bitter battles with ranchers over attempts to delay spring grazing until grasses have 4-6 inches of new leaf growth. Early spring grazing has been considered a *prima facie* cause of poor condition rangelands. Yet there appears to be no Pleistocene analogue to this concept. In actuality the application of range readiness in the shrub steppe postpones grazing until the critical reproductive period of native bunchgrasses such as wild rye grass and bluebunch wheat grass. These bunchgrasses are most intolerant of reproductive-period tissue removal on an annual basis (Stoddart 1946). This intolerance is not surprising given the fact intermountain bunchgrasses evolved under the selective pressure of early spring and dormant season herbivory. Fortunately the damage which the application of range readiness could have caused was partially offset by rotational and deferred grazing strategies where the bunchgrasses were only periodically subjected to flowering period grazing. There does not appear to have been anything in the Pleistocene herbivory that was analogous to our concept of range readiness. The concept runs counter to the instinctive nature of native and domestic ungulates. There are no indications in the fossil record of prehistoric forest rangers deterring wooly mammoths from eating green grass.

Perhaps a cautionary note regarding early spring grazing is appropriate. From a functional standpoint, it is the timing of grazing cessation rather than initiation that is operative here. It is paramount that early spring grazing cease while there is sufficient growing season (primarily soil moisture) left to assure plant regrowth and seed production. In a practical sense for the shrub steppe that equates to the grazing herds slowly but continuously grazing toward higher elevations rather than remaining in a particular pasture for an appreciable duration.

• Herding

Livestock grazing on rangeland of the intermountain region has become integrally tied to base ranches or farms. These base ranches have often become intensive irrigated farms used to produce winter hay for the livestock that graze rangelands during the summer. Such farming operations can deflect management attention away from grazing opera-

"There are no indications in the fossil record of prehistoric forest rangers deterring wooly mammoths from eating green grass."

tions and the rangeland "pasture" becomes little more than a summer "day care" for the cattle while the cowboy farms. To some degree farming and rangeland grazing are incompatible endeavors, with each demanding full-time attention. In terms of functional livestock grazing, fences may not be an appropriate substitute for a good saddle horse. Given the sedentary nature of most range cattle, especially during the hot summer season, perhaps there is a need for man to provide the predator-herding function. In unattended fenced pastures, creek bottoms become attractive to many creatures including cattle. The Pleistocene model suggests that rangeland grazing should be more extensive and nomadic.

• Drought Response

Periodic and prolonged droughts are common climatic conditions of the intermountain region today just as they likely were during the Pleistocene. Typically, land managers attempt to reduce livestock grazing pressure with the onset of drought. Such actions as shortening the grazing season or reducing stocking levels are apparently driven by concern for the vegetation. However, it is questionable how drought-dormant forage plants benefit from early livestock "takeoff" dates. As soon as favorable growing conditions return we immediately return to normal stocking and grazing seasons.

Prolonged drought would have affected both the Pleistocene herbivores and their habitat. Logically, such prolonged droughts would have initially resulted in heavier to severe overgrazing followed by eventual herd die-offs. Once the drought gave way to more favorable growing conditions, there would have been a lag of several years before the grazing herds again increased in response to more favorable forage conditions. This lag period would have provided drought-stressed vegetation a recovery period. This scenario would suggest that perhaps we should reconsider our livestock management response to drought.

• Dormant Season Grazing

Another aspect of the marriage between farming and range livestock involves winter feeding. As discussed previously, dormant season grazing provides functional benefits to the vegetation. Fall/winter grazing as the herds move to lower elevations tends to incorporate litter, break surface crusts, and disperse plant seeds. To the extent that winter feeding of livestock has replaced dormant season grazing these functions are compromised. For some grasses like wild ryegrass heavy winter grazing or burning is a prerequisite to thriving productive stands. This grass which was common in the intermountain region is notably intolerant of summer grazing. It has diminished under decades of summer livestock grazing and flourishes under winter grazing.

"The Pleistocene model suggests that rangeland grazing should be more extensive and nomadic."

Livestock grazing policies of public land agencies sometimes preclude dormant season use if the area was grazed during the spring, the

apparent idea being that the plant community should not be subjected to grazing more than once each year. Apparently we are trying to minimize the negatives rather than considering function and purpose.

• Utilization Limits

Another disparity between prehistoric herbivory and current management of livestock grazing is the use of grazing utilization limits. For many years the standard range management prescription was take half - leave half. More recently it has become politically popular to impose even more conservative utilization limits (30-40%) on rangeland livestock grazing. When such use levels are reached anywhere on an area, the animals are to be removed. This approach is more political than biological. Seasons of use, rest periods, and vegetation trends are largely ignored. Managing grazing by utilization standards or guidelines reduces range management from an applied science and an art (Mosley 1985) to a policing action.

Grazing management solely on the basis of conservative use levels does not have the support of the range science community (Sharp *et al.* 1994, Frost *et al.* 1994) and for good reason. It is ludicrous to try reducing something as biologically complex as livestock grazing on something as variable as rangelands to a single simple number. Utilization is by definition the percentage removal of total available annual production. If the concept has utility it is only where grazing occurs after annual plant growth is complete. It certainly does not apply to early growing season grazing where grazing ceases before the annual growth is complete (Frost *et al.* 1994). Conservative utilization limits do not appear to be part of natural herbivories such as in Africa today, the plains bison of the 1800s, or the Pleistocene megafauna. Utilization limits appear to be a human-made concept. The fossil record gives no indication of prehistoric forest rangers attempting to enforce use limits on megafauna.

"Managing grazing by utilization standards or guidelines reduces range management from an applied science and an art to a policing action."

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CONCLUSION

The biota of intermountain rangelands clearly evolved over several million years as a natural grazing ecosystem. The fossil record indicates that this herbivory was comparable to the modern Serengeti in faunal diversity. Massive extinctions at the close of the Pleistocene removed most of the larger bodied fauna from the system.

At the time of European contact with North America the biologic system was in flux. Evolution and species immigration had not yet filled the vacant herbivore niches. The science of ecology, largely unaware of or unconcerned with the fossil record, assumed that the biologic conditions at the time of European contact were pristine or climax. This view has profoundly shaped the development of range science and rangeland management. The underlying assumption has been that the intermountain biome was largely unadapted to large herbivore grazing. Consequently, livestock grazing management has focused on minimizing and mitigating the negative impacts to the natural system.

Perhaps it is time to rethink the fundamentals. We now know that herbivory, including large grazers, is part of the natural biologic system on terrestrial landscapes, the intermountain region included. Herbivory is a functional process that serves both flora and fauna. Grazing management should be designed to assure that domestic livestock grazing is functional within the parameters of the biologic system. Characterization of the Pleistocene herbivory provides a potential model for the design of functional livestock grazing strategies.

"Perhaps it is time to rethink the fundamentals... characterization of the Pleistocene herbivory provides a potential model for the design of functional livestock grazing strategies."

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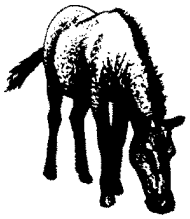

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